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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.¹ 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.² 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.³

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.⁴ 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

	New Orleans	U.S.
Median Household Income (1999)	\$27,133	\$41,994
Families in Poverty	23.5%	9.2%
High School graduate or higher	74.7%	80.4%
Bachelors degree or higher	25.8%	24.4%
Homeownership rate	47.0%	66.0%

Source: U.S. Department of Commerce, Bureau of Census, 2000

1 U.S. Bureau of the Census, July 1, 2005 Population Estimate, <http://www.census.gov/popest/counties/files/CO-EST2005-ALLDATA.csv>

2 New Orleans Convention and Visitors Bureau, Economic Impacts of Tourism, <http://www.neworleanscvb.com/static/index.cfm/contentID/164/sectionID/4/subsectionID/0>

3 http://www.portno.com/pno_pages/about_overview.htm

4 Louisiana Department of Labor, Louisiana Workforce at a Glance, Monthly Reports, 2004, 2005 and 2006

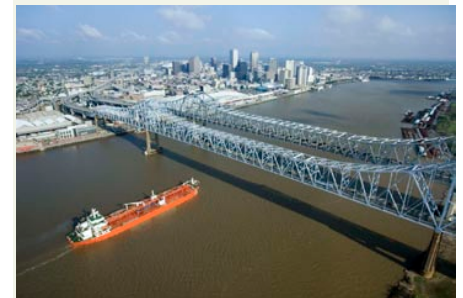
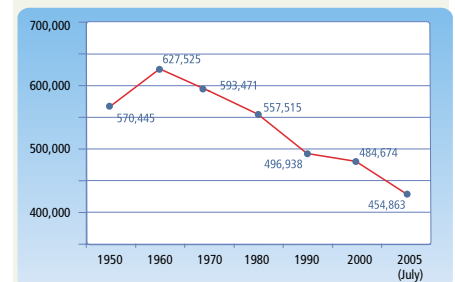


Figure 1.1 Population Decline in New Orleans, 1960 to 2005



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 grades⁵ 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.



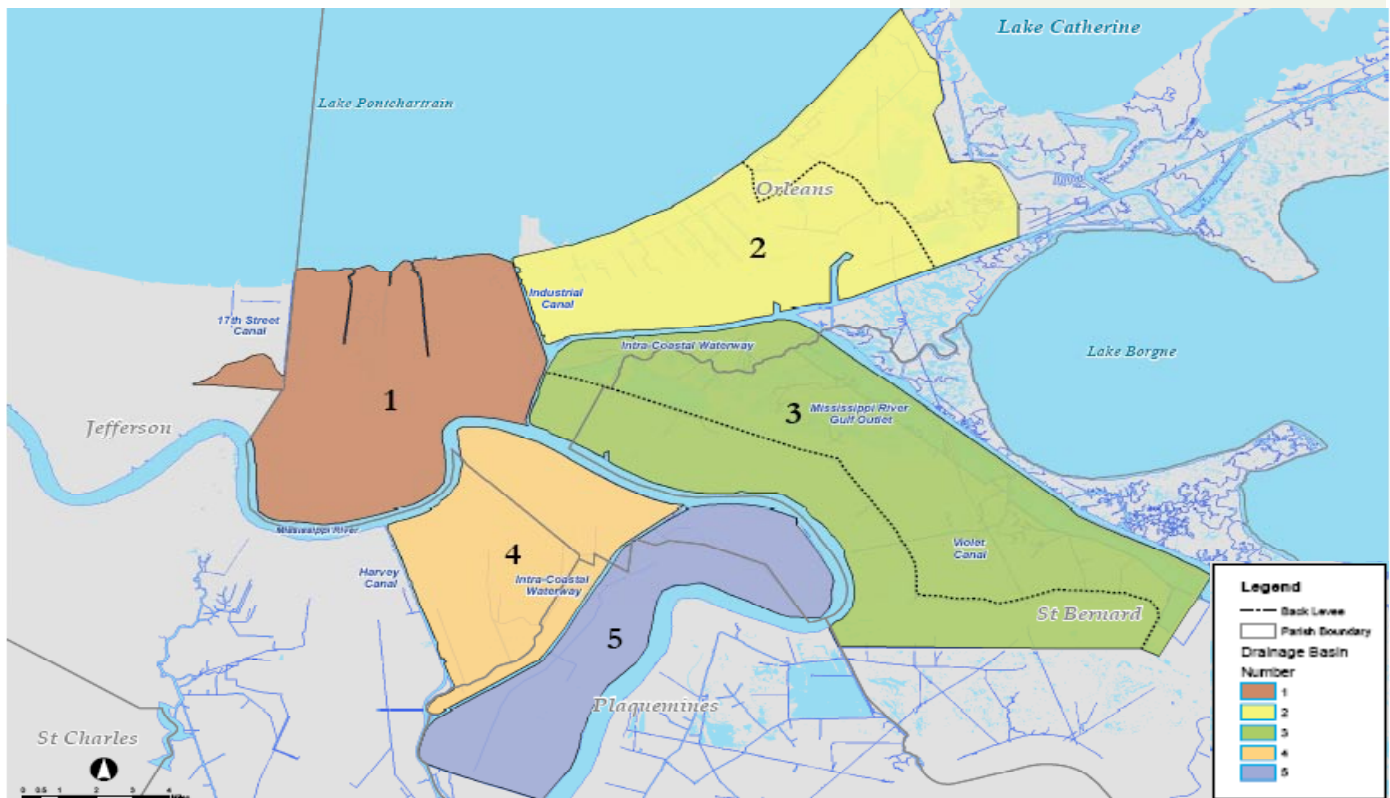
⁵ Greater New Orleans Community Data Center, <http://www.gnocdc.org/orleans/education/html>, 47% of Orleans Parish Schools were rated "academically unacceptable" and 26.5% were rated as "academic warning" in the 2003-2004 school year.

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.

Figure 1.2 New Orleans Metro Area: Boundaries of Five Drainage Basins



Source: U.S. Army Corps of Engineers, Burk-Kleinpeter, Inc.

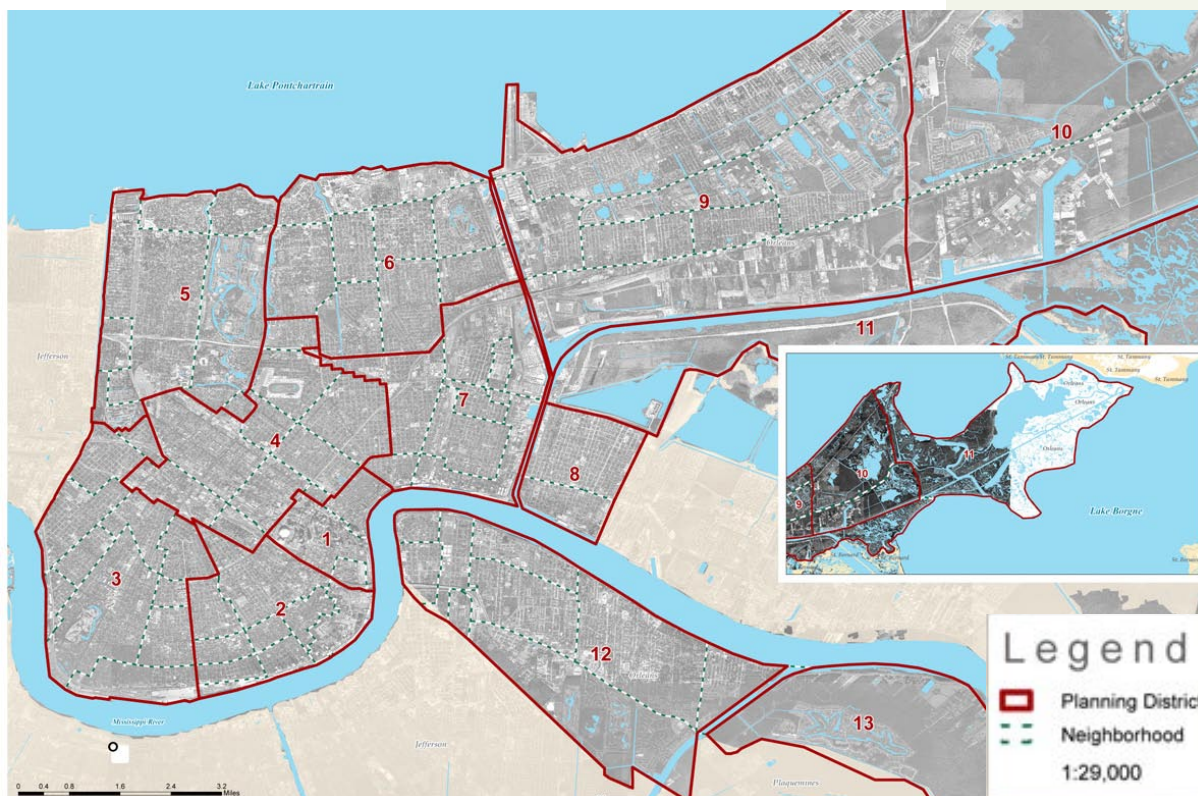
City Planning Areas

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



Source: City of New Orleans, New Orleans Regional Planning Commission (NORPC) & GCR & Associates, Inc.

Table 1.2: Planning Districts and Associated Neighborhoods in New Orleans

Planning District	Neighborhoods
District 1	Central Business District, Vieux Carre, Warehouse District
District 2	East Riverside, Garden District, Irish Channel, St. Thomas Area – Lower Garden District, Central City – Magnolia, St. Thomas Project, Milan, Touro
District 3	Black Pearl, Broadmoor, East Carrollton, Freret, Hollygrove, Uptown, West Riverside, Marlyville – Fontainebleau, Leonidas – West Carrollton, Audubon – University, Country Club – Dixon A
District 4	Bayou St. John, Mid-City, St. Bernard Area – Project, Seventh Ward, Tulane – Gravier, Cert Town – Zion City, Fairgrounds – Broad, Sixth Ward – Treme – Lafitte, Iberville Project, Calliope – B.W. Cooper Project
District 5	City Park, Lakeshore, Lakeview, Lake Vista, Lakewood, Parkview, Country Club Gardens
District 6	Dillard, Filmore, Gentilly Terrace, Gentilly Woods, Lake Terrace – Lake Oaks, Milneburg, Pontchartrain Park, St. Anthony
District 7	Bywater, Marigny, St. Claude, St. Roch, Desire Project, Desire Area, Florida Housing Development, Florida Area
District 8	Holy Cross and Lower Ninth Ward
District 9	Edgelake – Little Woods, Pines Village, Plum Orchard, Read Boulevard East, Read Boulevard West A, Read Boulevard West B – West Lake Forest, Viavant – Venetian Isles
District 10	Village de L'Est, Viavant – Venetian Isles
District 11	Viavant – Venetian Isles
District 12	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
District 13	River Park – Cut Off – Lower Coast

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.



FEMA photo archive

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.⁶ 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.



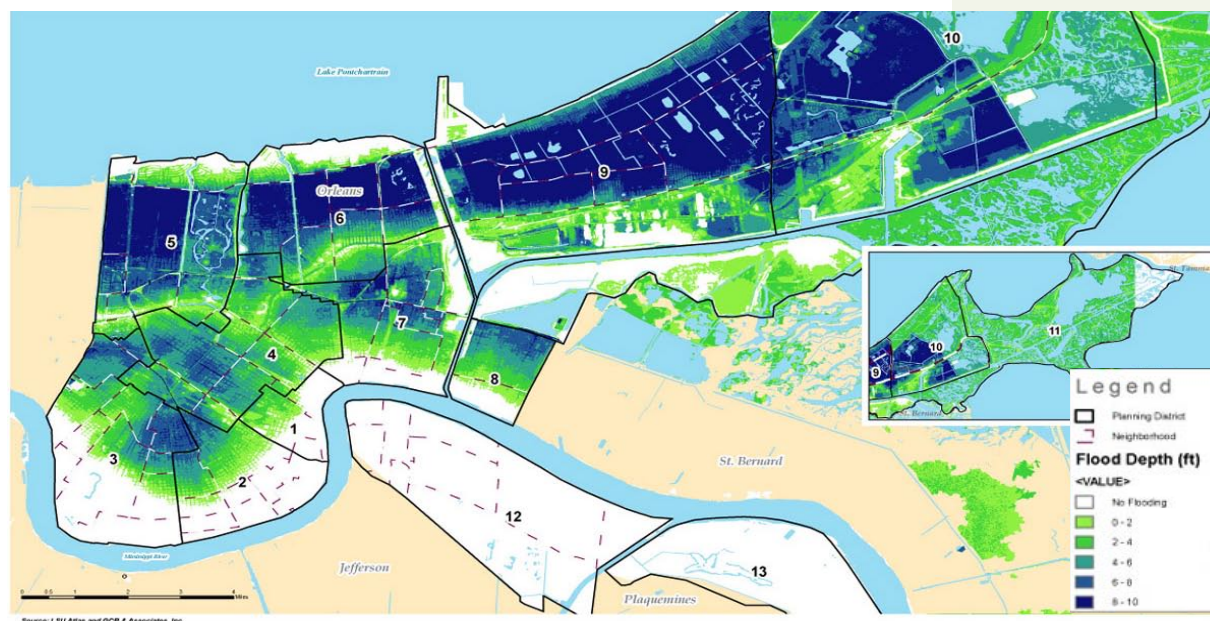
FEMA photo archive



FEMA photo archive

6 NOLA, Katrina Archives. <http://www.nola.com/katrina/wide.ssf/katrina/graphics/flashflood.swf>

Figure 1.4 Depth of Flooding (as measured on August 31, 2005)



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.

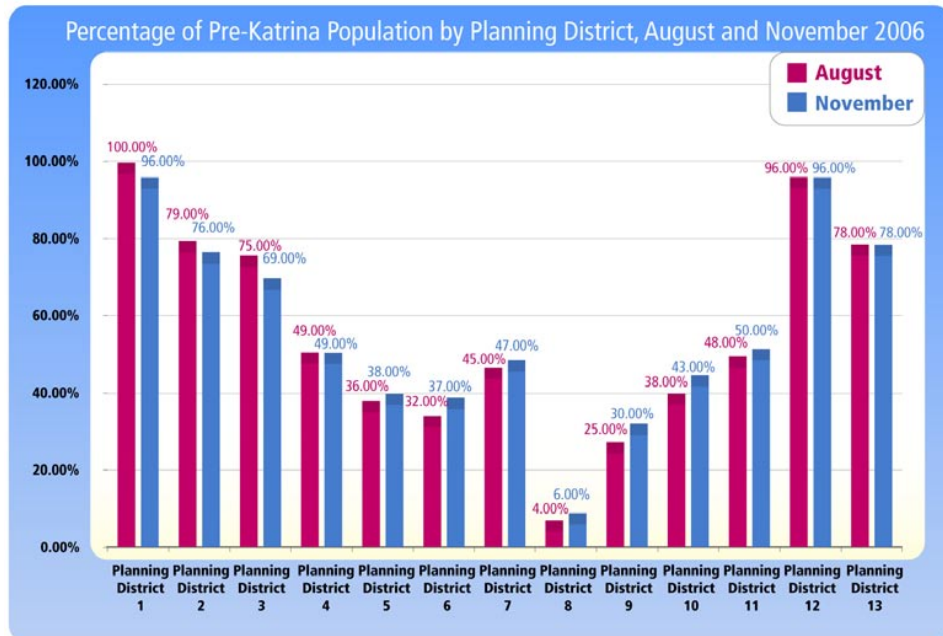
The first major task of the Unified New Orleans Plan process was to assess the level of damage and state of recovery across a number of sectors: Population; Flood Protection; Housing; Economy; Infrastructure and Utilities; Transportation and Transit; Education; Health Care; Public Safety; Environmental 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 Assessment⁷.

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.



Source: Estimates provided by GCR& Associates, Inc. - based on Utility "Activity Index"; due to differences in data availability, estimates for Districts 12 & 13 date from July, 2006

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.

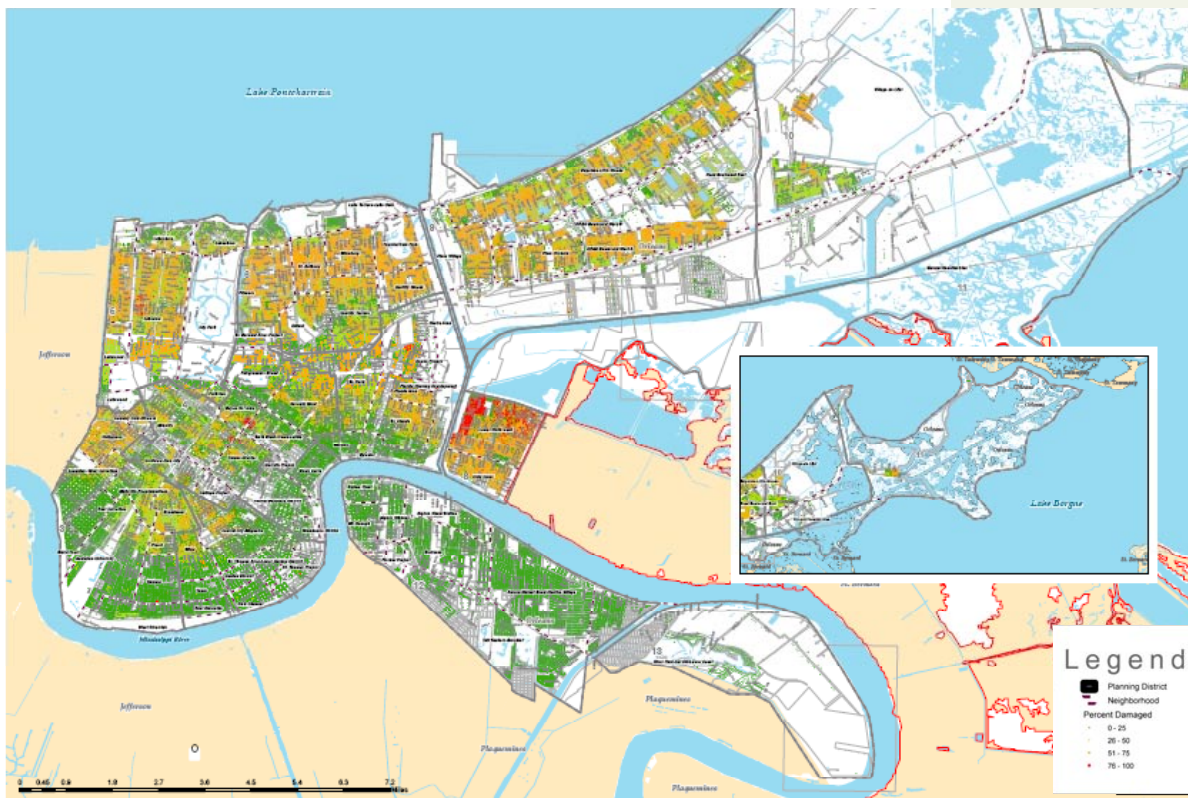
District Plans have used data provided by UNOP and the City to identify areas of the Districts that are at low elevations and have flooded repeatedly. In the greatest flood (Katrina) much of the older housing stock (50 years plus) was elevated on piers and withstood flooding to a greater extent than 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:

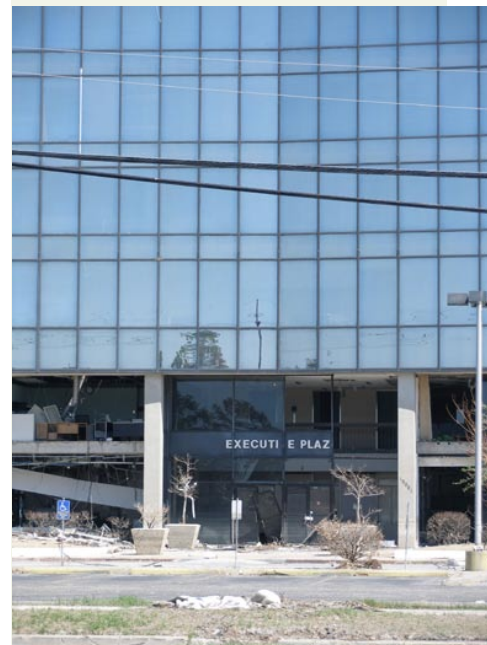
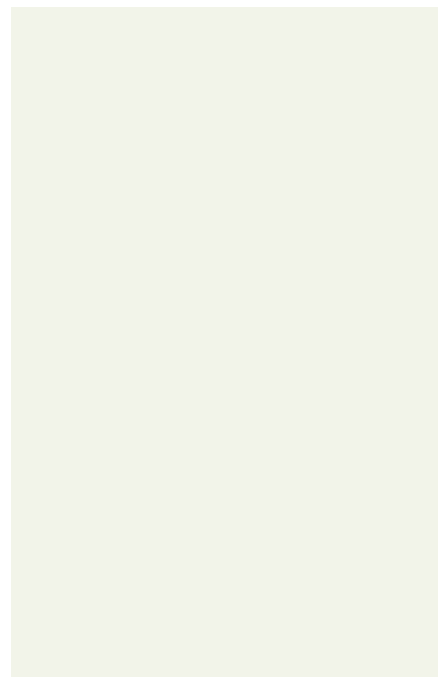
The District assessments suggest that, despite the levels of building permits granted in neighborhoods across the city, the level of actual rebuilding activity was lower. A number of homes are being elevated by a variety of methods. Modular housing is starting to appear in some areas, and there are concerns 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 8,000⁸ 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

8 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.

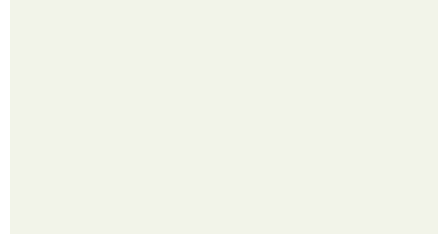
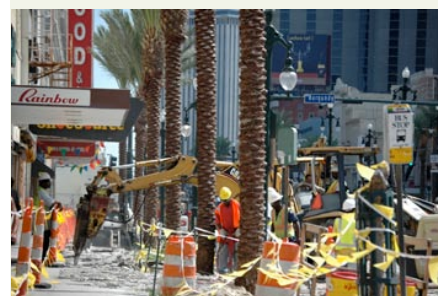
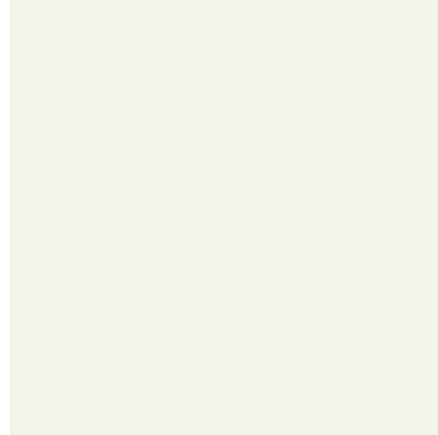
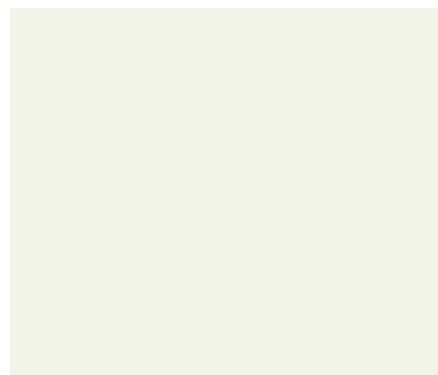
Private infrastructure, of course, has similar problems, wherein equipment such as compressors or power supplies was submerged in brackish water and needs to be replaced. Entergy New Orleans is patching together a working grid. The LRA committed over \$200 million in CDBG funds to assist Entergy New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



9 Report by Black & Veatch submitted on December 20, 2006.

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)¹⁰. 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.



10

Report from Alvarez & Marzel, 2006.

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

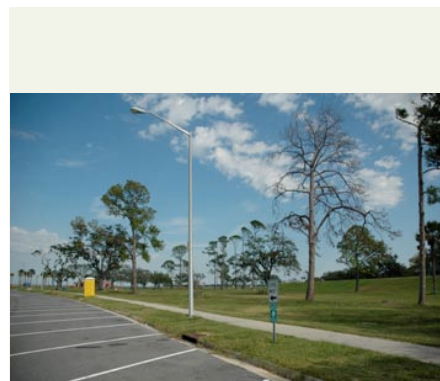
Over 260 non-profit cultural institutions, such as museums, arts centers, performance halls and other venues were severely damaged or destroyed. Municipal resources, including the Mahalia Jackson Theatre for the Performing Arts, were also damaged. Total employment in the creative economy of the City 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: \$163 million for streets; \$17 million for police, fire, and judicial facilities; \$43.5 million for parks and recreation facilities; \$10.5 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 \$155 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.¹¹ 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.



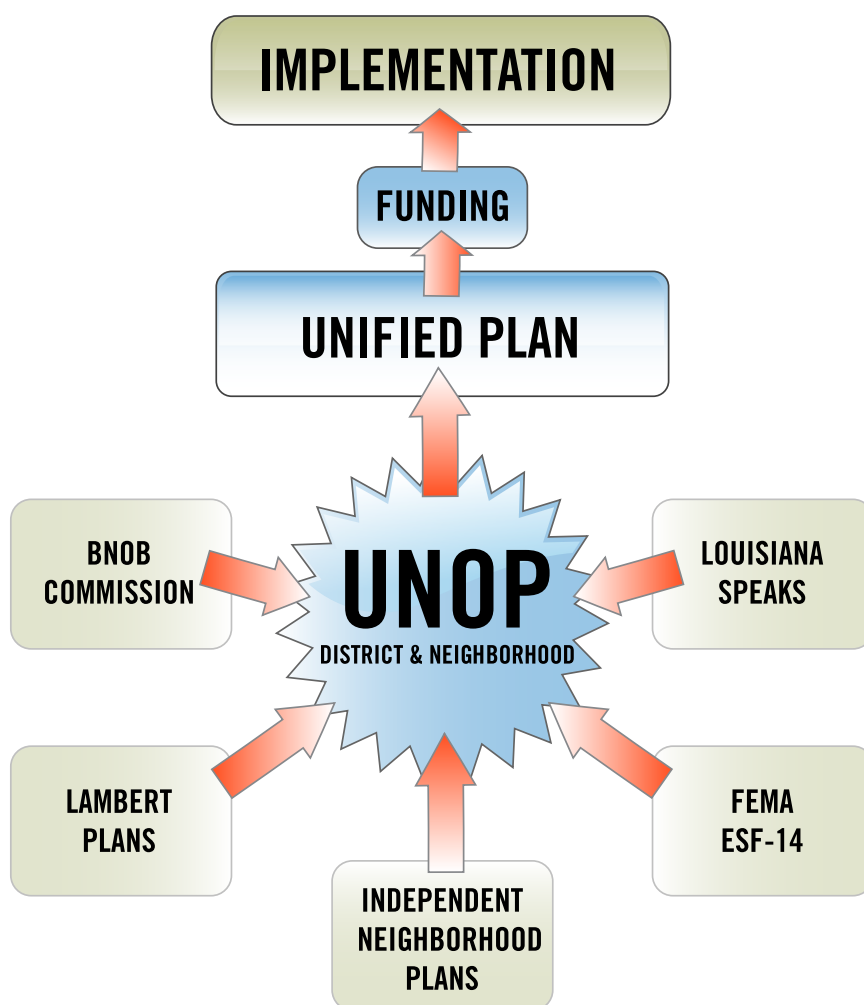
¹¹ Urban Planning Committee report, Bring New Orleans Back Commission

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."¹²

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.

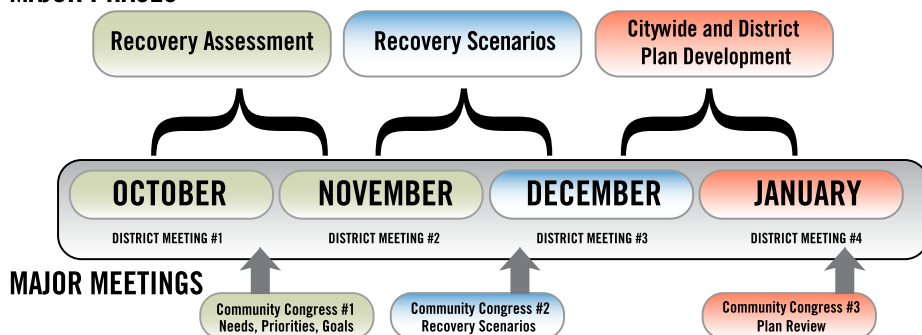


UNOP Citywide and District Scopes of Work and Community Participation

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.

Figure 1.6 UNOP Process Timeline

MAJOR PHASES



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 LRA’s 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.

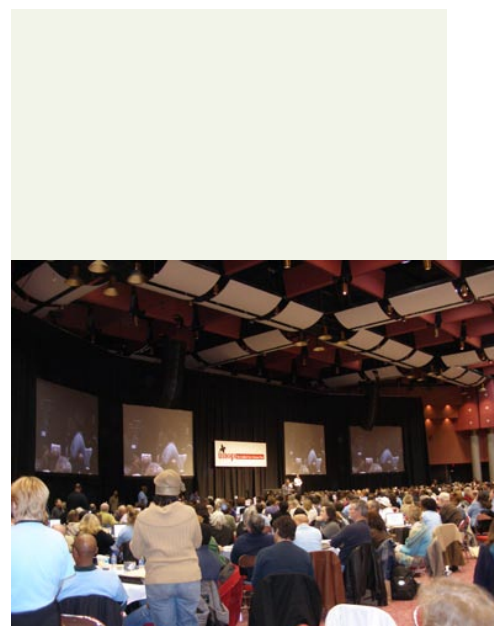
On December 2, 2006, over 2,500 participants gathered for Community Congress II, which took place simultaneously in 21 cities, including New Orleans, Atlanta, Baton Rouge, Dallas, and Houston. In the five largest cities (previously noted), participants were part of an interactive meeting made possible 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 South 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.¹³ 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 South 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.



Section 2.: Citywide Recovery Framework

Recovery Needs and Priority Issues

In January 2007, recovery and restoration in the City of New Orleans has reached a new plateau. Unlike the weeks and months immediately following the flood, the streetscape of recovery across the City is now calmer and less hectic. We have entered a new period that could be called the “beginning of the long haul,” wherein the action has largely shifted from recovery efforts to resettlement efforts.

New Orleans’ residents, businesses, public and non-profit agencies have submitted thousands of claims for reimbursement to insurers and federal agencies. They have filed a similarly tall stack of applications for grants and loans to rebuild homes, businesses, and public facilities. Over \$40 billion is estimated to either have been allocated or paid for claims, grants, and loans in Orleans Parish alone. For public agencies, the first round of funding was used for the basics: emergency response, debris removal and clean-up, and basic repairs and restoration of utilities and services. Now, the City and other public agencies are beginning a next phase of recovery that will take many years, as major structures lost in the storm are rebuilt (e.g. criminal justice buildings, schools, hospitals). An overhaul of the City’s infrastructure (e.g. roads, water, sewers) which had been deteriorating pre-Katrina will also be needed and cannot be fully carried out with the limited funds for repairs that FEMA Public Assistance and insurance claims provide.

The next wave of activity is expected to be defined, in large part, by the decisions made by homeowners and business owners as they decide how to use the nearly \$30 billion that is available from insurance proceeds, Small Business Administration (SBA) loans and the Louisiana Recovery Authority (LRA) Road Home grants to repair, reconstruct, or sell their homes. During this next period, thousands of individuals will be making decisions about their – and their families’ – futures. These decisions range from where to live, to whether or not to reopen a business. This decision-making process will be affected by a number of issues. The UNOP process identified two overarching issues that frame the future recovery outcomes: the pace of repopulation and future flood risk.

Population Recovery: Currently and Over the Next 10 Years

For planning purposes, estimates of both short- and long-term population of New Orleans have been developed, based upon a number of data sources, including FEMA inspection reports, FEMA trailer counts, historical building permit activity, and post-Katrina economic analyses. At the start of 2007, about 210,000 to 230,000 of New Orleans’ pre-Katrina population (460,000) are back. This estimate is not much higher than the estimates made in early 2006, suggesting that those residents who did not sustain much damage, or had the financial means and jobs to return to, have now come back.

The November 2006 levels of repopulation vary dramatically across the City. Pre- and post-Katrina electric utility activity was compared to examine population trends at smaller geographical areas. The following table summarizes the current population estimates for each planning district. These are estimates and not an exact tally of residents currently living in each district. The population in undamaged neighborhoods has recovered and even grown, in some cases. Not surprisingly, those areas with less flooding rebounded more quickly than the more heavily-damaged areas. Construction progresses in areas that were moderately

or slightly damaged, while some of the mostly heavily damaged neighborhoods have little activity.

Table 2.1 Population Estimates by Planning District, November 2006

Planning District	Pre-Katrina Population	Current Population Estimate	Current Population as Percentage of Pre-Katrina Population
1	6,802	6,530	96%
2	47,515	36,111	76%
3	67,069	46,278	69%
4	79,435	38,923	49%
5	25,897	9,841	38%
6	44,133	16,329	37%
7	41,163	19,347	47%
8	19,515	1,171	6%
9	81,408	24,422	30%
10	13,195	5,674	43%
11	1,760	880	50%
12	55,653	53,427	96%
13	1,147	895	78%

Source: GCR Analysis of Utility Usage. Note: due to differences in data availability, estimates for Districts 12 & 13 date from July, 2006

Short-term Population Forecast

The scarcity of post-Katrina housing has been a major impediment to neighborhood-level recovery of residents and businesses across New Orleans. Therefore, short-term population forecasts depend heavily upon the level of flooding sustained in neighborhoods. Flood depth-specific rates of return for the pre-Katrina housing stock and population were developed and then adjusted to reflect the socio-economic profile of neighborhoods. Based upon field observations, the forecasts assume that areas with higher-levels of home ownership and flood insurance and relatively high median incomes will recover more quickly than other neighborhoods. Rates were also adjusted to account for the locations of FEMA group trailer sites and the population associated with those households. The results of the short-term forecasts are shown in the following tables.

Table 2.2 Short-term Population Forecasts

2007 Population Totals					
	Pre-Katrina Households	Pre-Katrina Population (2000)	January 1, 2007 Projected Population Low Scenario	January 1, 2007 Projected Population Moderate Scenario	January 1, 2007 Projected Population High Scenario
Citywide Total	188,251	484,674	209,893	225,257	232,269
Citywide Total as Percentage			43.31%	46.48%	47.92%
2008 Population Totals					
	Pre-Katrina Households	Pre-Katrina Population (2000)	January 1, 2008 Projected Population Low Scenario	January 1, 2008 Projected Population Moderate Scenario	January 1, 2008 Projected Population High Scenario
Citywide Total	188,251	484,674	254,787	267,631	287,570
Citywide Total as Percentage			52.57%	55.22%	59.33%
2009 Population Totals					
	Pre-Katrina Households	Pre-Katrina Population (2000)	January 1, 2009 Projected Population Low Scenario	January 1, 2009 Projected Population Moderate Scenario	January 1, 2009 Projected Population High Scenario
Citywide Total	188,251	484,674	286,152	299,278	323,169
Citywide Total as Percentage			59.04%	61.75%	66.68%

Source: GCR & Associates, Inc.

Over the first half of 2007, population growth is likely to proceed slowly, but then accelerate somewhat later in 2007 and early 2008, once more of the Road Home funds are disbursed and rebuilding activity increases. From 2008 onward, higher rates of rebuilding activity are likely for many years.

Long-term Population Forecast

Projecting New Orleans's population more than one year into the future is challenging. Nonetheless, there are several reasonable assumptions that can be made. The first assumption is that vacant housing within the undamaged areas of the city will be filled by August 2007. Currently, the overall vacancy rate is slightly higher than pre-Katrina rates since many houses are for-sale and residents are still making long-term decisions. By August 2007, buying and selling activity is expected to stabilize and excess vacancies will be absorbed.

It is also assumed that higher levels of rebuilding activity are likely to occur in neighborhoods that were minimally flooded, are near intact employment and commercial centers, and are already experiencing observable activity. In essence, certain neighborhoods are expected to reach a "tipping point" whereby housing, infrastructure, and the commercial sector are sufficiently viable. Once this "tipping point" is reached, then recovery activity is expected to accelerate considerably. In other neighborhoods where damage was heavier, it is assumed that similar levels of viability will take much more time to reach. Therefore, the long-term population forecasts are expected to vary significantly from neighborhood to neighborhood across the city. Furthermore, there are also going to be geographic shifts in population over time. Some neighborhoods will exceed their pre-Katrina population while others will house only a fraction of their pre-Katrina residents.

A major factor that will drive geographic shifts in population is the location and rates of new housing construction. Vacant office buildings and industrial buildings, surface parking lots, and the underutilized upper floors of commercial buildings provide opportunities for new construction. Incentives, such as expanded New Market Tax Credits and federal Historic Rehabilitation Tax Credits, will provide a major catalyst for this type of "infill" growth. Planning districts 1 and 2 are well positioned to capture this residential growth, as demonstrated by the number of new projects announced in both areas.

Taking these myriad factors into account, the long term population estimates are shown in the tables below. By January 2017, the City's population may finally approach its pre-Katrina level, with estimates ranging from about 389,000 to 461,000 residents. The exact rate at which population growth occurs in New Orleans is highly variable and hinges on a variety of issues affecting the pace of recovery. Strategic management of the recovery process, coupled with a strong economy and outside investment, could strengthen the City's ability to achieve its pre-Katrina population by 2017. Alternatively, there are also many factors that could negatively affect long-term forecasts. In 2017, New Orleans' population could be far less than its pre-Katrina population, even with over a decade of reconstruction.



Source: GCR & Associates, Inc.

Table 2.3 Long-term Population Forecasts

2012 Population Totals					
	Pre-Katrina Households	Pre-Katrina Population (2000)	January 1, 2012 Projected Population Low Scenario	January 1, 2012 Projected Population Moderate Scenario	January 1, 2012 Projected Population High Scenario
Citywide Total	188,251	484,674	333,709	357,050	404,341
Citywide Total as Percentage			68.85%	73.67%	83.43%

2017 Population Totals					
	Pre-Katrina Households	Pre-Katrina Population (2000)	January 1, 2017 Projected Population Low Scenario	January 1, 2017 Projected Population Moderate Scenario	January 1, 2017 Projected Population High Scenario
Citywide Total	188,251	484,674	389,477	429,155	460,844
Citywide Total as Percentage			80.36%	88.54%	95.08%

Source: GCR & Associates, Inc.

Irrespective of the exact population tally, in 2017, the density and geographical distribution of New Orleans' residents will be substantially different than today. The areas that had minimal to no flooding are likely to have more residents than today, while even the most optimistic population forecasts do not assume a full recovery of severely flood damaged neighborhoods by 2017.

Future Risk of Flooding

The devastation caused by Hurricanes Katrina and Rita in 2005 resulted in the establishment of three coast-wide restoration and protection planning efforts that are independent yet interrelated. The U.S. Congress directed the U.S. Army Corps of Engineers (USACE), New Orleans District, to prepare a Louisiana Coastal Protection and Restoration Project report (LACPR) that would provide a category 5 level of protection and include a "full range of flood control, coastal restoration and hurricane protection measures." The USACE's Preliminary Technical Report was due in July 2006 and the draft and final environmental impact statement and technical report are due in July 2007 and December 2007, respectively.

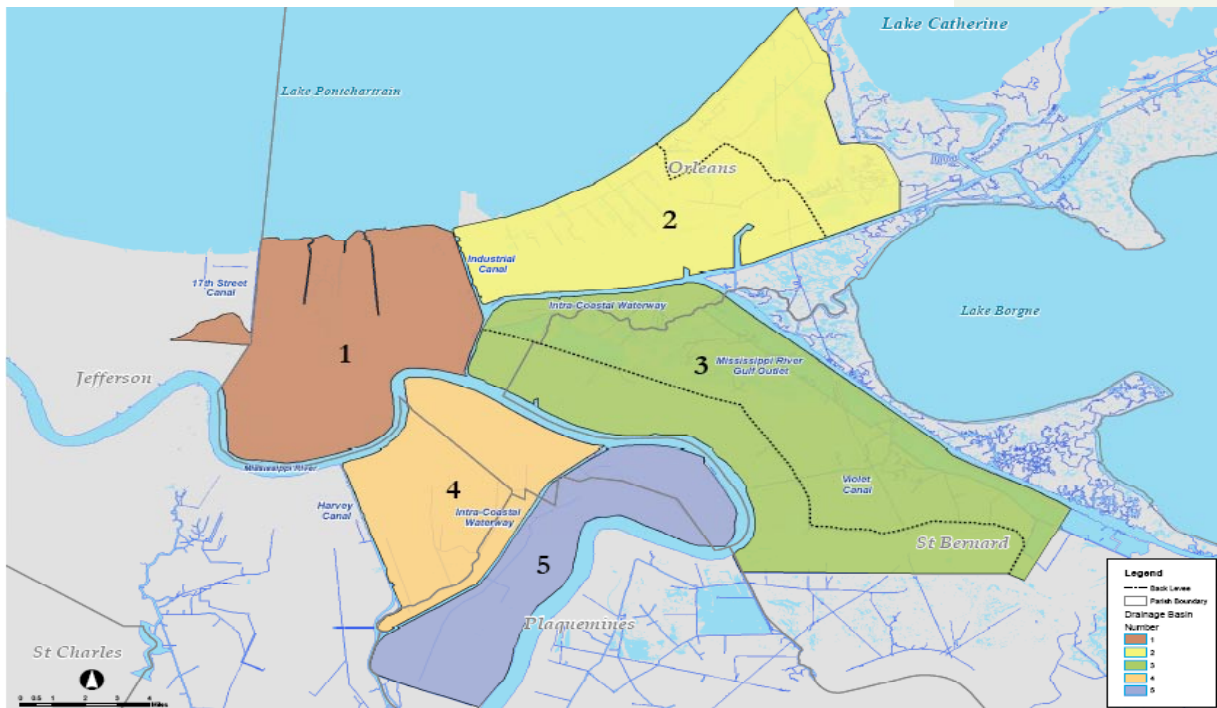
The State of Louisiana directed the Coastal Protection and Restoration Authority (CPRA) to develop a Comprehensive Master Plan with the guiding principles being: 1) integration of protection and restoration, 2) public and stakeholder involvement, 3) adaptive management and other processes, 4) recognition of constraints, and 5) land use. The CPRA held a series of stakeholder meetings and public outreach between August and October 2006. It delivered a Preliminary Plan and held public meetings on that plan in November and December, 2006, respectively. A Draft Plan is due in January 2007 with public hearings in February 2007 and a Final Plan will be presented in April 2007.

In the absence of definitive data from the USACE and CPRA regarding future flood risk management, the following planning level information is organized by the five basins in which the City of New Orleans resides (previously described in Section 1, and shown again below). This information includes identification of the basin, a listing of the Planning Districts within that basin and the status of USACE repairs and planned improvements, by year, for that basin. Each section contains an "Implications for Planning" statement.

As a reminder, the five basins are:

1. The central core of the City of New Orleans
2. New Orleans East
3. The Lower Ninth Ward and St. Bernard Parish
4. Algiers, Gretna and Harvey
5. Lower Coast Algiers and Belle Chasse

New Orleans Metro Area: Boundaries of Five Drainage Basins



Drainage Basin 1

(Planning Districts: 1, 2, 3, 4, 5, 6, 7)

Implications for Planning

Flooding in Basin 1 was due to design flaws that caused the floodwalls to fail. Currently planned (and funded) projects to be completed by 2010 will correct that problem and significantly improve storm surge protection (and reduce risk) in this drainage basin as they are completed.

Planned Improvements

2006. All failed levee and floodwall sections have been repaired. Temporary flood gates have been constructed at the mouths of the 17th Street, Orleans and London Avenue canals. This represents a significant improvement, as the storm surge will no longer be able to penetrate into the outfall canals. Temporary pumps have been installed at the floodgates in the event of closure of the gates during a tropical storm with surge; however, pumping capacity of the temporary pumps is only approximately 50% of the existing pumping stations.

This means that Drainage Basin 1 is currently at risk of flooding during a tropical storm with heavy rainfall. Topographic maps prepared by the USACE show that a 9-inch rain in six hours could cause 3 of 4 feet of flooding in the lowest-lying parts of Broadmoor, Central City, Hollygrove, Lakeview, Gentilly, and



Florida/Desire.

2007. The USACE expects to increase temporary pumping capacity to 67% of pre-storm pumping station capacity by June 2007. Levee walls in the Industrial Canal are to be raised to authorized height by September 2007.

2010. The USACE expects to replace the temporary gates at the outfall canals with permanent, flood-proofed pumping stations by the end of fiscal year 2010. New floodgates to keep storm surge from entering the Industrial Canal will be constructed at the Seabrook Bridge, the Gulf Intracoastal Waterway (GIWW) and, perhaps, the Mississippi River-Gulf Outlet (MR-GO).¹

2010 +. Proposals to build barrier structures at the Rigolets and Chef Pass and in Lake Borgne to prevent storm surge from entering Lake Pontchartrain will provide Drainage Basin 1 with better protection than it has ever had.

Drainage Basin 2

(Planning Districts: 9, 10, 11)

Implications for Planning

The levees of New Orleans East did not fail during Hurricane Katrina, but they were overtopped by storm surge. The eastern perimeter of the Greater New Orleans Metropolitan Area (GNOMA) has become increasingly vulnerable with ongoing subsidence and wetlands retreat. Katrina showed that Lake Borgne and the east end of Lake Pontchartrain is an open portal to the Gulf of Mexico and solutions to the storm surge problem in New Orleans East must be comprehensive and long-term.

Stakeholders in New Orleans East should carefully monitor flood protection proposals and implementation by the USACE and CPRA.

Planned Improvements

2006. All storm damaged levees repaired (completed).

2007. Levees will be raised to authorized height by September 2007.

2010. Levee heights expected to be increased by 2 to 8 feet to meet 100-year flood requirements by 2010. Flood gates at Seabrook Bridge and the GIWW are to be built by 2010².

2010 +. The USACE is to develop alternative scenarios for protecting the City of New Orleans and all of coastal Louisiana from storms greater than the 100-year storm and present them to Congress by December 2007. These projects, currently undefined, will likely be components of the Louisiana Coastal Restoration Program and may take decades to implement.

¹ The proposed floodgate in the GIWW at Paris Road is controversial, with officials in St. Bernard Parish claiming that it will increase the chances of flooding in that parish as well as New Orleans East. Resolution of these conflicts could extend completion of this project beyond the 2010 timeline.

² The proposed floodgate in the GIWW at Paris Road is controversial; with officials in St. Bernard Parish concerned that it will increase the risk of flooding in their parish as well as New Orleans East. Resolution of the conflict could extend the completion of this project beyond the 2010 timeline.



Drainage Basin 3

(Planning District: 8)

Implications for Planning

Planning District 8 shares a large drainage basin with St. Bernard Parish. Similar to New Orleans East, the levees were overtopped by Katrina and were washed away by subsequent scouring. Other than the possible raising of the levees by 2 to 8 feet by 2010, there are no concrete plans to improve the hurricane protection system at the present time (for example, by armoring the levees.)

The USACE is to develop alternative scenarios for the protection of the City of New Orleans and Louisiana's coast and provide that information to Congress by December 2007. For all practical purposes, improved hurricane storm surge protection for the Lower Ninth Ward depends upon the implementation of large-scale coastal restoration projects that will take time to plan, permit, design and implement. Stakeholders in District 8 should carefully monitor flood protection proposals and implementation by the USACE and CPRA.

Planned Improvements

2006. Damage to MR-GO levees and Industrial Canal floodwalls repaired (completed). MR-GO levee has been raised to authorized height of about 20 feet.

2007. Industrial Canal floodwalls to be raised to authorized height by September 2007.

2010. Parts of the levee could be raised 2 to 8 feet to meet 100-year standard. Seabrook floodgate to be built at the lake entrance.

2010 +. The USACE is to develop alternative scenarios for protecting the City of New Orleans and all of coastal Louisiana from storms greater than the 100-year storm and present them to Congress by December 2007. These projects, currently undefined, will likely be components of the Louisiana Coastal Restoration Program and may take decades to implement.

Drainage Basin 4

(Planning District: 12)

Implications for Planning

Ongoing projects to build the West Bank levees to their authorized heights are to be completed by 2007; however, it is generally agreed that protection will not meet the new 100-year standard. Consequently, future rounds of levee-raising will be required. Current surge protection of the west bank is described by Ivor van Heerden, Deputy Director of the LSU Hurricane Center, as "Category 2 hurricane protection."

The key issue with the entire west bank is that it has not been seriously tested in modern times. Van Heerden has stated that "If you had a Katrina that came up to the west of Morgan City, we could potentially see the flooding of the entire West Bank."



Planned Improvements

2006. No Katrina-related repairs required. Harvey Canal Gate is under construction and expected to be completed this year.

2007. Levee and levee floodwalls to be raised to authorized heights by September 2007.

2010. Harvey Canal Gate may be raised to meet 100-year flood requirements.

Drainage Basin 5

(Planning District: 13)

Implications for Planning

Similar to Basin 4 (Planning District 12), the main problem with Basin 5 is that the hurricane protection system has not been seriously tested.

Planned Improvements

2006. No repairs required. A recent lift of the levee has brought elevations to 9.5 feet, the authorized height. No further improvements have been identified; however, further levee-raising may be required to achieve the new 100-year standard by 2010.

In summary, all areas of the City continue to be vulnerable to flooding from one source or another through the year 2010 and, in some cases, significantly beyond that. Inadequacies in the primary defense system will persist in parts of the City until the USACE and CPRA's long-term plans are fully implemented, which may take 10 or more years.

Recovery Scenarios

As part of the UNOP process, three scenarios were developed based on the three overarching issues - population growth, flood protection, and funding - and their divergent possible outcomes. The scenarios represent three distinct potential futures for the recovery of the City of New Orleans. Scenarios are different from "visioning" which asks "what do you want to happen?" or "what would like to see?" Instead, scenarios recognize external influences, uncertainties, strategic opportunities, conflicts, and challenges. We need to understand the possibilities - both good and bad - of how our City might look around the year 2017. Since this plan is about recovery and rebuilding, all scenarios consider likely outcomes on a 5- to 10-year time frame.

All three scenarios have at their core the same fundamental vision that City leaders have maintained throughout the first year of recovery: *that every citizen, regardless of current residence, has the right to return to New Orleans.* They also further envision that *all citizens, businesses and investors in our Great City have a right to a Safer, Smarter, Stronger City that enables a substantially higher quality of life, greater economic opportunity, and greater security against hurricanes than New Orleans had prior to Katrina.*

The scenarios are not planning concepts so much as alternate models of reality, and their main purpose has been to provide contrasting decision-making frameworks about recovery priorities and projects, in particular to distinguish between project priorities under varying degrees of budget constraints. Each scenario makes some general assumptions that similar levels of resources and types of strategies will be applied across the City and across different recovery needs and issues. But, in reality, the ultimate scenario, or path, for New Orleans' recovery will not be a choice of one of these three scenarios, but rather a blending of the three different resource levels and strategies by need, issue and geography.

Scenario 1 – Re-pair

The first recovery scenario, which is termed “*Re-pair*,” represents the market approach to recovery policy underway in most of New Orleans in 2006. This scenario relies primarily on the current suite of disaster funding provided by the FEMA Public Assistance Program (PA), Small Business Administration (SBA) loans, private insurance, and federal grants to the Louisiana Recovery Authority (LRA) to fund repairs to damaged public and private properties. In this scenario, the existing programs (such as the Road Home program) are fully implemented to current funding levels, but New Orleans does not receive any large addition of federal or state funds. There are no substantial improvements in flood protection beyond the 2010 conditions of the region’s levees, pumps and canals. The City will be safer from future flooding because new building codes and mitigation funds are used as part of repair. Public services and facilities, including utilities, schools and health care facilities, will be repaired but not substantially improved beyond their pre-Katrina levels even after 10 years or more. Population growth will be incremental and slow and will not reach pre-Katrina levels. In this scenario, the City will not yet have a tax/consumer base sufficient to realize the higher quality of life and service delivery standards that is hoped for New Orleans’ recovery.

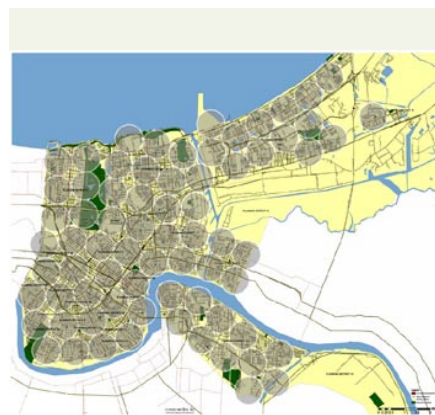
Scenario 2 – Re-habilitate

The second scenario is called *Re-habilitate*. It builds on the *Re-pair* scenario by assuming that additional funds from public and private sources will flow into New Orleans. In this scenario, a moderate level of additional federal, state and private funds are received, in addition to all the existing programs and funds that are fully implemented. These additional funds will be used to correct some of the systemic infrastructure problems (e.g. utilities, streets and services) so that they are improved over pre-Katrina capacity and conditions and also provide the economic incentives for other investments and projects.

There will be some secondary flood protection defenses created by many individual and businesses decisions in rebuilding and resettlement, and the City’s population will be nearing pre-Katrina levels. In this scenario, individuals, businesses and investors will have a greater measure of security and confidence in the City, but the City’s ability to attract investment will evolve more slowly and will be more dependent upon external and unpredictable factors, such as being hit by another hurricane. Quality of life and delivery of goods and public services is moderately improved, even in the face of reductions in population, consumer spending and tax base.

Scenario 3 – Re-vision

The third scenario is termed “*Re-vision*” because it is the most optimistic view of our collective future. In this scenario, significant and multiple sources of additional federal, state and private funding will be received and all existing programs and funds will be fully implemented. New Orleans will be doing more than relying on external flood protection, by funding and implementing the elevation or relocation of thousands of structures and community assets out of harm’s way. In this scenario, additional funds are strategically reinvested in the community and there are many quality of life enhancements, including state-of-the-art schools and health care facilities. The City’s population will be fully returned or will exceed pre-Katrina levels, and there will be vastly improved business and investor confidence for us to realize some of our greatest economic and social/cultural aspirations.




Community Feedback on Scenarios

Scenario discussions were first held at the second round of District Meetings, during the weekend of November 11 and 12, 2006. Based on the community input received, a menu of recommendations was developed for each district's recovery. These recommendations ultimately translated into a priority list of recovery projects as part of each District Plan.

The three scenarios were then presented to over 2,500 New Orleanians attending Community Congress II on December 2, 2006. The scenarios formed the basis for citywide conversations about priorities for flood protection and the recovery and reconstruction of the City's infrastructure, health care and education facilities, and other essential services. The following emerged as the strongest messages from the public at Community Congress II:

- **Reduce Flood Risk:** New Orleans must do everything possible to advocate for Category 5 flood protection³ and wetland restoration⁴ in order to protect the city from future storms. At the same time, New Orleans should set voluntary standards for individuals to reduce their flood risk by making decisions to rebuild stronger or relocate safer. Financial incentives and support must be available to help residents reach those standards.⁵
- **Empower Neighborhoods to Rebuild Safer and Stronger:** Empower residents to rebuild stable and safe neighborhoods by providing financial incentives and the best possible information, rather than through government mandates and enforced standards.⁶
- **Build Affordable, Rental and Low-Income Housing:** Build housing for renters, low-income families and public housing residents, so that everyone can come home to New Orleans who wants to do so.⁷ Funding is needed to build low- and moderate-income public housing.⁸



Preliminary Report UPDATED


Community Congress II December 2, 2006

New Orleans, Atlanta, Baton Rouge, Dallas, Houston & 16 other cities

More than 2,500 New Orleanians gathered for Community Congress II, a large-scale community meeting that took place simultaneously in 21 cities. The unique interactive assembly connected participants in New Orleans with those in the four cities with the largest number of Katrina evacuees – Atlanta, Baton Rouge, Dallas, and Houston through satellite technology. Meetings held in public libraries and community organizations in 19 other cities engaged other members of the diaspora via webcast in this critical conversation.

Community Congress II focused on updating New Orleans residents on recovery efforts, creating a public dialogue to identify rebuilding priorities, and strengthening public awareness for continued recovery and rebuilding efforts.

Participants began the day-long Community Congress by sharing their ideas on the most important elements to preserve and to change as New Orleans is rebuilt. The next discussions focused on identifying and prioritizing action-based solutions on six key aspects of rebuilding: 1) Flood Protection; 2) Roads, Transit and Utilities; 3) Neighborhood Stability; 4) Rental and Affordable Housing; 5) Education and Health Services; and 6) Other Public Services. Finally, citizens weighed in on what needs to happen in order to ensure that the necessary resources are available to allow these ideas to be put into action.



Who Attended Community Congress II?

UNOP sought participants that represent the diversity of pre-Katrina New Orleans. Participants' demographics are compared below to the pre-Katrina demographics of the city, according to 2000 Census Bureau data.

I Am Participating In...	Dec 2 nd	Age	Dec 2 nd	Actual Pre-Katrina
New Orleans	62%	15 to 19	2%	7%
Houston	13%	20 to 34	12%	22.8%
Dallas	11%	35 to 44	10%	14.8%
Baton Rouge	6%	45 to 54	27%	13.1%
Atlanta	8%	55 to 64	27%	7.8%
		Over 65	16%	11.7%

Location of Residence	Dec 2 nd	Actual Pre-Katrina	Race/Ethnicity	Dec 2 nd	Actual Pre-Katrina
District 1	3.1%	1.4%	African-American	64%	67.3%
District 2	6.0%	9.9%	Asian	4%	2.3%
District 3	11.9%	13.8%	Caucasian	27%	28.1%
District 4	11.4%	16.4%	Hispanic/Latino	2%	3.1%
District 5	10.0%	6.3%	Native American	0%	0.2%
District 6	13.7%	9.1%	More than one race	2%	1.3%
District 7	5.9%	8.5%	Other	1%	1%
District 8	7.4%	4.9%			
District 9	19.3%	16.6%			
District 10	4.8%	2.7%			
District 11	0.8%	0.4%			
District 12	4.6%	11.5%			
District 13	0.5%	0.2%			

Income	Dec 2 nd	Actual Pre-Katrina
Less than \$20,000	25%	37%
\$20,000 - \$39,999	22%	24%
\$40,000 - \$59,999	17%	14%
\$60,000 - \$74,999	8%	7%
More than \$75,000	20%	19%

Home Ownership	Dec 2 nd	Actual Pre-Katrina
Home Owner	95%	48%
Renter	29%	54%
Other	6%	N/A

3 Across all rebuilding priorities, category 5 flood protection received the strongest support. Within all flood protection options, 58% of CCII participants said category 5 flood protection was an important option to pursue.

4 Across all rebuilding priorities, taking a more holistic approach to flood protection, which includes wetlands restoration, received the third highest vote count. Within the area of flood protection, 39% of CCII participants said this was an important option to pursue.

5 63% of CCII participants supported financial incentives to reduce flood risk while only 23% opposed this option. Participants were also very supportive of standards for reducing risk and an option that provided standards while giving people choices received the third highest support across flood protection options.

6 The option receiving the strongest support to create more stable neighborhoods was offering incentives for neighbors to purchase blighted properties. CCII participants expressed strong opposition to enforcing where residents can live with 58% opposing vs. 31% in support. 65% of participants supported offering financial incentives for rebuilding near one another vs. 22% in opposition. 63% supported financial incentives for reducing flood risks vs. 23% in opposition.

7 Creating homeownership opportunities for low-income and public housing residents without concentrating poverty received the most support of affordable housing options. Making housing available for evacuees received the second most support.

8 53% of CCII participants supported funding for low and moderate-income housing with 36% opposed.

- **Reopen and Rebuild Public Facilities:** Public facilities, like schools and healthcare centers, should be reopened and rebuilt based on repopulation and recovery rates.⁹ Temporary, satellite or mobile facilities should be used in less populated areas. The city should develop a plan to expand services as neighborhood populations grow.¹⁰ Where possible, public facilities should be combined under one roof to increase efficiency and lower costs.¹¹
- **Rebuild Communities around High Quality Schools:** Neighborhoods should be rebuilt around schools as 24/7 community centers.¹² Improving school quality is essential to New Orleans' recovery.¹³

This input is also consistent with the top five priorities of participants in Community Congress I, held on October 28, 2006:

- Flood Protection and Risk of Flooding
- Affordable Housing for Lower and Middle-Income people
- Quality of Public Schools
- Response-Time of Police, Fire, and EMS
- Accessibility to Hospitals, Clinics, and Medical Services.

All the feedback was analyzed in depth by the Citywide Team and shared with all the District Teams for use in the plan development efforts of the next phase of the planning process.

Strategic Recovery Framework

Due to the sheer scale of the destruction caused by Hurricane Katrina, the recovery of New Orleans requires a response that goes well beyond traditional disaster recovery planning. More than simply providing a prioritized list of projects, the Citywide Recovery and Rebuilding Plan must address the city's recovery as a comprehensive whole. The Citywide recovery framework incorporates the public input from Community Congresses and district meetings, the district and citywide recovery assessments, and elements of all three recovery scenarios - *Re-pair*, *Re-build* and *Re-vision* – into a comprehensive vision, goals, and strategic policy framework to guide the City's recovery and rebuilding.

Recovery Vision

All citizens, regardless of current residence, have the right to return to New Orleans. In addition, *all citizens, businesses and investors in our Great City have not only a right to return but also a right to return to a Safer, Stronger, Smarter City that enables a substantially higher quality of life, greater economic opportunity, and greater security against hurricanes than New Orleans had prior to Katrina.*

Over the next 5 to 10 years, all of New Orleans diverse neighborhoods will come back: the French Quarter, the Central Business District, the Garden District, the Irish Channel, the Warehouse District, Uptown, Downtown, the Lakefront, Lakeview, Gentilly, New Orleans

⁹ 72% of CCII participants supported opening and rebuilding health and education facilities based on repopulation and recovery rates vs. 19% opposed. Participants expressed mild opposition to locating and staffing health and education facilities evenly throughout the city (41% in support vs. 51% opposed).

¹⁰ The two options receiving the greatest public support in the area of "other public services" were to place main stations where people are and satellite/mobile stations in low population areas, and to develop a plan to increase services as population grows.

¹¹ Combining public facilities received strong support at CCII for education and health (68% vs. 23% in opposition) and "other services" (65% vs. 25% in opposition).

¹² Making schools 24/7 community centers received the greatest support from CCII participants in the area of education and health services, and was one of the top options across all recovery options. Improving school quality received the second highest support in the area of education and health services.

¹³ Improving school quality received the second highest support across all recovery priorities.

East and the Lower Ninth Ward. The future City will be familiar, but different, it will be a New Orleans that is Safer, Stronger, and Smarter.

The future New Orleans, like the old one, will be noted for its architecture, its accessible public spaces, and its lush greenery in public and private spaces. It will be noted for its cleanliness, its walkability, and its lack of crime. The City will diversify its economy and provide state-of-the-art health care, education, and public services to all its residents. The City will have a financially sustainable government and government agencies that are able to maintain and improve facilities and services. The City will honor its history and will become at once the most European of American cities as well as a great Caribbean city.

Envision a New Orleans that is prosperous, progressive and populated by an engaged citizenry steeped in the culture and traditions of New Orleans and active in the governance of the City. They will be supported through a collaborative effort of the local, state and federal governments, assisted by the generosity of non-governmental organizations, working together with a unified vision. Our people are resilient; a population that had to struggle to stay here, or had to struggle to get back here.

Recovery Goals

Based upon the feedback on the scenarios and other data analyzed in early phases, seven major planning priorities were developed to help frame the necessary breadth and depth of the City's recovery and rebuilding focus.

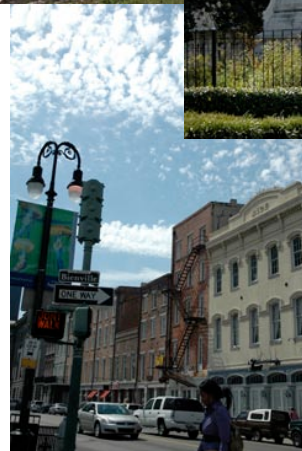
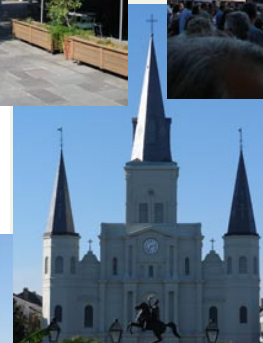
1. Promote the integration of multi-level flood protection systems into rebuilding plans.

Lessening the risk of future catastrophic loss is critical to the City's recovery. New Orleans' flood protection system of levees, pumping stations, surge gates and floodwalls is insufficient to protect the people and property of New Orleans against the most serious flood risks. A substantially upgraded levee protection system will ultimately protect the entire City from even a Category 5 hurricane. However, self-directed flood mitigation measures must be also be implemented. The mix of measures include: helping residents/businesses relocate from the most vulnerable areas, elevating structures, hardening infrastructure, and accommodating additional population in less vulnerable areas.

A multi-level approach to flood risk management will reduce future interruptions of the recovery and foster confidence among residents, businesses and the financial community (including public and private financing sources and insurers). This added confidence will help spur development in all of the key sectors of the recovery, including, housing, infrastructure, public services and economic development.

2. Foster remedies to address blighted neighborhood conditions throughout the City.

Current programs and policies are causing an uneven resettlement pattern which is negatively affecting the safety and sustainability of some neighborhoods. Many of these neighborhoods sustained some of the deepest flooding in Katrina, and are at low elevations that are vulnerable to future flooding. The blighted condition of many neighborhoods potentially



fosters crime, creates inefficiencies in delivering vital city services, and weighs heavily upon the minds of returning residents. Market forces will drive the recovery of the City in many ways, but market anxiety could also impede recovery in the absence of clear direction and concerns about neighborhood-level safety and sustainability. A more rationale pattern of resettlement can be encouraged by concentrating community services and commercial activity in areas of higher elevation, offering incentives to residents/business owners and developers to relocate into a more clustered development.

3. Promote the strengthening and diversification of the economy by retaining key facilities, making strategic investments in workforce development and new infrastructure, and improving the overall quality of life.

An economic boom in construction and related industries is possible as the City's recovery gains momentum. The economic gains will be short lived, though, unless New Orleans retains key facilities such as the LSU/VA Medical Complex, allows for their expansion, and seeks out new growth industries whose lifespan will exceed the recovery and rebuilding period. Small businesses are the economic backbones of our neighborhoods and they must also be supported to ride out the recovery. Support must be provided to our businesses that have returned and our workforce must be trained to implement the recovery and lead the city's economy into its next generation.

Sustained economic growth is the result of many factors; one that is occasionally overlooked is providing an overall high quality of life for businesses and residents. Improving the safety of the City, the quality of public education, the efficiency of public service delivery, and the overall appeal of the built environment must be recognized as critical to long-term economic prosperity.

4. Ensure an adequate supply of affordable, rental and public housing in an equitable manner.

Two main principles guide this priority: (1) basic equity among residents of the City, and (2) economic equilibrium and growth. First, providing for sufficient affordable and low-income housing supports the core value of this planning process: that everyone has a right to return to New Orleans. Secondly, an adequate housing supply facilitates the development of an adequate workforce to carry out the recovery and future growth of the City.

Critical to the long-term health of New Orleans' neighborhoods is an understanding of the location, design, and overall quality of affordable, subsidized, and public housing. Efforts to rebuild and expand the affordable housing stock should provide interim housing solutions here in New Orleans for public housing residents who want to return. The new developments must respect the character, the architecture, and the socio-economic health of neighborhoods.

5. Renew the City's roads, utilities, public transit, and infrastructure in a sustainable and strategic fashion.

Renewal of the City's infrastructure is critical to the support of basic living conditions and essential economic activity. Since practical and financial limitations will likely prevent the comprehensive repair and improvement that is necessary to bring the City's infrastructure to full strength, infrastructure recovery must proceed efficiently and while making effective use of limited funds. Coordination with housing, public services and economic development initiatives will be vitally important in planning the renewal of the City's infrastructure.

As infrastructure is rebuilt, it must be designed and constructed in a sustainable manner that will protect key structures and facilities in the event of another significant flood and reduce unnecessary future costs. Strategic investments must also be made to stimulate neighborhood revitalization and to modify infrastructure to accommodate additional population moving

into some areas. Long-term capital improvement plans and investments in infrastructures must be instituted and followed. Residents and businesses must have confidence in the City's ability to rebound rapidly from a major disaster and to quickly restore the services that are essential to a high quality of life.

6. Make significant, strategic investments in community facilities that will result in substantially enhanced community infrastructure and improved service delivery.

Prior to Katrina, many of the City's schools, health care facilities, playgrounds, community centers, and criminal justice facilities needed repairs and reinvestment. Furthermore, by virtue of their location and construction, many of these facilities were severely impacted by Katrina's floodwaters, thereby retarding the restoration of services that are essential to civic life.

The restoration of community-serving buildings and services must be planned in such a way as to maximize limited resources, provide quality services to the current and near-term population as effectively as possible, follow a long-term strategy for sustainability, and allow for an expeditious recovery in the event of a future flood. The City must also aim to create state-of-the-art community services.

7. Preserve New Orleans' culture, historic architecture and overall aesthetic character to the maximum extent possible while facilitating new development.

New Orleans would not be celebrated and beloved, nor would it be a major destination City, if not for its culture and historic architecture. The amount of damage caused by Katrina has placed unprecedented pressure on the building stock of both officially designated historic districts as well as those areas that are not formally protected as local historic districts. Existing preservation laws must be rigorously enforced, but they must also be administered in a way that makes the historic review process more expeditious, transparent, and predictable. New methods of protecting historic buildings while facilitating rapid redevelopment must be explored, particularly in those neighborhoods that do not have historic district status but whose architecture should be treasured.

Strategic Planning Framework

Rebuilding the systemic and catastrophic damage that New Orleans' neighborhoods, infrastructure and facilities sustained in Katrina, requires that we do more than simply select a project here or there within a neighborhood. Catastrophic urban recovery requires a strategic and coordinated framework that first stabilizes the recovery and then builds a foundation that can both sustain and progress the recovery over time. This framework must balance the recovery vision and goals with the realities of recovery. It must be fair and equitable to bring back the entire City and enable all citizens to return. It also must optimize existing resources as there is insufficient funding and manpower to undertake the entire reconstruction all at once.

The proposed citywide strategic planning framework defines the resources and strategies that are needed in different parts of the City over different phases of time, in the next 5 to 10 years of the City's recovery. The proposed planning areas of the City are defined by the overarching issues affecting the City's recovery:

1. Varying rates of repopulation across the City, and
2. Differing levels of flood risk.

The proposed planning areas are based on reliable, and publicly available, evidence. But, the data will be dynamic (ever-changing) and must be monitored as flood protection improvements are made and the rates of returning population accelerate over time.

Rates of Population Return

The differing rates of population return are a major risk factor that must be considered before public investments are made. Figure 2.1 shows a grouping of City blocks according to the current rates of repopulation across the City. The rates of utility usage for both commercial and residential customers were used as a proxy of population return. November 2006 rates of usage were compared with November 2004 rates. Areas with 15% or less of its pre-Katrina utility usage are more vulnerable in recovery and careful attention must be paid to developing appropriate policies and strategies to match residents' needs in order to return. Areas with 15% to 60% of pre-Katrina utility usage are showing strong promise of recovery and residents may need strategies and policies that help them return and rebuild safely. Areas with more 60% of its pre-Katrina utility usage are well on their way to recovering their former populations and need policies and strategies that help them to accommodate additional population.

Figure 2.1 Post Katrina Activity Index By Block, August 2006



Source: GCR & Associates, Inc. Note: Index equals November 2006 index

Future Risk of Flooding

Hurricane Katrina taught us a very sobering lesson: that the hurricane protection system we had in place in August of 2005 was not able to protect the City from a near miss by a slow moving Category 3 hurricane. And even though the damaged levees and floodwalls have been repaired, we are still vulnerable to Category 3 and larger hurricanes until the USACE makes some key upgrades to the hurricane protection system, as it is planning to do, by 2010. Furthermore, it will take many more years for the USACE and the State of Louisiana to restore wetlands and help protect the entire Louisiana coast from Category 5, and larger, hurricanes. In the meantime, New Orleans can do more to protect itself by building stronger and more safely.

To depict the future risk of flooding, two key factors were identified: topographic elevations and potential storm surge. Figure 2.2 shows a grouping of city blocks according to their natural elevations and potential for storm surge. Average elevations by city block are grouped in three categories using United States Geological Survey (USGS) datum for areas that are three feet or more below sea level; between three feet below sea level to sea level; and areas at sea level or above.

Figure 2.2 Natural Elevations Across New Orleans



To depict potential storm surge, computer model data from the USACE was used. This model depicted the flooding that would have occurred in the City from Katrina if there had been no breaches of the floodwalls and all the drainage pumping stations were running continuously. This model shows that without the breaches, there are still many levees and floodwalls that would have been overtopped, causing widespread flooding throughout the City (though not as extensive or deep as occurred with the breaches). When combined, three areas of high, moderate, and low risk of future flooding can be identified.

Proposed Recovery Planning Areas

When these two factors are combined, a pattern of varying flood risk and population recovery begins to emerge and can generally be categorized as follows:

- **Areas with very slow repopulation rates and high risk of future flooding.**
- **Areas with moderate repopulation rates and moderate risk of future flooding.**
- **Areas with fast repopulation rates and low risk of future flooding.**

While this is not a perfect classification, it does offer a defensible and workable framework to establish strategies and policies, programs, and projects that are better tailored to the varying recovery and rebuilding needs of different parts of the City. These areas are only proposed at this stage, as the final projects must be adopted and funds more fully secured in order to implement the strategies and approaches proposed in this Citywide Plan for each planning area.

For areas with very slow repopulation rates and high risk of future flooding:

The immediate next steps in recovery of these areas must focus on stabilization. The heavy damage to infrastructure must be repaired and residents and businesses will be encouraged

to return and rebuild in more sustainable clusters within their neighborhoods; or they may choose to relocate to another neighborhood in the City. Any programs or projects proposed for residents and businesses must be strictly voluntary and incentive-based; no mandatory relocation programs are proposed. But the technical and financial resources must be made available so that residents and businesses can work together to make collective decisions on where and how to rebuild more closely together with flood mitigation and sustainable/green building practices.

A more clustered pattern of resettlement will help the City and other agencies focus investments and upgrade public services and infrastructure to attract residents and businesses to reside near one another. A more clustered pattern of resettlement will reduce the guesswork among residents and businesses about their neighborhood's future viability, by restoring communities and reducing blight. It will also provide a guide to the City and other agencies to use in restoring infrastructure and services, and targeting investments to enhance infrastructure and services, and improve quality of life, which can stimulate additional investments.

Plans and designs of a more clustered resettlement pattern should be developed and work initiated in the first two years of recovery. Heavy damage must also be quickly repaired to stabilize these neighborhoods. Then, more focused investments that provide upgraded and state-of-the-art infrastructure and public services should be made to reinforce and support the clustered pattern of resettlement that emerges. Progress must be reviewed annually, as conditions in neighborhoods can change. Over time, the undeveloped areas will need to be re-envisioned into alternative, productive uses. These uses should reflect the goals and objectives of the City's Master Plan as well as the reductions in flood risk, anticipated as the USACE implements its next phases of work.

For areas with moderate repopulation rates and moderate risk of future flooding:

Most of the City's land area will likely be within this planning area, as many residents have already made the financial commitment to return and rebuild their homes and we have long known that life in New Orleans carries a certain susceptibility to flooding. Strategies and approaches to these planning areas need to reinforce the investments already made by returning residents with incentives to help them better protect their property from future flood risk. Strategies and approaches also need to be structured to provide incentives that encourage other residents to return, so that the full public investments in rebuilding infrastructure and public services are maximized.

As an immediate next step in the recovery, all developed parcels in these areas should be considered future living sites whether occupied or left vacant. Thus, all blighted properties should be adjudicated or otherwise brought into compliance with city codes and efforts made to put them back to use. Public investment should first focus on repairing heavy damage to avoid additional losses, and next to improve and expand infrastructure and public services to accompany repopulation rates. Temporary, modular or mobile facilities might be used initially in the least populated portion of these areas; but, because the full geographic extent of these areas may fully recover, major investments in public infrastructure and utilities should also proceed in the short- and medium-term as population returns.

Progress must be reviewed annually, and alternative strategies and approaches should be considered to help those areas still struggling to rebound after a few years. Likewise, major investment strategies will also need to be adjusted. For those areas where repopulation is still quite slow, a clustered approach to resettlement might be implemented over time. Any future redevelopment should reflect the goals and objectives of the City's Master Plan as well as the reductions in flood risk, anticipated as the USACE implements its next phases of work.

For areas with fast repopulation rates and low risk of future flooding:

These areas of the City represent the safest and most fully recovered areas. Immediate investment should focus on repairing any heavy infrastructure damage to insure no further damage occurs. All land parcels are valuable and strategies and approaches should aim to reverse some of the historic disinvestment and underutilization of some neighborhoods located in these areas. Strategic investments in public services and infrastructure should concentrate on identifying and completing those recovery projects that encourage further population return and expand capacity to accommodate more residents and businesses wishing to voluntarily relocate into these parts of the City. Attention must be paid to preserving affordable housing in these areas. Full recovery will take 5 years or less, in some cases, much less.

Recovery Strategies Through Time

A comprehensive set of recovery strategies has been developed for each the City's major sectors – from housing to jobs to flood protection to utilities. The top recovery priorities are then defined for each sector (primarily those things that we must do in the next 2 years to stabilize and build the foundation for a sustainable recovery across all neighborhoods in the City). It also defines a course for planning and investing in the mid-term (2 to 5 years) and longer-term (beyond 5 years).

But, since we can't predict the future, the strategic recovery framework also provides a template for future plan implementers to monitor and evaluate progress, and adjust strategies and approaches based on actual resettlement patterns over time. The framework will guide investment in support of the City's recovery in each sector for each part of the City. It also provides a means of bundling together priority recovery programs and projects recommended by the Citywide and District Plans for implementation and financing.

As conditions change in a given areas of the City, the framework also enables future planners and decision-makers to shift resources to meet the demands and also evaluate how these strategies should change. For example, a certain set of strategies may be appropriate for providing public services in a certain parts of the City based on its level of flood risk and current population, but these conditions may change over time.

District Plan Integration

Over the course of the UNOP process, a diverse range of recovery projects have been identified by citizens and planners. All Citywide and District recovery projects are acknowledged in the Citywide Plan. Many of the projects are listed within the sector recommendations as concrete examples of how strategies may be carried out. Other projects are referenced in the implementation section of the Citywide Plan as policies or processes that must be put in place to ensure the plan's successful implementation.



Section 3. Summary of Recovery Projects

Recovery projects evolved from a rigorous assessment of the City's recovery fourteen months after Katrina. The assessment evaluated recovery progress and needs across a wide range of sectors, including flood protection, housing, utilities, health care, education, transportation, recreation, and libraries. Agency representatives and peers within the community were interviewed as part of each recovery assessment. From this work, scores of action-oriented projects began to emerge. These projects ranged from simply repairing existing facilities damaged by the storm to redevelopment projects that could transform parts of the City. Some are immediate needs, others are more long-range. Consequently, a framework was developed so that projects could be phased and prioritized according to damage, rate of repopulation, and future risk of flooding.

Summary Descriptions of Projects by Recovery Sector

The following pages provide summaries of recovery policies, programs, and projects organized by sector. Each sector summary includes a description of the sector, some background on the key issues affecting recovery, strategies to advance the recovery, and a list of action-oriented policies, programs and projects.

Many of the policies, programs and projects will apply citywide. However, some are designed to target the specific needs of different areas of the City, based upon the rates of population return and the risk of future flooding. As discussed in Section 2 – New Orleans Recovery Framework, these proposed planning areas are:

- Areas with slow repopulation rates / high risk of future flooding
- Areas with moderate repopulation rates / moderate risk of future flooding
- Areas with fast repopulation rates / low risk of future flooding

Defining Recovery Projects

The LRA's Louisiana Speaks planning process defines recovery projects as "those that directly address needs resulting from the disaster and include:

- Projects of high recovery value that are consistent with the community's vision and goals, focus on overall community recovery and can achieve multiple recovery benefits;"
- Recovery projects that are "catalytic" to recovery - in that they 'jump start' community efforts or are necessary for other recovery projects to progress: and
- Recovery projects that provide an opportunity for a community to improve upon pre-disaster conditions and leverage recovery resources in a sustainable manner."

In addition to these general guidelines, this plan also considers whether projects already have an identified and secure source of funding. In January 2007, there are some 1,400 Project Worksheets submitted by qualified public agencies and non-governmental organizations (NGOs) to FEMA for reimbursement of damages caused by Hurricanes Katrina and Rita through the FEMA Public Assistance (PA) program. All projects that are deemed eligible by FEMA will be reimbursed by the PA program for 90% of the repair costs and the State of Louisiana will fund the 10% local match. Therefore, unless a project has been deemed ineligible by FEMA PA, it is assumed to be fully funded and is not included in the Citywide list of recovery projects. While the process to agree on project costs (differentiating between

pre-existing conditions and storm-related damage) may take some time to negotiate for reimbursement; it is assumed that these projects will eventually be completed and the respective public agencies and NGOs will be justly compensated. However, all those PA requests that are denied funding, or are not provided adequate funding may need to be subsequently added to this plan and its citywide list of recovery projects.

Also, an implementation timeline for programs and projects is located in each sector summary to indicate their start and finish dates, as well as to provide an indication of anticipated milestones.

Flood Protection

Flood protection consists of all measures taken by the community to protect itself from flooding. This includes the external system of levees provided by the Corps of Engineers as well as the internal system of drainage ditches, catch basins, pipes, canals and pumping stations provided by the Sewerage and Water Board (S&WB) and the Department of Public Works (DPW). It also includes measures to restore a healthy coastal zone so that barrier islands, natural ridges, marshlands and swamps can serve as buffers against hurricane winds and storage areas for storm surge. Lastly, it includes steps taken by the government, public and private institutions, and individual homeowners and business owners to raise their homes and businesses above the floodplain.

Background/Statement of the Problem

For the last one hundred years, the City of New Orleans has relied upon engineered flood protection systems – levees, canals, and pumping stations – to protect it from flooding. This system did not protect the City from the storm surge of Hurricane Katrina, a Category 3 storm. Of the 330 miles of levees that protect the City, many were overtopped, some 25 miles were completely destroyed and had to be rebuilt, while another 220 miles had to be repaired. Floodwalls in the core of the City were also breached, causing massive flooding. The reliance on levees alone has caused the City to move away from earlier flood mitigation techniques, such as locating on higher ground and elevating structures above potential flood waters, with particularly devastating effects on the many slab-on-grade homes constructed in the past fifty years.

The programs and projects identified for this sector are focused on what the City and individuals can do to protect themselves from flood damage in the future. Elements of the larger planning programs, such as the Corps of Engineer' Hurricane Protection System (HPS) and the Southeast Louisiana Urban Flood Control Program (SELA), as well as Louisiana's Coastal Protection and Restoration Master plan, are not included, because they are already underway and have dedicated funding sources.

Strategies

Flood risk management is a priority of the plan to make our citizens safe across the City. The flood protection strategy is two-fold:

- **Advocate forcefully that the Corps of Engineers and the Sewerage and Water Board provide stronger levees and floodwalls and provide additional (and more reliable) pumping capacity.** Full funding and expedited implementation should be guaranteed for the repair and upgrade of the regional hurricane levee system to current project standards by June 2007. Design and construct new systems, including levees, floodwalls, pumping stations, and floodgates to protect against Category 3 hurricanes by June 2010. Design and construct new systems, including coastal restoration and surge barriers to protect against Category 5 hurricanes as soon as possible, but in no case by later than 2020.
- **Take measures to flood-proof individual structures and critical equipment from rising water and hurricane-force winds.** By taking action ourselves, we are taking more responsibility for our lives, property and public investments, thereby demonstrating the City's commitment to mitigate its flood risk and justify our request for Category 5 protection.

Policies, Programs and Projects

1. Strictly enforce, at a minimum, FEMA Base Flood Elevation (BFE) guidelines across the City.

Provide more staffing to the City Planning Commission and the Office of Safety and Permits. These departments are essential to this effort. All costs are accounted for as part of implementation, and there is no specific project description sheet associated with this policy.

2. Develop and implement design guidelines for repairs and reconstruction across the City.

The project is discussed further in the Historic Preservation and Urban Design Sector. These guidelines will require more staffing in the City Planning Commission and the Office of Safety and Permits.

3. Provide incentives for flood mitigation practices that will “harden” both structures and contents for all public-serving facilities.

Ensure that essential public-serving facilities are “flood-proof” as soon as possible. All of the following public-serving facilities are eligible for these incentives: schools, hospitals, police and fire stations, communication centers, etc. This program applies equally across the City. More details are provided in Project Sheet #02.

4. “Elevate New Orleans” with incentives to voluntarily elevate structures.

Provide any residence or small business in the City of New Orleans with “gap financing” to fund the gap between the FEMA/Road Home funds and the actual costs of elevating a structure. Elevations must be performed in accordance with new FEMA BFEs and design guidelines. Incentives will be available for at least 5 years. More details are provided in Project Sheet #01.

5. Provide incentives for the voluntary reconstruction of slab-on-grade houses.

Provide homeowners whose slab-on-grade homes flooded during Katrina, or any other flood event, with “gap financing” to voluntarily demolish the home and rebuild a new house on-site in accordance with the new FEMA BFEs and design guidelines. The new structure must be designed and constructed in a more traditional New Orleans style, either on piers, with chain walls, or with first floor basements, in order to elevate the first floors above flood waters. Incentives will be available for at least 5 years. This program will be implemented differently across recovery planning areas in the City. More details are provided in Project Sheet #06.

6. Study the strengthening and use of secondary protection systems for flood protection and provide third party monitoring of on-going improvements and modifications to the flood protection system.

These studies would include concepts such as an analysis of Internal Flood Protection Measures for Selected New Orleans East neighborhoods, a study of a Hurricane Protection Levee System for Algiers, a study for a Hurricane Protection Levee System for Algiers Lower Coast, a preliminary conceptual study of Internal Flood Protection for the East Bank of New Orleans, and a study of flood protection between Orleans and Jefferson Parish. More details are provided in Project Sheets #03, #04, #05, and #07.



Application Across Planning Areas

Some policies, programs or projects should be adjusted to accommodate the requirements of the three proposed planning areas.

For areas with very slow repopulation rates and high risk of future flooding:

- Fully cover the costs of elevating homes under the “Elevate New Orleans” program. (Provide additional incentives for participants in the Neighborhood Cluster Program [see following sector]). Make gap financing available for at least five years.
- Study the use of secondary protection systems for flood protection. This would have particular application to New Orleans East.

For areas with moderate repopulation rates and moderate risk of future flooding:

- Provide generous incentive programs to help those who already decided to return to protect their rebuilding investment, including the “Elevate New Orleans” elevation or the “Slab-on-Grade Remediation” reconstruction program. Provide similar incentives for those who have not returned to encourage them to rebuild more safely. Make incentives available for at least five years.
- Study the use of secondary protection systems for flood protection.

For areas with fast repopulation rates and low risk of future flooding:

- Provide incentives to bridge the gap between FEMA/Road Home funds for elevation and full cost to elevate. Make incentives available for at least five years.

Flood Protection Projects (District and Citywide)

Citywide Team Projects	District	Corresponding District Projects
FLOOD PROTECTION		
"Elevate New Orleans" Incentive Program for Residential and Small Business Owners	1	Raise residential and sensitive buildings to sea level or above
	2	Develop and implement a voluntary incentive-based home "FEMA Plus" flood mitigation elevation program
	3	Home elevation program for high and medium risk areas
	4	Home elevation program for high and medium risk areas
	5	Develop and administer incentive-based program to elevate homes in areas of lowest topography
	6	Establish grant, loan, and regulatory program to support elevation of homes in low-lying areas to above mean sea level
	6	Secure funding to facilitate elevating homes in vulnerable locations and supporting voluntary buyout program
	7 (Bywater/ Marigny)	Raise homes to sea level or above
	7 (Florida/ Desire)	Raise homes to sea level or above - Property owners will require funding assistance to raise structures which should include ADA accessible amenities
	7 (St. Claude/ St. Roch)	Raise homes to sea-level or above; property owners will require funding assistance to raise structures, which should include ADA accessibility features
	8	Develop and institute voluntary "FEMA Plus" home mitigation and elevation program
	9	Restoration of Lake Pontchartrain fishing camps as small "hardened" buildings, constructed to withstand wind and water
	9	Provide incentives to elevate or replace priority at-risk homes (priority is homes in lowest areas of elevation) based on pre-Katrina values, while not creating any hardships or financial penalties for homeowners
Floodproof Essential Public Equipment	10	Provide incentives to elevate or replace priority at-risk homes (priority is homes in lowest areas of elevation) based on pre-Katrina values, while not creating any hardships or financial penalties for homeowners
	12	Develop and administer incentive-based program to elevate homes in areas of lowest topography.
	1	"Harden" civic and other buildings
	2	Hardening of utility service and street infrastructure program
	3	Pumping station upgrades and associated flood protection projects
	4	Pumping stations upgrades and associated flood protection projects
	5	Repair/reopen and harden Hynes Charter School
	5	Rehabilitate (3) and harden existing fire stations in District 5
	5	Rehabilitate and harden police station on Canal Blvd.
	7 (Bywater/ Marigny)	Harden civic and other buildings
	7 (Florida/ Desire)	Harden civic and other buildings
	7 (St. Claude/ St. Roch)	Harden civic and other buildings
	8	Repair and upgrade to hardened underground utilities corridor and street infrastructure program
	8	Develop and Implement a safe havens, passive survivability, and evacuation plan
	9	Construct new school at Ray Abrams Elementary as hardened facility
	9	Rebuild schools at higher elevation
	9	Rehabilitate/restore existing fire stations (3) as hardened structures
	9	Rehabilitate/restore existing police station as hardened structure
	9	Construct two police substations as hardened structures
	10	Rebuild schools at higher elevation
	10	Rehabilitate/restore existing fire stations (3) as hardened structures
	10	Rehabilitate/restore existing police station as hardened structure
	10	Construct two police substations as hardened structures
	13	Hardening of utility service and street infrastructure program
Study: Internal Flood Protection Study for Selected New Orleans East Neighborhoods	9	Conduct a secondary internal levee flood protection study
	9	Conduct a detailed flood mitigation study
	10	Conduct a secondary internal levee flood protection study
	10	Conduct a detailed flood mitigation study

Study: Hurricane Levee System for Algiers	12	Conduct a detailed flood protection/mitigation study for District 12
	12	Conduct a study to explore and test secondary internal levee flood protection concepts for District 12. Study Donner Canal as levee flood protection- study elevating levee along District 12 side to protect adjacent neighborhoods
Study: Hurricane Levee System for Algiers Lower Coast	13	Conduct a detailed ecological study
	13	Complete an independent third party study of flood risk within the district
Slab-on-Grade Remediation Program		
Study: Orleans/Jefferson Flood Protection	2	Complete an independent third party study of flood risk
	3	Equalize levee protection on both sides of Monticello Canal/study decking
	5	Conduct a detailed flood protection/mitigation study
	5	Conduct a secondary internal levee flood protection study for District 5
	8	Complete an independent third party study of flood risk in district

Implementation Timeline

The following table provides guidance on the anticipated rate of investment as a percentage of total costs over 3 recovery phases for all the programs or projects in this sector.

	Short-Term (2007-08)	Mid-Term (2009-11)	Long-Term (2012-16)
"Elevate New Orleans" Incentive Program	45%	55%	100%
Floodproof Essential Public Equipment	10%	60%	-
Study: Internal Flood Protection for New Orleans East	100%	-	-
Study: Hurricane Levee System for Algiers	100%	-	-
Study: Hurricane Levee System for Algiers Lower Coast	100%	-	-
Slab-on-Grade Remediation Program	10%	60%	30%
Study: Orleans/Jefferson Flood Protection	100%	-	-

Neighborhood Stabilization

Neighborhood stabilization aims to ensure that whole neighborhoods in New Orleans can recover from Katrina and prosper in the future. It promotes neighborhoods coming back, instead of just individuals coming back. This sector focuses on the underpinnings of neighborhood stability and revitalization.

Background/Statement of the Problem

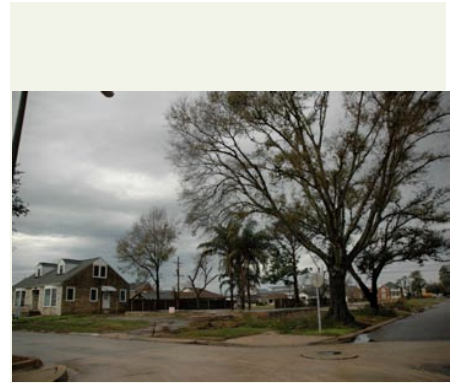
There are some parts of the City where repopulation has been very slow. Many of these areas also had the deepest flooding and are at some of the lowest elevations in the City. In January 2007, roughly 10% of New Orleans' city blocks, which contain roughly 20,000 households, still have less than 15% of their pre-Katrina populations and also have natural elevations of -6 (minus six) feet or more below mean sea level. Reasons for their slow pace of recovery include: the slow pace of funding from the Road Home program, loans, or insurance settlements; lack of reliable utility service; uncertainty about other neighbors' decisions to return; and concern about future flood risk. These neighborhoods need financial and technical assistance to stabilize their neighborhoods, prevent further deterioration and blight, and establish a course for rebuilding that allows the City and other agencies to restore and upgrade infrastructure and community services while also giving residents and businesses confidence to return and options to improve their safety and stability.

However, there are other parts of the City where repopulation rates are higher, and natural land elevations are some of the highest in the City, but gaps in the resettlement exist. Some gaps are caused by historic disinvestment prior to Katrina. Others are caused by the varying rates of individual resident and business recovery as well as lingering post-Katrina blight. These neighborhoods need policies and strategic approaches that combat blight and build momentum for additional residents and businesses to move there and invest in the neighborhood.

Strategies

Just as every citizen is welcome back, so is every neighborhood. Ensuring that every neighborhood of New Orleans can recover and prosper is a priority of the plan. The strategy is two-fold:

- **In less populated areas, encourage people and neighborhood-serving businesses to reside closer together, while also reducing blight and future risk of flooding.**
- **In more populated areas, maximize the ways in which additional population and investment can be attracted more quickly yet accommodated in a context sensitive manner.**



Policies, Programs and Projects

The following policies, projects and programs apply to this Sector.

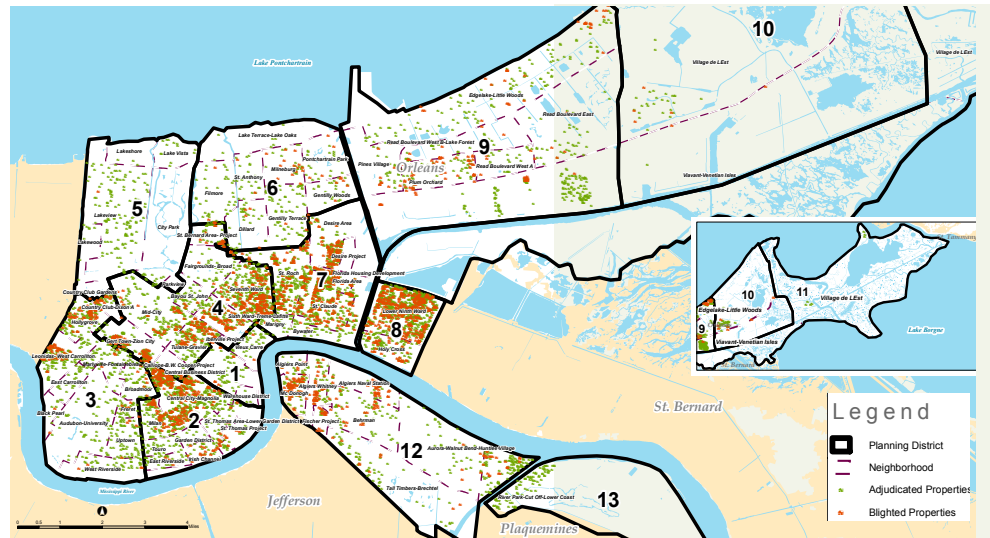
1. Implement the “Cluster New Orleans Neighborhoods” program to help neighbors and businesses come back to those neighborhoods that have been very slow to repopulate and also are at highest risk of future flooding.

This program is completely voluntary and incentive-based, and only offered in those areas of the City with the slowest rates of repopulation, lowest natural elevations, and high risk of future flooding. It provides funds and technical assistance to help residential property owners, neighborhood-serving small businesses and renters to return and rebuild in more sustainable clusters within their neighborhoods. (Also, for these areas additional policies, programs and projects for small businesses and residents are provided in the Economic Development and Housing sector discussions, respectively. Likewise, additional policies, programs and projects are also provided in the Flood Protection, Utilities and Infrastructure, Transportation/Transit, and Community Services Sector discussions.)

Technical and financial assistance will be available to residents and businesses to work together to make collective decisions on whether to rebuild more closely together with flood mitigation and sustainable/green building practices. This program aims to reduce the guesswork among residents and businesses about their neighborhood’s future viability, by restoring communities and reducing blight. It will also provide a guide to the City and other agencies to use in restoring infrastructure and services, and targeting investments to enhance infrastructure and services, and improve quality of life, which can stimulate additional investments. More details are provided in Project Sheet #08.

2. Target redevelopment of underutilized areas of the City where land elevations are higher and surrounding repopulation rates are high.

This policy sets priorities for the City Planning Commission and other responsible agencies to help encourage and facilitate the redevelopment of higher elevation areas of the City that were underutilized prior to Katrina. Small area studies that could facilitate the adaptive reuse of underutilized, previously non-residential land have emerged from the District Plans. The District Plans have also recommended a host of capital improvements and community investments to dramatically improve areas that have historically attracted little investment. More details are provided in project sheet 09. (Also for these areas, additional policies, programs and projects for small businesses and residents are provided in the Economic Development and Housing sector discussions, respectively. Likewise, additional policies, programs and projects are also provided in the Flood Protection, Utilities and Infrastructure, Transportation/Transit, and Community Services Sector discussions.)



Source: City of New Orleans and GCR & Associates, Inc.



3. Expedite the reuse of pre-Katrina blighted and adjudicated properties, with priority in higher elevation areas of the City.

Streamline the process of making abandoned and adjudicated properties available for sale at attractive, below market rates so that additional residents and businesses can purchase and rehabilitate the properties. Priority should initially be given to properties in higher elevations of the City. Funding will be needed for additional staffing in responsible agencies. Project Sheet #10 provides additional details.

4. Prevent post-Katrina blight through careful code enforcement.

Damaged structures are deteriorating in neighborhoods across the City. This can affect the overall safety, property values and viability of the neighborhood. Post-Katrina blight can be combated with stronger code enforcement on permitting and demolition. However, careful attention must be given to identifying property owner' intentions, before enforcement actions are taken. Policies and procedures must target the truly abandoned properties and not those where owners intend to return but are still waiting for additional funding or are overcoming some other impediment. This policy applies citywide, and funding will be needed for additional staffing in responsible agencies.

5. Study the use of alternative mechanisms to purchase blighted and adjudicated properties.

Study the use of alternative mechanisms for residents and businesses to purchase and rehabilitate blighted properties. This includes the "lot next door" program and additional mechanisms for remediation of blighted properties. This study should be undertaken in the mid-term, after other policies and programs to stabilize neighborhoods have been implemented and additional mechanisms for the remediation of blighted properties have been explored.

Application Across Planning Areas

Some policies, programs or projects are adjusted to accommodate the three proposed planning areas.

For areas with very slow repopulation rates and high risk of future flooding:

- Provide generous, voluntary-incentives to residents and businesses that choose to rebuild in clusters with more sustainable and flood-proof construction.
- Repair heavy damage to infrastructure and restore community services across the entire area, but target upgrades and enhanced services to cluster areas.
- Prevent post-Katrina blight through careful code enforcement.
- Over time, reevaluate strategies and work with communities to re-plan areas outside clusters. Also, over time, study use of alternative mechanisms to purchase blighted and adjudicated properties.

For areas with moderate repopulation rates and moderate risk of future flooding:

- Encourage residents and businesses to continue to rebuild and reinvest in these neighborhoods by repairing infrastructure damage and restoring community services. At the same time, invest strategically in infrastructure and community service improvements across the planning area.
- Prevent post-Katrina blight through careful code enforcement.
- Over time, reevaluate strategies and consider offering voluntary-incentives to residents and businesses within the slower repopulation areas to rebuild in clusters. Also, over time, study use of alternative mechanisms to purchase blighted and adjudicated properties.

For areas with fast repopulation rates and low risk of future flooding:

- Target redevelopment of underutilized areas to accommodate additional population and stimulate revitalization.
- Repair heavy damage to infrastructure and restore community services, but only make limited investments to modify infrastructure so it can accommodate additional population or stimulate neighborhood revitalization. A major overhaul of infrastructure is generally less critical in these areas because they experienced less damage from Katrina.
- Prioritize the sale and reuse of pre-Katrina blighted and adjudicated properties in these areas. Over time, study the use of alternative mechanisms to purchase blighted and adjudicated properties.

Neighborhood Stability Projects (District and Citywide)

Citywide Team Projects	District	Corresponding District Projects
NEIGHBORHOOD STABILITY		
Neighborhood Stabilization Program (Clustering)	2	Develop and implement a voluntary incentive-based "premium plus" home flood mitigation relocating program
	3	Neighborhood green block and housing moving program
	4	Neighborhood green block and house moving program
	5	Develop and administer incentive-based voluntary buyout program for home sites at lowest elevations
	7 (Florida/ Desire)	Implement a voluntary residential buyout program
	8	Develop and Institute Home Flood Mitigation Relocation Program
	9	Adopt policies and create incentives for housing relocation/redevelopment at higher locations within district
	10	Adopt policies and create incentives for housing relocation/redevelopment at higher locations within district
	12	Develop and administer incentive-based voluntary buyout program for home sites at lowest elevations
Small Area Adaptive Re-use Studies	2	Facilitate mixed use development in Lower Garden District
	4	Revitalize Gert Town: new town center and community facilities
	6	Create a long-term framework for transformation of the Industrial Canal into a major mixed-use waterfront amenity
	6	Foster development of a great campus and public destination on the lake anchored by UNO and associated development
	8	Study Industrial Canal site for redevelopment as employment center
	9	Improve infrastructure to reopen/recover employment areas along Industrial Canal in D9
	9	Provide infrastructure/incentives to redevelop a clustered mixed-use center at Crowder Blvd. and Lake Forest Dr.
	9	Provide infrastructure/incentives to redevelop clustered mixed-use Neighborhood Centers at Morrison Road and Bundy Road, Bullard Ave. and Hayne, and Morrison Road and Martin Dr. (Kenilworth Shopping Center)
	9	Provide infrastructure/incentives to redevelop commercial/mixed-use center at Read Blvd. and I-10; address mitigation and hardening of structures; develop, adopt, and enforce design and development standards to ensure high-quality redevelopment
	9	Conduct an economic development study for alternative location of regional airport and entertainment study for Lakefront airport
	9	Provide infrastructure/incentives to redevelop high ground bounded by Industrial Canal, Chef Menteur, I-510, and Almonaster Blvd.
	9	Provide infrastructure and incentives to construct high-quality mixed income housing in the lowest-risk areas of New Orleans East
	10	Provide infrastructure and incentives to construct high-quality mixed income housing in the lowest-risk areas of New Orleans East
	12	Study development potential and utility repairs/upgrades for possible increased residential and development capacity, drainage and sewerage (particularly in Behrman/Elmwood Park neighborhoods)
	13	Create a master plan for the district
Study: Streamline Process for Purchase of blighted housing and lot next door program	2	Develop and implement an amended lot next door consolidation program
	6	Improve city's process for dealing with abandoned properties; establish strategy and timeline.
	7 (Bywater/ Marigny)	Establish an infill housing rehabilitation program for blighted/adjudicated
	8	Develop and implement an amended lot next door consolidation program
	12	Address and implement revitalization for Old Algiers, McDonough and Algiers Point neighborhoods including Tunnisberg, McClendonville, Riverview, River Park and Cut-off
	12	Develop & implement programs for redevelopment of blighted and adjudicated properties
	12	Infrastructure/incentives to encourage infill housing in Lower Algiers (Lower Coast/Cut-off) neighborhood

Implementation Timeline

The following table provides guidance on the anticipated rate of investment as a percentage of total costs over 3 recovery phases for all the programs or projects in this sector.

	Short-Term (2007-08)	Mid-Term (2009-11)	Long-Term (2012-16)
Neighborhood Stabilization Program (Clustering)	20%	40%	40%
Small Area Adaptive Re-use Studies	100%	-	-
Study: Streamline Blighted Housing and Lot Next Door	30%	70%	-

Housing

The Housing Sector includes private housing, public housing, and rental property, and focuses, in particular, on affordable housing and filling the gaps between existing programs and the real costs required for all citizens of New Orleans to return and rebuild. It also includes policies and standards for housing rehabilitation and rebuilding.

Background/Statement of the Problem

Over 70% of the City's housing stock sustained damage in Katrina; over 40% of the City's housing stock was severely damaged or destroyed. Almost 5,000 public housing units have been permanently taken off the housing market with yet no clear timeline for their rehabilitation or replacement. Housing recovery and rebuilding rates vary across the City. Reasons for the slow pace of recovery include: delays in funding from the Road Home program, loans, or insurance settlements; lack of affordable options; lack of reliable utility service; uncertainty about other neighbors' decisions to return; and concern about future flood risk.

Initial recovery and rebuilding funds for City residents have come from private and flood insurance settlements, FEMA Individual Assistance grants, Small Business Administration loans, commercial bank loans, and personal savings. In the second half of 2006, the State's Road Home program swung into gear and aims to supplement both home and rental property owners with funds to complete repairs and rebuilding; but the application process is lengthy and reimbursements do not necessarily meet the needs of residents to finance post-Katrina construction costs. Furthermore, more than half of the City's pre-Katrina housing stock was renter-occupied housing which is not well matched with the Road Home program. Strategies in the Housing Sector take a comprehensive look at ways to catalyze recovery of all housing types in the City.

Strategies

Ensuring that all citizens have fair and equitable opportunities to return and live in New Orleans is a priority of the plan. Housing Sector strategies take a comprehensive look at the needs of all citizens and ways to catalyze recovery of all housing types in the City.

- **Provide a realistic and comprehensive housing strategy for all residents in the short, mid, and long term.** Approaches must be tailored to meet the needs of all residents, including relocation costs and affordability. They also must aim to fill the current gaps in funding that are impeding repairs and rebuilding of all housing types in the City.
- **Advocate for the reexamination of "Road Home" eligibility criteria, and the award and loan calculations in Orleans Parish.** This includes reviewing the eligibility criteria and award calculations for homeowners, as well as the eligibility criteria and loan calculations for small rental repairs, to ensure that the true costs of post-Katrina repair are being reflected. The State Office of Community Development might involve the City's Director of Recovery Management and work with local officials to identify ways to accelerate implementation in Orleans Parish. The "reexamination" efforts needs to be coordinated with the Flood Protection, Neighborhood Stabilization, and Housing programs proposed as part of this plan.
- **Provide an array of implementation measures and staffing to expedite both housing rehabilitation and new construction to meet the post-Katrina housing needs in the City, that both respects neighborhood and historic character while improving affordability as well as the overall quality of the City's housing stock.** All public and private agencies involved in housing must more effectively market existing housing programs to individuals, non-profits and for-profit developers, and also enhance public outreach and assistance for all residents in navigating the various housing programs.

- **Enhance public access to critical recovery and rebuilding information through the establishment of Recovery Resource Centers.** Residents have had to absorb a dizzying amount of information since Katrina just to enable them to return to their homes. This is a particular challenge to those who do not have computers and internet access.

Policies, Programs and Projects

1. Implement comprehensive permanent housing strategy for all displaced residents.

This project provides for temporary staffing and technical assistance to the Housing and Redevelopment agencies of the City of New Orleans. It will revive and expand pre-disaster housing production and rehabilitation programs in the City to citywide levels needed to address the extraordinary demands for affordable housing created by the Hurricanes Katrina and Rita, and to also implement new policies, programs, and projects adopted as part of this plan. Mechanisms include assistance for home purchases and rehabilitation, the sale and reuse of abandoned properties, and the revival of soft-second mortgage funding. For more information, see Project Sheet #11.

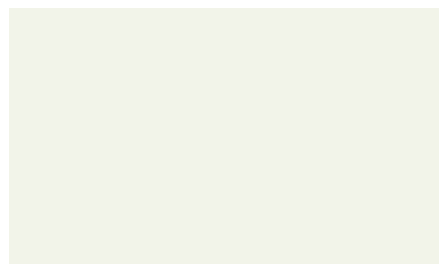
2. Rehabilitate and rebuild low-income housing.

The federal Department of Housing and Urban Development (HUD) has declared its intention to rehabilitate and rebuild public housing in the City of New Orleans. In January 2007, the dimensions and timeframe of this undertaking are still unknown. This project aims to ensure that there will be a sufficient number of low-income housing units to accommodate all displaced former public housing tenants. In light of post-Katrina conditions, the project also advocates for HUD to develop a low-income re-housing technical assistance strategy that accommodates all displaced former public housing tenants both in the short- and long-term. The project also calls for public housing to be rehabilitated or rebuilt to the highest standards, to incorporate mixed-income housing and potentially mixed-uses, and to be of a higher density than current HOPE 6 policies suggest. Redevelopment plans should also account for seniors and individuals with disabilities. For more information, see Project Sheet #14.

3. Provide an array of homebuyer assistance programs, emphasizing low to moderate income residents.

This suite of programs applies citywide and targets both purchasers and structures. Marketing and public education efforts are also required to promote awareness and provide the necessary technical assistance to individuals, non-profits, and for-profit developers. These programs would apply citywide. For slow repopulation areas with a high risk of future flooding, these programs would be offered in conjunction with the Neighborhood Cluster program. These programs should include, but are not limited to the following components:

- **Homebuyer assistance for low to moderate income residents.** This program applies citywide and provides gap financing and 'soft seconds' funds to assist low and moderate income home buyers. It provides closing cost assistance, favorable interest rates and technical assistance to home purchasers. For more information, see Project Sheet #13
- **Home rehabilitation loans to low and moderate income residents.** This program provides rehabilitation loans to low and moderate income residents for the renovation of blighted homes unaffected by Katrina, but which are ineligible for the "Road Home" loans. For more information, see Project Sheet #15.



4. Provide for more rental housing within the City's existing housing mix of "Singles and Doubles".

Creation of a "Singles and Doubles" loan program would provide funds for owners to purchase and/or renovate duplex units to replenish the rental housing stock. Approximately 40% of all the houses in New Orleans are duplexes. Duplexes have always played an important historical role in the revitalization of neighborhoods because they provide both affordable homeownership and rental opportunities at the same time. Duplexes also help support families by enabling grandparents, parents, and children to live together and care for each other. Likewise, this program would assist homebuyers for the purchase of singles which would become rental properties. For more information, see Project Sheet #12.

5. Promote inclusionary housing techniques to add to affordable rental and for-sale housing mix.

Potential policies include adoption of an inclusionary zoning ordinance that requires for-profit developers to include below market rate and/or elderly housing units as a percentage of large scale housing developments. The use of HUD programs for non-profit construction of elderly and disabled housing (202 and 811 programs) should also be promoted. These policies would apply citywide and additional funding may be needed to supplement staffing of responsible agencies.

6. Provide rental relocation assistance to renters whose building owners choose to relocate as part of the Neighborhood Cluster program offered in the slowest repopulation/highest flood risk areas of the City.

The relocation assistance would assist those renters who currently reside in buildings located in the slowest repopulation/highest flood risk areas of the City. Building owners must have elected to voluntarily participate in the Neighborhood Cluster program. For more information, see Project Sheet #08.

7. Create a program to develop transient worker housing.

Develop a system to deliver worker housing immediately. As noted in greater detail in the Economic Recovery Assessment, transient worker housing is essential for the reconstruction of New Orleans. For more information, see Project Sheet #16

8. Establish Neighborhood Recovery Resource Centers

Within existing public buildings, establish a number of Neighborhood Recovery Resource Centers that would distribute critical rebuilding information to the general public. For more information, see project sheet 17. Full time staff members would be available to answer questions on available public assistance programs, permitting processes, key services such as public education and health care, and the rebuilding process in general.

Application Across Planning Areas

Some policies, programs or projects should be adjusted to accommodate the requirements of the three proposed planning areas.

For areas with very slow repopulation rates and high risk of future flooding:

- Relocation assistance will be offered to renters whose building owners choose to rebuild in clusters with more sustainable and flood-proof construction.
- All other policies, programs and projects apply.

For areas with moderate repopulation rates and moderate risk of future flooding:

- All policies, programs and projects apply.

For areas with fast repopulation rates and low risk of future flooding:

- All policies, programs and projects apply.

Housing Projects (District and Citywide)

Citywide Team Projects	District	Corresponding District Projects
HOUSING		
Implement Permanent Housing Development Strategy for All Displaced Residents	1	Take a new look at housing homeless in downtown in conjunction with S. Rampart development where thousands of new units of mixed income housing will be created
	2	Develop and incentivize senior citizen housing
	5	Provide incentives/infrastructure for elderly housing development at potential sites such as West End, Beth Israel and/or Lakeview School
	6	Explore opportunities for new affordable/rental/senior housing via public/private partnerships. Undertake a study to assess needs and determine financing/development strategies.
	10	Provide infrastructure and incentives to construct high-quality, senior (55 and older) housing facilities along Dwyer Road
	7 (St. Claude/ St. Roch)	Assess needs and possible locations for elderly housing; develop elderly housing
Singles and Doubles Program: Homebuyer Assistance for Rental Properties		
Homebuyer Assistance for Low- and Moderate-Income Homeowners		
Rehabilitate and Rebuild Low-Income Housing	2	Construct housing at W.J. Guste
	2	Construct new housing at C.J. Peete
	2	Construct new housing at HANO scattered sites
	2	Renovate existing C.J. Peete housing
	4	Create new connections between Zion City/ Booker T. Washington/ B.W. Cooper
	4	Redevelop and improve Iberville Housing and adjacent areas
	4	Redevelop and improve Lafitte Housing and adjacent areas
	4	Redevelop and improve St. Bernard Housing and adjacent areas
	7 (Florida/ Desire)	Redevelop public housing sites together with vacant and underutilized land to transform Desire-Florida into a model mixed-income community that welcomes back all residents that seek to return as well as newcomers
	12	Study and facilitate Christopher Park Homes and Woodland Apartments revitalization through existing and potential financial incentive programs.
Home Rehabilitation Program for Low- to Moderate-Income Homeowners		
Transient Worker Housing		
Neighborhood Recovery Resource Centers	3	Program and develop community/recovery resource centers
	6	Launch a neighborhood information center/community hub. Undertake a study to assess long-term funding needs.
	7 (Bywater/ Marigny)	Launch neighborhood information/housing resource centers
	7 (Florida/ Desire)	Reopen Edwards Elementary School as a community resource center
	7 (Florida/ Desire)	Launch neighborhood information/housing resource centers
	7 (St. Claude/ St. Roch)	Launch neighborhood information/housing resource centers
ALL City Housing Projects, Programs, and PoliciesDue to the complexity of the housing issue and the range of recommendations coming from District plans, certain District policy initiatives correspond less with individual Citywide housing projects and more with the full suite of Citywide projects and strategies. Those projects are shown to the right.	1	Fund the gap necessary to promote significant additional workforce ownership and rental housing.
	2	Develop a renter assistance program
	2	Develop and implement moderate and affordable housing incentive program
	3	Affordable and rental neighborhood housing renovation program (CDC)
	4	Affordable and rental neighborhood housing renovation program (CDC)
	7 (Bywater/ Marigny)	Preserve long-term economic and social diversity by encouraging infill development of appropriately scaled and designed mixed-income housing
	7 (St. Claude/ St. Roch)	Create live-work space for artists
	7 (St. Claude/ St. Roch)	Establish program to increase home ownership
	7 (St. Claude/ St. Roch)	Expand Musicians' Village
	7 (St. Claude/ St. Roch)	Rehabilitate existing housing stock (including blighted and adjudicated properties)
	8	Develop and institute housing incentive program
	8	Develop a renter assistance program
	9	Provide infrastructure and financial incentives to replace existing damaged multi-family housing with medium-density, high-quality "hardened" housing along I-10 corridor; typically build units above one floor of parking.

Implementation Timeline

The following table provides guidance on the anticipated rate of investment as a percentage of total costs over 3 recovery phases for all the programs or projects in this sector.

	Short-Term (2007-08)	Mid-Term (2009-11)	Long-Term (2012-16)
Implement Permanent Housing Development Strategy	40%	60%	-
Singles and Doubles Program	50%	50%	-
Homebuyer Assistance for Low- and Moderate-Income	50%	50%	-
Rehabilitate and Rebuild Low Income Housing	40%	60%	-
Home Rehab for Low- to Moderate-Income Owners	40%	60%	-
Transient Worker Housing	60%	40%	-
Neighborhood Recovery Resource Centers	80%	20%	-

Economic Development

The short-term recovery of New Orleans over the next five years will largely be driven by the business areas on which it has relied for the past ten to twenty years: the Port, Tourism, Energy and Health care.

Background/Statement of the Problem

While some of those areas have seen significant growth since Katrina, the New Orleans economy was growing only slightly in the years prior and was outpaced even by other Louisiana cities. Since Hurricane Katrina, relocation of several mid-sized corporations from the City has occurred, and there is a natural reluctance to invest heavily in the City until questions of safety from flooding can be addressed. Capital improvements must be made to facilities and services that are of critical importance to the mainstays of the local economy. Resources will be focused on nurturing existing businesses and new technologies that provide quality jobs. Financing emerging biotechnology enterprises, along with the expansion of the Port cruise terminal and container-handling capacity, will begin to improve the level of entrepreneurship in the City.

Several key projects have already been completed which play a key role on the continued success of the major sectors. These include the repair and reopening of the Louisiana Superdome and the Convention Center.

Strategies

- **Support existing key business sectors.** As noted above, the port, tourism, energy and health care are the leading industries in New Orleans and recovery strategies must be focused on retention and expansion of these key sectors.
- **Restructure the City's economic development infrastructure.** This strategy recommends the consideration of a new economic development entity – similar to the Jefferson Economic Development Commission (JEDCO) – to study the needs of existing businesses for their long-term retention and expansion, creation of small business-incubators and workforce training programs, and potential re-structuring of the City's economic development marketing functions.
- **Support entrepreneurial endeavors and research and development programs.** The health care industry was poised to expand prior to Katrina and needs something to jump start its recovery. Several medical district projects are proposed. Creation of a theater district downtown could lead to "Broadway South."
- **Provide assistance to small businesses.** In areas where the rate of recovery has been slow, help businesses relocate to population centers. Also, help with general gap financing, downtown revitalization assistance, a small commercial building repair program, and small business loan programs (in addition to SBA programs).
- **Restore key mixed use corridors, with particular attention to Canal Street.** The corridors that have been identified are signature streets that have historically provided essential services to the surrounding communities. Due to their development potential and their prominent identity, redevelopment can have a catalytic effect on adjacent areas.

Policies, Programs and Projects

1. Consider the establishment of a new economic development entity.

A new economic development commission supported by the business sector (like JEDCO in Jefferson Parish) could provide greater flexibility and autonomy in promoting the City's economic development. This would reduce impacts caused by transitions between Mayoral administrations. The economic development agencies should also call upon existing local and State bureaus and agencies to enhance marketing campaigns for New Orleans' core industries (tourism, port, oil and gas and health care); and work with large businesses to determine the factors that are straining their resources in the post-Katrina environment. Factors that might be addressed include: providing businesses with marketing, outreach, and employment-matching services, better marketing of existing tax incentives, and lobbying for new federal, State and local tax incentives, emphasizing employment tax incentives.

2. Promote and invest in the health care sector through key projects.

The *Bio-Innovation Center*, a business incubator, is designed to nurture new and emerging biotechnology enterprises. It will foster technologically-driven high performance companies that have the potential of creating quality jobs and economic diversification. The *LSU/VIA/University Hospital Complex* is a second key project to the reinvigorated medical district. The third leg of the restoration and expansion of the downtown medical district is the construction of the Louisiana Cancer Research Center. The specialized cancer center that is envisioned would be a regional center for cutting-edge cancer research, similar to M.D. Anderson Cancer Center in Houston. These combined teaching, research, clinical, and acute care facilities and services represent the critical anchor, along with Tulane Medical Center, of the District's rebirth. Without these facilities, the medical district will not be revived. For more information, see Project Sheet #18, #19, and #27.

3. Promote expansion of the port industry.

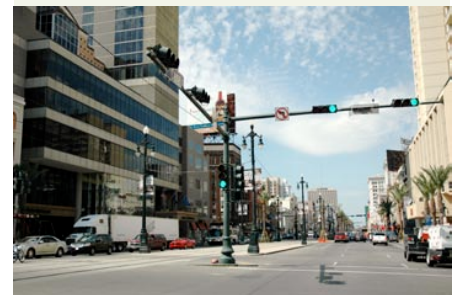
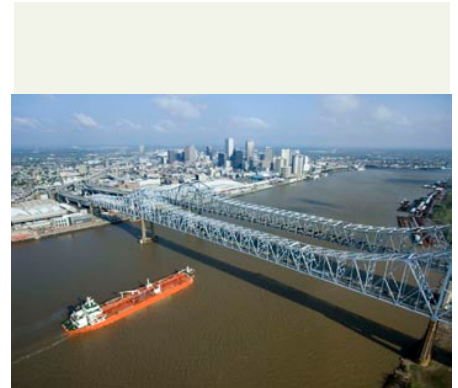
Containerized freight represents an ever-growing share of cargo volume in worldwide maritime trade. Pre-Katrina port modernization significantly increased capacity to handle containerized freight in New Orleans. However, as the port continues its speedy recovery, whatever excess capacity existed prior to Katrina will be quickly absorbed. To maintain its competitive position, the Port of New Orleans must replace its lost capacity - lost to Katrina at France Road - to handle container vessels on the river. For more information, see Project Sheet #22.

An additional cruise ship terminal at Poland Avenue could accommodate cruise ships resuming their calls in New Orleans. Passenger handling capacity should be increased to better position the City to regain its pre-storm momentum as a cruise ship destination. This would help existing lines increase their calls and provide an incentive to other cruise ship lines to add New Orleans to their ports of call. For more information, see Project Sheet #21.

Key port clients must be retained following the close of MR-GO. New Orleans Cold Storage (NOCS) needs to be relocated to a renovated Milan Street wharf. For more information, see Project Sheet #25.

4. Promote expansion of the Armstrong International Airport.

The Louis Armstrong New Orleans International Airport ("Airport") plays an integral role in the local economy as the gateway to the tourism industry, one of the mainstays of employment, and one of the few sectors that had experienced continuous growth before the storm. The economic activities directly related to the Airport generate hundreds of millions of dollars of income and thousands of jobs. The Airport also provides crucial services to local business and industry.



In a report published in May, 2004, by Timothy Ryan of the University of New Orleans, the economic impact of the Airport was analyzed, providing a frame of reference to the importance of the overall operation prior to the disruptions from the 2005 storms. The report analyzed the economic impact of the Airport for the full year 2003.

According to the report the Airport contributed over \$1.09 billion annually in direct and secondary spending to the New Orleans area economy. As part of this impact, over 12,400 jobs, or roughly 2% of all jobs in the metro area, were supported. Total earnings from this employment translated into almost \$500 million and generated over \$71 million in tax revenue for the state and local governments. The Airport was also the conduit for 58% of all visitors to the city, which supported \$2.6 billion of additional tourism and convention spending.

The Airport's new five year plan calls for an investment of over \$450 million, mostly in the expansion of existing concourses and loading bridges, taxiways, and acquisition of limited land surrounding the Airport. Management feels that the new development is critical to increasing passenger levels to pre-Katrina and beyond. For more information, see Project Sheet #23.

5. Provide a seed and early-stage equity capital fund.

Establish a seed and early-stage equity capital fund to help fuel a “culture of entrepreneurship” throughout the City. This would provide pure equity investments through a professionally-managed partnership that would have a lifespan of between five to ten years. This project would apply citywide. For more information, see Project Sheet #20.

6. Establish a corridor revitalization program.

Develop a program to improve the attractiveness of commercial corridors and commercial districts throughout the City. This program would focus on all implementation mechanisms at the disposal of City government—from regulatory functions to capital improvements to leveraging publicly owned properties—to effect lasting beautification, revitalization, and infill development activity along key commercial and mixed use corridors throughout the City. For more information, see Project Sheet #24.

7. Create a Canal Street/Downtown revitalization program.

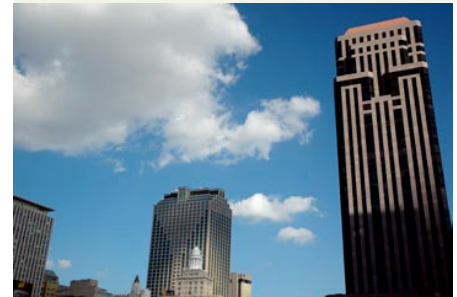
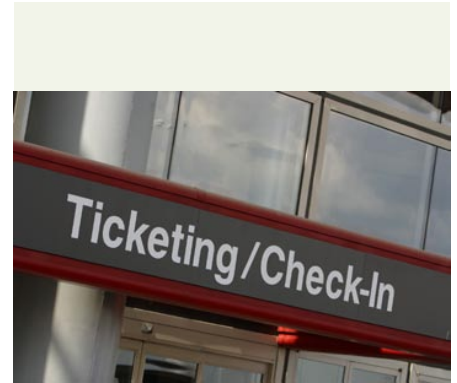
Develop a program of direct financial assistance, enhanced marketing and commercial recruitment, revised building codes, and parking management to effect the revitalization of Canal Street. Major capital improvements have already been completed or are well underway, and a number of major projects have been announced for Canal Street. However, the present retail offerings, the lack of accessibility to local residents, and the difficulty in renovating historic buildings are impeding progress. This program would address all of these issues. For more information, see Project Sheet #29.

8. Relocate small neighborhood-serving businesses participating in the Neighborhood Cluster program.

Relocate businesses to follow their customer base. As noted in the Neighborhood Stabilization Sector, businesses would also be included in the “Neighborhood Cluster Program.”

9. Create a small business incubator and assistance program.

Foster entrepreneurship in low income communities through the provision of office space, computer software and hardware, and abundant technical assistance in a number of



convenient, neighborhood-serving locations. At a minimum, provide extensive information and administrative support relative to existing small business assistance programs. Study the need for a supplemental, locally administered program of direct assistance to support the unique needs of emerging small businesses. For more information, see Project Sheet #26.

10. Create a neighborhood workforce training program.

Reach out to the most chronically unemployed by providing basic job preparedness training, information about available jobs, job counseling, and assistance with entering more intensive, community college-based job training programs. By maintaining a community presence and by focusing on the most basic job skills and support services, these centers will be a bridge between the most impoverished neighborhoods and the existing, centralized job training infrastructure. For more information, see Project Sheet #28.

11. Create a program to develop transient worker housing.

Develop a system to deliver worker housing immediately. As noted in the Housing Sector discussion, as well as in greater detail in the Economic Recovery Assessment, transient worker housing is essential for the reconstruction of New Orleans.

12. Evaluate the status of, and potentially adaptively reuse, publicly owned buildings

There is a vast supply of publicly owned properties that do not fulfill their development potential. Devising effective redevelopment concepts and disposing or leasing these properties through a structured RFP process could not only provide badly needed investment in certain areas but could also address community needs, such as affordable housing and commercial uses in retail starved neighborhoods. For more information, see project sheet 30.

Application Across Planning Areas

Some policies, programs or projects should be adjusted to accommodate the requirements of the three proposed planning areas.

For areas with very slow repopulation rates and high risk of future flooding:

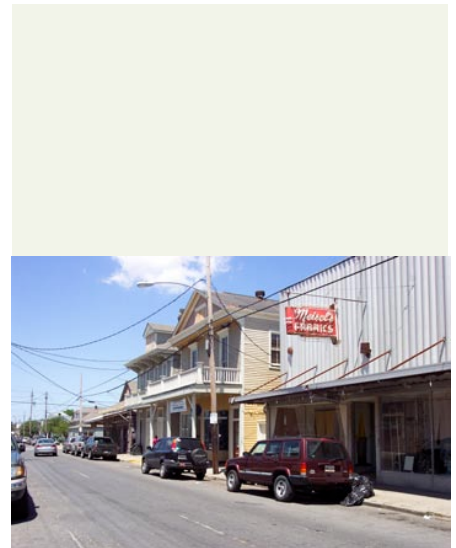
- Provide incentives for small, neighborhood-service businesses that participate in neighborhood stabilization program to follow resettlement clusters.
- Target additional entrepreneurial assistance to those businesses that participate in neighborhood stabilization program.
- Refrain from implementing major corridor revitalization initiatives, locating job training or business incubators, and reusing public properties until neighborhood stabilization program has been adopted.
- Create incentive programs to promote long-term private equity investment.

For areas with moderate repopulation rates and moderate risk of future flooding:

- Study incentives to retain large businesses in repopulated areas and provide immediate outreach and marketing to business sector.
- In the mid-term, reevaluate population recovery and offer incentives for small, neighborhood-service businesses that participate in neighborhood stabilization program to follow resettlement clusters.
- All other policies, programs and projects apply and respond to evolving settlement patterns in the mid- to long-term.

For areas with fast repopulation rates and low risk of future flooding:

- Study incentives to retain large businesses in repopulated areas and provide immediate outreach and marketing to business sector.
- All other policies, programs, and projects apply.



Economic Recovery Projects

Citywide Team Projects	District	Corresponding District Projects
ECONOMIC DEVELOPMENT		
Bio-Innovation Center	1	Fund the gaps in finance required to construct BioInnovation Center, Cancer Center, and other key Medical District initiatives
LSU/VA/University Hospital	1	Support and promote new LSU/VA hospital
Seed and Early Stage Equity Capital Fund	4	Develop LSU/VA Regional Medical Center
Cruise Ship Terminal Expansion		
Replace Container Handling Capacity at Port	2	Relocate Port of New Orleans terminal to uptown complex at Napoleon Avenue
Expansion of Louis Armstrong International Airport		
Corridor Revitalization	1	Promote redevelopment of downtown's single riverfront site for strategic uses that will support the larger downtown economy
	1	Transfer development rights from historic landmarks along the South Rampart corridor
	1	Conduct study to determine steps to redevelop large surface parking lot in French Quarter along N. Peters Street in a manner compatible with the Quarter's regulations and character
	1	Encourage mixed-use development/mixed-income housing along the North and South Rampart Street Corridor
	2	Conduct Tchoupitoulas mixed use corridor study
	2	Develop and implement neighborhood commercial building program
	2	Revitalize Oretha Castle Haley Blvd. as a mixed use arts and cultural corridor
	2	Revitalize South Claiborne Avenue as a transit oriented mixed use corridor
	3	Broadmoor cultural and commercial corridor
	3	Redevelop Carrollton Shopping Center
	3	Redevelop intersection of S. Carrollton and S. Claiborne Ave.
	3	Revitalize Freret St. Commercial Corridor
	3	Revitalize Oak St. commercial corridor
	3	Revitalize S. Claiborne Ave. commercial corridor
	3	Tchoupitoulas St. corridor zoning overlay/limit commercial activity
	3	Washington and Broad Street corridor improvements
	4	Bayou Road/Governor Nicholls cultural corridor
	4	North Claiborne Ave. corridor study
	4	Redevelop Blue Plate node (Earhart/ Washington Street/ Jeff Davis intersection)
	4	Revitalization of the St. Bernard Ave. commercial corridor
	4	Revitalization of the Tulane Ave. commercial corridor with emphasis on biosciences district
	4	Revitalize Broad Street commercial corridor with Main Street Program
	4	Revitalize Canal Street commercial corridor
	4	Revitalize Earhart Boulevard commercial/industrial corridor
	4	Revitalize Galvez St. commercial corridor
	4	Redevelop the Lafitte corridor as an urban/mixed-use district with central greenway
	5	Facilitate West End Marina District mixed-use redevelopment project including addressing zoning and infrastructure requirements
	5	Address existing/ potential infrastructure/incentives requirements to facilitate Harrison Avenue redevelopment
	5	Address existing/potential infrastructure/incentives to facilitate Robert E. Lee Boulevard/West End redevelopment
	5	Address existing/potential infrastructure and financial incentives and address zoning needs to develop mid-rise condominiums adjacent to the West End Marina.
	6	Create Town Center/community nexus at Gentilly Blvd. and Elysian Fields. Undertake a study to quantify public costs and identify funding sources.
	6	Rehabilitate neighborhood commercial areas.
	6	Create sub-area master plans and study gap funding requirements/ways to encourage commercial recovery in key commercial nodes: Elysian Fields/Gentilly Boulevard, Gentilly Woods, Leon C. Simon/Franklin Ave.
	7 (St. Claude/ St. Roch)	Establish St. Claude Ave. beautification project
	7 (Bywater/ Marigny)	Extend Main Street Program to support redevelopment of St. Claude Ave. as a "main street"

Corridor Revitalization	7 (Florida/ Desire)	Revitalize Louisa St. from Higgins to Almonaster as mixed-use corridor
	7 (Florida/ Desire)	Study opportunities to enhance and promote development along Chef Menteur Highway
	7 (St. Claude/ St. Roch)	Redevelopment of St. Claude as "Main Street"
	7 (St. Claude/ St. Roch)	Support redevelopment of Franklin, Desire Streets as secondary commercial corridors
	8	Study Reuse Options for Holy Cross School Site
	8	Create transit-oriented mixed-use redevelopment area along North Claiborne and St. Claude Avenues
	8	Study Mississippi riverfront site for mixed-use redevelopment
	9	Restore/improve function and appearance of Chef Menteur as "Main Street" with improved access management, roadway improvements, sidewalks, street lights, landscaping, and signage
	10	Plan, design, and implement an ethnic tourist destination near Chef/Michoud and Alcee Fortier
	10	Restore/improve function and appearance of Chef Menteur as "Main Street" with improved access management, roadway improvements, sidewalks, street lights, landscaping, and signage
	12	Conduct a study to coordinate development of Federal City with DOD and the Algiers community to facilitate development of shared commercial and community facilities along Newton Street/General Meyer frontage as well as address the potential for recreational levee access on site.
	12	Facilitate Newton/Opelousas/Teche Street Main Street concept through infrastructure and economic incentives; address zoning and streetscape requirements
	12	Implement infrastructure / incentives to redevelop Newton Street / General Meyer Avenue corridor; address zoning and streetscape requirements
	12	Implement infrastructure/incentives to improve/revitalize General DeGaulle Dr. corridor with street and streetscape improvements and improve and revitalize Aurora mixed-use village/Schwegmann's/Little Sisters of the Poor site
	12	Implement zoning changes and incentives to revitalize Algiers Point Main Street properties along Morgan Street/Patterson Drive from the ferry terminal (Delaronde St.) to Belleville St.
Relocate New Orleans Cold Storage	12	Infrastructure/incentives to redevelop Jo Ellen Smith site as a mixed-use residential site; address zoning changes needed to facilitate redevelopment
	12	Infrastructure/incentives to redevelop Todd Shipyard; address zoning changes needed to facilitate redevelopment
Small Business Incubator and Assistance Program	2	Relocate Port of New Orleans terminal to uptown complex at Napoleon Avenue
	2	Create a district-wide business plan
	2	Develop a business incubator in Central City
	2	Establish and implement a small business recovery loan program for business retention
	7 (Florida/ Desire)	Provide interim financing and capital for small businesses
	7 (St. Claude/ St. Roch)	Create incentives to attract desired uses: supermarket, bank, movie theater, family restaurants, service station, art galleries
	8	Develop a business incubator and assistance program
	8	Establish small business recovery loan program
Develop Louisiana Cancer Research Center	11	Document and promote redevelopment of Versailles Gardens and Market
	1	Fund the gaps in finance required to construct BioInnovation Center, Cancer Center, and other key Medical District initiatives
Workforce Training Program	1	Introduce a comprehensive workforce readiness and entrepreneurship program
	2	Develop and implement a comprehensive workforce program
	7 (Bywater/ Marigny)	Introduce a job-training program
	7 (Florida/ Desire)	Introduce a comprehensive workforce readiness and entrepreneurship program
	7 (Florida/ Desire)	Reopen Sidney Collier Technical School and establish a community enhancement team/job training program
	7 (St. Claude/ St. Roch)	Introduce comprehensive workforce readiness and job training programs
	8	Implement a comprehensive training and workforce plan

Canal Street/Downtown Revitalization	1	Facilitate conversion of upper-level vacant premises to residential, especially along Canal Street
	1	Determine the critical mix of downtown amenities necessary to promote downtown as a highly competitive center for tourism; identify any gap financing required.
	1	Provide financial support to meet tourism industry's need for hotel rooms
	1	Encourage developers to include a full service grocery store downtown through a combination of financial incentives, support, recruitment, site assembly and the creation of a parking strategy
Evaluation and Potential Reuse of Publicly Owned Property	1	Perform a study to determine alternate ways to stabilize the funding source for the Superdome
	1	Resolve financial feasibility and other issues necessary to convert Charity Hospital building to mixed income housing
	2	Develop a civil rights museum on Oretha Castle Haley Boulevard
	3	Program and develop interim use strategies for public facilities/schools
	4	Program and develop interim use strategies for public facilities/schools
	5	Prepare/remediate, redevelop JFK School site for new high school or low or mid-rise housing

Implementation Timeline

The following table provides guidance on the anticipated rate of investment as a percentage of total costs over 3 recovery phases for all the programs or projects in this section

	Short-Term (2007-08)	Mid-Term (2009-11)	Long-Term (2012-16)
Bio-Innovation Center	50%	50%	-
LSU/VA/University Hospital	50%	50%	-
Seed and Early Stage Equity Capital Fund	100%	-	-
Cruise Ship Terminal Expansion	100%	-	-
Replace Container Handling Capacity at Port	50%	50%	-
Expansion of Louis Armstrong International Airport	30%	30%	40%
Corridor Revitalization	50%	50%	-
Relocate New Orleans Cold Storage	100%	-	-
Small Business Incubator and Assistance Program	100%	-	-

Infrastructure and Utilities

The utility infrastructure serving Orleans Parish consists of both private and public utilities. The Sewerage and Water Board of New Orleans (S&WB) operates and maintains the major drainage collection system and pumping stations; auxiliary power system; sewer systems; and, water systems. The City of New Orleans Department of Public Works (DPW) is responsible for storm water drainage for streets.

Background/Statement of the Problem

Many infrastructure systems are approaching or exceeding their design lives. The hurricane accelerated their deterioration and need for massive improvements. Projects proposed in this Sector are in addition to the reimbursements made by FEMA, as well as the drainage improvements funded by Congress through the Southeast Louisiana Urban Flood Control program. Projects for private utilities are not included.

Strategies

The strategy for infrastructures and utilities has three essential elements:

- **Repair damaged infrastructure to stabilize neighborhoods.** Repair infrastructure to prevent additional damage and stabilize neighborhoods. In the short term, emergency repairs will be implemented everywhere possible to prevent further damage to systems, while other non-essential repairs would follow as areas stabilize.
- **Invest and upgrade permanent infrastructure to reflect hosting capacity and make major infrastructure improvements to spur neighborhood revitalization.** Make major infrastructure repairs, bringing them up to generally acceptable professional standards for greatest service and longest life. Major improvements to infrastructure are programmed to coincide with the neighborhood stabilization plans and will be based on population resettlement. Upgrades will be used to spur neighborhood revitalization, and may include premiere state-of-the-art technologies, and may include burial of power lines and other utilities concurrently.
- **Maintain infrastructure using a comprehensive renewal/replacement strategy.** Develop a long-range maintenance and upgrade plan for all infrastructure throughout the City. One third of the system is close to 100 years old, and less than one third of the system is under 40 years old. It is generally not possible to replace such large portions of the distribution system over a short time period, and therefore should be broken out over a 25-year timeframe.

Policies, Programs and Projects

1. Repair and replace essential facilities.

Several proposed projects would improve essential equipment in the event of emergencies, loss of power, or future hurricanes, as well as make essential repairs on flood-damaged equipment beyond what has been reimbursed by FEMA.

- **Add capacity to emergency fuel storage in event of emergency.** This project increases the storage capacity for fuel at the Algiers Pumping Station for future emergency situations and replaces components failing due to age. It is a high priority that must be implemented soon. For more information, see Project Sheet #31.
- **Modify power plant to prevent flooding when commercial power is not available.** This project improves back-up power generation capability and also upgrades the existing facility. The 25-cycle power generator at Carrollton was shut down for 5 days following the storm but was mostly unharmed once services were restored; however, this plant has reached the end of its design life. For more information, see Project Sheet #36.
- **Make short-term drainage improvements for emergency situations.** This project makes a series of emergency-related upgrades to various drainage facilities, including emergency water cooling systems, emergency power supplies, underpass drainage mitigation, and safety power rooms. For more information, see Project Sheet #34.
- **Improve levees and mitigate wetlands adjacent to East Bank wastewater treatment plant.** This project repairs and improves the levees adjacent to the East Bank Wastewater Treatment Plant, which were severely damaged along with adjacent wetlands. The application of treated wastewater effluent into wetlands offers an opportunity to comply with more stringent effluent limits while simultaneously supporting the restoration of adjacent wetlands. For more information, see Project Sheet #35.
- **Expedite the restoration of basic utility service.** Advocate strongly for restoration of reliable electric, gas, and telephone service to areas of the City that are still lacking basic utilities.

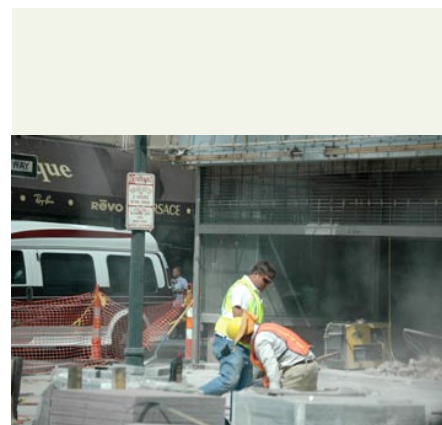
2. Provide capacity improvements and system upgrades.

The following projects address increased demand occurring as result of population resettlement as well as hurricane-damage:

- **Added capacity at the East Bank drinking water plant.** This project is the result of the systemic leaks in the City's water distribution system, exacerbated by Katrina. These leaks require increased water production to satisfy demands for consumption and fire protection. The increased demand accelerated accumulation of sedimentation in the basins. Additional capacity is needed to satisfy this demand while allowing for required basin cleaning and maintenance. For more information, see Project Sheet #32.
- **Upgrade mechanical systems at East Bank drinking water plant.** This project repairs and upgrades the mechanical and physical infrastructure which has deteriorated due to age and stress and which is in need of replacement. Greater-than-normal water losses in the distribution system continue to require the plant to operate at capacity levels. For more information, see Project Sheet #33.
- **Water and wastewater systems—short-term and mid-term improvements.** These two projects consist of a variety of system-wide repairs. The prioritization for repair, rehabilitation, and improvements to infrastructure will vary across the City, depending on the risk of re-flooding; the wastewater collection system Consent Decree; and, the return of population. For more information, see Project Sheet #38, #39, and #40.

3. Develop asset management plan for water distribution system.

Create a water distribution system asset-management plan to prioritize or organize rehabilitation efforts, provide operational optimization for the whole system, and incorporate data gathering during current maintenance program. In order to replace large portions of the



distribution system over a reasonable time frame, costs are scheduled over 25 years and will be phased (short, medium and long term). Project Sheet #41 has additional details.

4. Develop a technical staffing program for the Sewerage and Water Board.

Develop a program that assists the Sewerage and Water Board in recruiting and retaining engineers and other technical staff. For more information, refer Project Sheet #37.

5. Expand and improve the free, citywide wireless internet network.

6. Improve free citywide wireless network to enhance the geographical reach and speed of the wireless service.

For more information, see Project Sheet #42.

Application Across Planning Areas

Some policies, programs or projects are adjusted to accommodate the requirements of the three proposed planning areas.

For areas with very slow repopulation rates and high risk of future flooding:

- Heavily damaged infrastructure is repaired to avoid additional damage and stabilize neighborhoods initially. Reliable infrastructure service is restored expeditiously.
- As neighborhoods resettle, major infrastructure improvements are made based on resettlement of population.
- Over the long-term, an asset management plan is developed for continuous maintenance and upgrades to infrastructure.

For areas with moderate repopulation rates and moderate risk of future flooding:

- Heavily damaged infrastructure is repaired to avoid additional damage and stabilize neighborhoods initially.
- Then, as neighborhoods resettle, permanent infrastructure is improved to accommodate additional population.
- Major infrastructure improvements are also made to catalyze neighborhood revitalization.
- Over the long-term, an asset management plan is developed for continuous maintenance and upgrades to infrastructure in response to evolving settlement patterns.

For areas with fast repopulation rates and low risk of future flooding:

- Heavily damaged infrastructure is repaired to avoid additional damage.
- Infrastructure is improved and modified scalable to population.
- Major infrastructure improvements are also made to catalyze neighborhood revitalization.
- Over the long-term, an asset management plan is developed for continuous maintenance and upgrades to infrastructure.

Citywide Team Projects	District	Corresponding District Projects
INFRASTRUCTURE AND UTILITIES		
Algiers Drinking Water Plant-- Emergency Fuel Storage and Filter Valve Control System		
Carrollton Drinking Water Plant-- Additional Flocculation and Sedimentation Capacity		
Carrollton Drinking Water Plant-- Short-Term Projects		
Drainage Improvements - Short Term Projects	1	Undertake comprehensive repair/upgrade of drainage infrastructure
	1	Undertake improvement to water supply and raising water pressure and encourage adequate street drainage
	3	Pumping station upgrades and associated flood protection projects
	4	Pumping stations upgrades and associated flood protection projects
	5	Sewer & Water Board pump station landscape buffer improvements
	5	Repair/improve storm drainage structures within District 5
	5	Rehabilitation of Lakeview Sewer & Water Board Pump stations in district
	7 (Bywater/ Marigny)	Undertake comprehensive repair/upgrade of all streets, including signals, signs, lighting, gutters, drains, sidewalks, and curbs
	7 (Florida/ Desire)	Undertake comprehensive repair/upgrade of drainage infrastructure
	7 (St. Claude/ St. Roch)	Undertake comprehensive repair/upgrade of drainage infrastructure
	7 (St. Claude/ St. Roch)	Construct a fence and landscaping at Treasure to screen S&WB
	9	Construct street extensions for drainage improvement: Longfellow to Dwyer, Marques to Dwyer, Percelli to Dwyer, Lurline to Dwyer, Sandlewood to Dwyer, and Redwood to Dwyer; Dwyer between I-510 and Tulan
	9	Reinforce existing pumping capacity to Category 3 status--raise and rehabilitate pumping stations; construct new pumping station at Dwyer and Wilson
	9	Repair drainage structures, piping, and catch basins as needed; clean canals as needed
Eastbank Wastewater Treatment Plant - Levee Improvement Mitigation and Wetlands Project	10	Repair drainage structures, piping, and catch basins as needed; clean canals as needed
	11	Repair/improve storm drainage in Venetian Isles
	12	Repair/improve storm drainage/dredge canals as necessary (especially General DeGaulle culvert issues)
Power Plant		
Sewerage and Water Board - Technical Staff		
Wastewater collection system - Short Term Improvements	5	Implement sewer & water services rehabilitation
Wastewater collection system - Medium Term Improvements	6	Prioritize repairs on major water and waste-water system lines; provide schedule for completion and monthly status reports
Water Distribution System - Short Term	5	Implement sewer & water services rehabilitation
	6	Prioritize repairs on major water and waste-water system lines; provide schedule for completion and monthly status reports
Water Distribution System-- Medium Term	1	Undertake improvement to water supply and raising water pressure and encourage adequate street drainage
	11	Install community water and fire hydrants between the Chef Pass and the Rigolets and in Irish Bayou
Citywide wireless network	6	Establish city-wide free wireless network

Implementation Timeline

The following table provides guidance on the anticipated rate of investment as a percentage of total costs over 3 recovery phases for all the programs or projects in this sector.

	Short-Term (2007-08)	Mid-Term (2009-11)	Long-Term (2012-16)
Algiers Drinking Water Plant - Fuel Storage and Valve	80%	20%	-
Carrollton Drinking Water Plant - Flocculation	25%	55%	20%
Carrollton Drinking Water Plant - Short-Term Projects	80%	20%	-
Drainage Improvements - Short-Term Projects	80%	20%	-
Eastbank Wastewater Treatment Plant - Levee/Wetlands	25%	25%	50%
Power Plant	80%	20%	-
Sewerage and Water Board - Technical Staff	80%	20%	-
Wastewater Collection System - Short-Term Projects	80%	20%	-
Wastewater Collection System - Medium-Term Projects	40%	40%	20%

Transportation

This sector focuses on major and local streets and the transit system. A major street is defined as a major arterial, a minor arterial, or a collector street. Local streets include all other lower-capacity streets. The Transportation Sector includes all those policies and programs necessary to rebuild the badly-damaged transportation/transit sector of the City.

Background/Statement of the Problem

Before Hurricane Katrina, the New Orleans street network needed repair, and it was further damaged by immersion in brackish floodwater for several weeks following Katrina. Traffic signalization citywide was crippled and still is being restored in some areas. The transit system lost a great majority of its rolling stock (which is slowly being replaced), and new routes need to be designed in line with the rate of return of the user population. Major repairs are now needed and must be coordinated with repairs to the utility system, much of which is underground.

This Sector does not include projects that are under jurisdiction of the state of Louisiana (such as the LA Swift and the B.R.-N.O. rail passenger service) or other states (the N.O.-Mobile high-speed rail service). Those activities at the Port of New Orleans and the Armstrong International Airport are described in greater detail in the Economic Development Sector.

Strategies

Restoration of (and revisions to) the City's transportation nodes and services are essential to the stability of New Orleans's neighborhoods and the revitalization of a number of important aspects of civic and economic life:

- **Repair heavily damaged roads to stabilize neighborhoods.** A network of safe and passable roads must be afforded to every area of the City. Expedient repairs should be made throughout the City to ensure that streets experience no further damage.
- **Invest in road improvements.** Extensive and ongoing street repair and the construction of street extensions should be focused within areas of the most current and projected activity. The order in which repairs are made will be coordinated with respect to traffic volume, risk of further damage, and the relative recovery and repopulation of the surrounding areas. Repairs and improvements will be coordinated with the Sewerage and Water Board and other utility providers. Additional improvements to sidewalks and neutral grounds will complement repairs.
- **Make major public transit system improvements to spur neighborhood stability and revitalization.** Expanding both the frequency and number of public transit routes will support the revival of the City, its economy, and its school system. The current system should be reconfigured to best serve the current distribution of the City's population. Alternatives to fixed route service will be evaluated in areas where the population cannot sustain it.
- **Revision a unified transportation system which accommodates and coordinates all modes of transportation, and expands commuter service for regional integration.** The strategic integration of bicycle, transit, vehicular, ferry and pedestrian transportation is a necessity for a modern city. Expanded commuter services may include the extension of LA Swift bus service and eventual rail-based transit between Baton Rouge and New Orleans.

- **Address the deleterious effects of major transportation corridors through a variety of mitigation mechanisms.** Sound walls along the interstates and traffic and parking management programs will help to resolve quality of life issues related to transportation. The longstanding negative impact of the elevated portion of I-10 over Claiborne Avenue will be examined as well.
- **Evaluate the adequacy of current evacuation plans in light of previous plans' failure to account for the elderly, infirm, transit dependent, and prison population.** New Orleans can no longer afford to have a two tiered evacuation system. Safe, timely evacuation in advance of major storms must be guaranteed for all residents.

Policies, Programs and Projects

1. Repair and restore major and minor arterial roads coordinated with S&WB repair efforts.

The Department of Public Works and S&WB efforts will occur strategically based on the relative risk of an area as well as the rate of repopulation. Some of this will be occurring under the oversight of the Regional Planning Commission (RPC) and LA Department of Transportation and Development. For more information, see Project Sheet #43 and # 44.

2. Repair and restore collector and local streets coordinated with S&WB repair efforts.

Many neighborhood streets have been damaged by debris removal apparatus. As neighborhoods resettle and debris removal finishes, street repairs should follow. DPW and S&WB both require additional equipment and personnel to support the effort. For more information, see Project Sheet #45 and #46.

3. Develop and implement an ongoing replacement program for all streets.

A significant number of city streets were in need of extensive repair or total replacement prior to Katrina. The impact from billions of tons of water atop a large portion of the roadway network accelerated the rate of deterioration of road beds. This program would establish an ongoing repair/replacement cycle for the maintenance and upkeep of city streets. For more information, see Project Sheet #47.

4. Initiate streetcar travel time study.

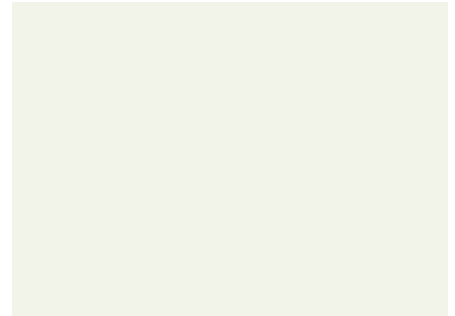
Streetcars are often cited as being too slow for commuters and users of public transit. This condition is often attributed to slow travel speeds, frequent stop locations, inefficient passenger loading, and traffic signal delays. A streamlined, more efficient operation could be implemented with modest changes to the existing systems that would enhance ridership and travel times. For more information, refer to Project Sheet #48.

5. Implement the East-West Corridor and Downtown Loop Plan.

Construct the East-West Corridor (currently in early planning stages) to provide transportation for tourists seeking access from the airport to downtown, for local commuters between Jefferson and Orleans Parishes, and as an added evacuation alternative. For more information, refer to Project Sheet #49.

6. Extend the riverfront streetcar line.

Expand the streetcar network to enhance transit service and to support the ongoing planning efforts of the Regional Planning Commission. For more information, refer to Project Sheet #50.



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7. Implement citywide bike path and bike lane system.

Create the first phase of a comprehensive bike path system serving all sections of the City of New Orleans. This project would tie together the various parts of the City. For more information, refer to Project Sheet #51.

8. Restore and expand transit service and improve transit infrastructure.

It is generally recognized that the present population of New Orleans cannot support the level of transit service that the City enjoyed prior to Katrina. Nonetheless, frequency of RTA service should be increased based on repopulation and ridership. Replace vehicles with newer, cleaner, and more energy-efficient models. Financially sustainable service should be added to less populated areas in a strategic fashion over time.

9. Study feasibility of additional transit rail infrastructure.

Study increasing the extent of a fixed rail (either streetcar or light rail) transit network. Due to the capital costs of installing rail lines and relatively lengthy construction periods, new routes should be studied for feasibility and added judiciously and should respond to present patterns of residential density or anticipated new settlement patterns. For more information, see Project Sheet #52.

10. Re-evaluate evacuation and disaster response plans.

Assess the effectiveness of present evacuation plans in light of Hurricane Katrina. Focus particular attention on establishing a convenient system of transit pick up and distribution points and a multimodal evacuation system to fully account for those without automobile access. Publicize this system extensively so that communities are intimately familiar with standard procedures in the event of another major storm. For more information, see Project Sheet #53.

11. Provide regional commuter rail in Louisiana.

Plan, install, and operate a commuter rail system connecting the most populous areas of southeastern Louisiana.

12. Develop parking and traffic management plan in districts in or around downtown.

Coordinate with residents, business owners, and public agencies to establish guidelines, policies, and implementation measures of parking zones and traffic restrictions throughout the downtown area and in other areas where circulation patterns impinge on quality of life. Focus particularly on the presence of large vehicular traffic, loading and unloading issues, and non-resident parking in areas where the capacity is limited. For more information, see Project Sheet #56.

13. Study construction of sound walls along Interstate-10 and Interstate-610.

Extend existing sound walls to areas along ground-level portions of expressways. Walls should conform to the height and design restrictions determined by previous studies and resident input. For more information, see Project Sheet #55.

14. Study the removal of the elevated portion of I-10 over Claiborne Avenue.

Conduct a detailed cost benefit analysis of the transportation, economic, and budgetary impacts of removing the portion of I-10 roughly from Elysian Fields Avenue to the Pontchartrain Expressway. For more information, see Project Sheet #54.



Application Across Planning Areas

Some policies, programs or projects should be adjusted to accommodate the requirements of the three proposed planning areas.

For areas with slow repopulation rates and high risk of future flooding:

- Initially, make only essential repairs on all major streets in these areas: major arterials, minor arterials, and collector roads. Also make non-essential repairs to those major streets that serve as high-traffic links across the City. In the mid-term, begin repairing remaining major streets in response to the evolving settlement pattern. In the long term, continue making complete repairs to major streets in those areas where neighborhood stabilization is occurring.
- Make only essential repairs to local streets, as the continual presence of construction equipment and heavy trucks make extensive repairs inefficient. Continue emergency repairs to local streets into the mid-term in some areas, while upgrading local streets in areas that participate in the neighborhood stabilization program. As neighborhoods stabilize, continue work on local streets.

For areas with moderate repopulation rates and moderate risk of future flooding:

- Make essential repairs to all major streets: major arterials, minor arterials, and collector roads. In the mid-term, initiate additional non-essential repairs based on population return and the degree of rebuilding completed on essential linkages. In response to the evolving settlement pattern, repairs to remaining major streets occur in the mid-term.
- Prioritize repairs to local streets based upon their condition. Repairs to local streets must be planned and conducted in response to evolving settlement patterns in the mid-term, and completed in the long-term.

For areas with fast repopulation rates and low risk of future flooding:

- First, prioritize major repairs and upgrades to major streets (major arterials, minor arterials, and collectors) in areas accommodating additional population.
- Re-evaluate these repairs over time. In the long term, complete repairs to all major streets.
- Prioritize repairs to local streets for areas accommodating additional population. Continue this work into the mid-term in areas needing revitalization, areas that are potential nodes for added population, and to those local streets that are in poor condition.



Transportation Projects

Citywide Team Projects	District	Corresponding District Projects
TRANSPORTATION		
Repair/Restoration of Streets: --High-Priority Major Arterial Roads --High-Priority Minor Arterial Roads --High-Priority Collector Roads --High-Priority Local Roads	1	Undertake comprehensive repair/upgrade of all streets, including signals, signs, lighting, gutters, drains, sidewalks, and curbs
	3	District-wide street/infrastructure repair and replacement program
	4	District-wide street/infrastructure repair and replacement program
	5	Design and implement City Park Avenue traffic-calming measures
	5	Repair/rehabilitate primary collector streets – paving, curbs, lighting, signals, signage: Canal Blvd., Pontchartrain/West End, Fleur de Lis, Harrison Avenue, Robert E. Lee Blvd.
	5	Repair/rehabilitate secondary collector streets – paving, curbs, lighting, signals, signage: Lakeshore Drive, Fillmore Drive, Bellaire Drive & Marconi Drive as well as tertiary/local streets – paving, curbs, lighting, signals, signage
	7 (Florida/ Desire)	Undertake comprehensive repair/upgrade of all streets, including signals, signs, lighting, gutters, drains, sidewalks, and curbs
	9	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on primary streets (Chef Menteur, Alcee Fortier, Michoud Blvd., Dwyer Road)
	9	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on secondary streets
	9	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on tertiary streets
	11	Bulkhead the shorelines of Highway 90 to provide protection along Chef Menteur Pass, Lake Catherine, and Lake Pontchartrain Shorelines
	12	General Meyer Avenue paving, curbs, access management, streetscape, lighting and pedestrian improvements
	12	Repair road paving, curbs, street lights, signalization & street signs on primary collector streets including General de Gaulle (focus from CCC to Holiday Drive)
	12	Repair curbs and street paving on Old Behrman Highway to improve driver safety on this street
	12	Repair road paving, curbs, street lights, signalization & street signs on secondary and local streets
Ongoing Replacement Program for Major and Minor Streets	6	Establish implementation strategy for renewal of streets and sidewalks: Institute pavement management system to prioritize street improvements; Repair/rebuild all damaged streets, including sub-base; Reassess functional classification of streets to secure federal funding; Prepare inventory of existing street lights; Rebuild all sidewalks to be ADA-compliant, including curb cuts, truncated domes
	1	Extend Howard Avenue to improve Superdome access and operations
	7 (Florida/ Desire)	Install overpasses at appropriate locations that could include N. Miro, Florida, Almonaster, or Alva to avoid blockages at railroad crossings; enhance overpass at N. Galvez
	7 (St. Claude/ St. Roch)	Provide additional above-grade RR crossings
	7 (St. Claude/ St. Roch)	Extend Treasure Street between Florida and Desire
	9	Construct street extensions for drainage improvement: Longfellow to Dwyer, Marques to Dwyer, Percelli to Dwyer, Lurline to Dwyer, Sandlewood to Dwyer, and Redwood to Dwyer; Dwyer between I-510 and Toulon
	11	Raise Highway 11 in Irish Bayou 90 to provide continuous access during heavy rain event
	12	Update and revisit feasibility/design study for “Donner Parkway” along Donner Canal as raised parkway from Tullis Drive to Hwy. 90
Ongoing Replacement Program for Major and Minor Streets	13	Conduct a study to elevate Highway 406 in low topographic zone
	13	Extend English Turn Parkway from Stanton Road to Delacroix Road
Streetcar Travel Time Improvement Study		
East-West Corridor/Downtown Loop	1	Light rail transit to airport
Extension of Riverfront Streetcar Line		
	1	Create bike-friendly corridors
	1	Improve pedestrian/bike connections to river
	3	New open space connections within network (including bike paths)
	4	New open space connections within network (including bike paths)
	5	Improve pedestrian & bicycle access to City Park, New Basin Canal and Lakeshore Drive.

Implement Citywide Bike Path System	6	Develop "rails to trails" walking/cycling path along People's Avenue corridor
	7 (Bywater/ Marigny)	Establish bike lanes on strategic streets--Chartres, St. Claude, and along the riverfront
	7 (St. Claude/ St. Roch)	Develop pedestrian/bike path along St. Roch to connect to the FL. Ave. Greenway
	9	Construct pedestrian walks and bike paths along primary streets such as Morrison, Hayne, and Dwyer Roads
	10	Construct pedestrian walks and bike paths along primary streets such as Chef Menteur and Michoud Blvds.
	12	Construct bike path and walking path along the length of the Mississippi River levee
Streetcar/Light Rail Routes Expansion Study	1	Expand streetcar service and routes
	2	Create new citywide light rail, streetcar system with multi-modal nodes
	6	Link the district, major institutions, and the lakefront to the rest of the city with Elysian Fields streetcar
	6	Prepare environmental impact statement for streetcar or light rail line on Elysian Fields.
	7 (Bywater/ Marigny)	Reestablish Desire Streetcar/St. Claude Streetcar
	7 (Florida/ Desire)	Establish streetcar line along Louisa St.
	7 (St. Claude/ St. Roch)	Re-establish streetcar service
	8	Create new citywide rail and streetcar system with multi-modal nodes
	9	Consider/study extension of light rail into NO East within the Chef Menteur Highway development corridor to provide transit service to the community
	10	Consider/study extension of light rail into NO East within the Chef Menteur Highway development corridor to provide transit service to the community
	12	RTA / Transit System- study ridership needs and modes (e.g. light rail) and address additional circulation/stops required in Algiers
	12	RTA / Transit System- study ridership needs and modes (e.g. light rail) and address additional circulation/stops required in Algiers
Evacuation/Disaster Response Plan	1	Promote establishment of mass evacuation plan with law enforcement hierarchy (federal/state/local) for every district and determine role that light rail and commuter rail could play
	2	Develop and Implement a safe havens, passive survivability, and evacuation plan
	8	Develop and Implement a safe havens, passive survivability, and evacuation plan
	11	Create a "safe harbor" in District 11
	13	Open private Audubon Institute and Coast Guard entrance in times of emergency
	13	Conduct a study for coordinated emergency services and safe haven evacuation center
Study the removal of I-10 between Highway 90 and Elysian Fields Ave.	4	Fund study of I-10 removal
Study installation of sound walls along I-10 and I-610	6	Install landscaped sound wall/barriers along I-10 and I-610
	9	Design and Install sound barriers along I-10 and I-509
	10	Design and Install sound barriers along I-10 and I-510
Traffic and Parking Management Plan	1	Resolve parking and other issues necessary to incentivize more loft renovation and mixed-use development
	1	Introduce a parking management strategy for downtown that includes shared parking facilities and addresses the needs of residents, employees, visitors, and others
	1	Prepare a downtown traffic transportation plan that addresses traffic congestion and conflicts throughout downtown and the French Quarter
	7 (Bywater/ Marigny)	Devise RR crossing management plan for Norfolk Southern tracks
	7 (Bywater/ Marigny)	Mitigate/reduce truck routes through neighborhoods
	7 (Florida/ Desire)	Mitigate/reduce truck routes through neighborhoods
	7 (St. Claude/ St. Roch)	Devise RR crossing management plan
	7 (St. Claude/ St. Roch)	Reduce truck traffic on North Robertson/Claiborne
	12	Conduct a comprehensive district-wide traffic study; address signalization and peak hour traffic levels

Implementation Timeline

The following table provides guidance on the anticipated rate of investment as a percentage of total costs over 3 recovery phases for all the programs or projects in this sector.

	Short-Term (2007-08)	Mid-Term (2009-11)	Long-Term (2012-16)
Repair/Restoration of Major Arterial Roads	80%	20%	-
Repair/Restoration of Minor Arterial Roads	80%	20%	-
Repair/Restoration of Collector Roads	80%	20%	-
Repair/Restoration of Local Roads	80%	20%	-
Ongoing Replacement of Major and Minor Streets	-	50%	50%
Streetcar Travel Time Improvement Study	100%	-	-
East-West Corridor/Downtown Loop	10%	40%	50%
Extension of Riverfront Streetcar Line	10%	60%	30%
Implement Citywide Bike Path System	40%	60%	-

Health Care

This sector covers medical and health care industries and services in New Orleans.

Background/Statement of the Problem

Prior to Hurricane Katrina, care for the City's uninsured population was delivered through the Medical Center of Louisiana at 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 for treatment. 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. Mental health care was also all but erased and has not been restored.

Concerns about the lack of reopened hospitals are particularly heightened for those who have returned to less-populous areas of the City. The open hospitals are concentrated in the southern and western portions of the City, leaving residents in Lakeview/Gentilly areas and New Orleans East with inadequate access to hospitals in case of emergency. The full-service acute-care hospitals in these areas, Lindy Boggs and Methodist Hospitals, are closed and there are no immediate plans to reopen them. An increase of temporary and permanent neighborhood-based clinics can fill the need for health-care services on an interim basis until populations rebound.

Strategies

The strategy for the recovery of the health care sector is two-fold:

- **Restore neighborhood comprehensive primary care.** Return regular health care services to neighborhoods to ensure access to primary care for all residents. Primary care facilities must include ambulatory and emergency evaluation services, mental health services as well as preventative care capabilities.
- **Provide state-of-the-art regional medical care.** Invest in the hospitals, educational facilities, and research and development opportunities to retain New Orleans position as the region's center for specialized medical services. Being a regional leader in medicine, and hosting the State's medical educational institutions is the cornerstone for having the personnel and supporting staff for neighborhood based care, in addition to their essential functions.

Policies, Programs and Projects

1. Redevelop neighborhood based health centers/clinics.

Address damage to primary health care services in Orleans Parish and restore primary care services and preventative care services through the recovery of pre-Katrina neighborhood level clinics and health care centers or the establishment of new ones. This was identified in the City of New Orleans Neighborhoods Rebuilding Plan. For more information, see Project Sheet #57.

2. Restore comprehensive medical services to New Orleans East.

The two hospitals that served New Orleans East, Lakeland and Methodist, were both severely damaged in the storm. Neither is expected to reopen. The project would include the acquisition and revitalization of the existing Methodist Hospital site. The current owner does not intend to reopen the facility and has indicated a willingness to sell for a negotiated

price. For more information, see Project Sheet #58.

3. Support the redevelopment of the New Orleans Medical District.

This District provides well-paying jobs, helps redevelop adjacent low- and moderate-income neighborhoods, and can bolster the region's biomedical industry. This policy is consistent with the goals and objectives within the Technology Subcommittee of the Bring New Orleans Back Commission. It includes the LSU/VA and University Hospital project, a Cancer Research Center, and the Bio-Innovation Center projects noted in greater detail in the Economic Development Sector discussion. It is essential because it provides staffing to support neighborhood clinics. For more information, see Project Sheet #01.

4. Advocate for the Implementation of LA Department of Health and Hospitals Plan.

Promote the implementation of the Ambulatory Care and Behavioral Health elements of the Louisiana Department of Health and Hospitals Hurricane Recovery Plan (DHH Plan, March 2006) for Orleans and Jefferson Parishes. The Ambulatory Care component will provide safety net clinic sites to meet the needs of existing and returning residents, and increase access to pharmacies and public information services.

Application Across Planning Areas

Some policies, programs or projects should be adjusted to accommodate the requirements of the three proposed planning areas.

For areas with very slow repopulation rates and high risk of future flooding:

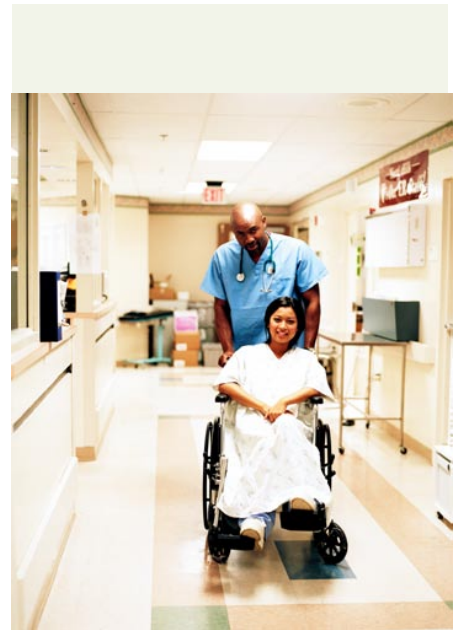
- Mobile health clinics are used to provide primary neighborhood care, in the short term.
- As the returning population warrants, temporary neighborhood health care services are provided in repaired or renovated structures, such as community centers, schools, libraries, where they can be appropriately accommodated.
- In the long term, permanent neighborhood health centers are constructed in locations with other service providers wanting to cluster together.

For areas with moderate repopulation rates and moderate risk of future flooding:

- Neighborhood health centers are repaired and renovated to serve the returning population.
- This pattern continues in line with resettlement patterns.
- In the long term, this pattern continues, as new neighborhood health care centers are also constructed as population resettlement and stabilization occurs.
- Hospitals return as population returns.

For areas with fast repopulation rates and low risk of future flooding:

- Neighborhood health care centers are repaired, renovated and new centers constructed throughout the coming years.
- Large scale medical facilities in the New Orleans Medical District come online as they are constructed over the coming years.



Health Care Projects

Citywide Team Projects	District	Corresponding District Projects
HEALTH CARE		
Redevelop Neighborhood-Based Health Centers/Clinics	1	Explore need for neighborhood health center for growing population in Warehouse District and Rampart Street Corridor and Lafayette Square
	2	Incentivize continued recovery and expansion of health care industry
	5	Provide incentives/infrastructure to facilitate development of 1-2 new community medical clinics
	5	Provide incentives/infrastructure to repair/reopen Lindy Boggs Medical Center
	6	Support location of neighborhood health clinic in or near the planned Town Center/community nexus
	7 (Florida/ Desire)	Restore health care services (e.g. multipurpose health/community services building, Desire Mental Health Clinic, clinic at Louisa and Higgins)
	7 (St. Claude/ St. Roch)	Provide a family health center
	9	Develop health centers with community centers at multiple locations (e.g. Chef/Michoud, Downman/Dwyer)
	10	Develop health centers with community centers at multiple locations (e.g. Chef/Michoud, Downman/Dwyer)
	11	Provide infrastructure/incentives for a community clinic on Highway 90
	12	Re-establish Algiers Mental Health Clinic
	12	Study market potential for redevelopment of a full service district medical facility
Restore Comprehensive Medical Services to New Orleans East	9	Provide infrastructure/incentives to restore Methodist Hospital; rebuild as protected structure with only service uses on first floor
	9	Rehabilitate Lakeland Hospital

Implementation Timeline

The following table provides guidance on the anticipated rate of investment as a percentage of total costs over 3 recovery phases for all the programs or projects in this sector.

	Short-Term (2007-08)	Mid-Term (2009-11)	Long-Term (2012-16)
Redevelop Neighborhood-Based Health Clinics	100%	-	-
Restore Comprehensive Medical Services to N.O. East	50%	50%	-

Education

The Education Sector includes all public primary and secondary schools, grades Kindergarten through 12, as well as State colleges and State universities. This sector does not cover private or parochial schools.

Background/Statement of the Problem

Even before Katrina, the New Orleans public school system had floundered both financially and academically, and had been largely taken over by the State through the Recovery School District (RSD). After Katrina, the role of the RSD and its agents have changed dramatically, from basic academic and fiscal oversight to full facilities management and rehabilitation. As of December 2006, of the 126 public school buildings in New Orleans, only seven suffered no damage from the storm. Conversely, 47 had moderate to severe levels of storm-related damage, not to mention the years of deferred maintenance. The current cost to repair the physical damages to all schools, in their current locations, and including deferred maintenance, is over \$800 million. FEMA damage estimates for storm-related losses total only \$55 million, leaving a huge gap in funding for school facilities. The colleges and universities of the City have also suffered substantial physical damage and are operating with considerably reduced enrollments. Public university support is predicated on student enrollment and local universities and colleges have, of course, suffered large enrollment declines as many of their former students are not able to return or suffered such devastating financial losses that they have had to forego college for the moment to rebuild their lives.

Strategies

The education system is a vital component in the restoration and recovery of the City of New Orleans, the region, and the entire State. Post Katrina, the City of New Orleans and the State of Louisiana have the opportunity to rebuild and greatly improve the public education system starting with early childhood education and going all the way through the college and university level. The strategy for recovery has several components all of which hold equal importance in the process.

- **Create and maintain an equitable, competitive and unified elementary and secondary school system that prepares all students for learning and life success, and is responsive to the changing needs of the City and its residents.** School system reforms are in order for the future that should move the school system in a direction that is inclusive, competitive, and educates the entire community.
- **Restore and rebuild a physical plant that emphasizes best design practices, develops schools as “community centers”, and builds schools that accommodate students in a motivating environment conducive to success.** Many facilities in low risk areas have already been rebuilt, however this does not always accurately represent where students are living. Therefore a short- and long-term rebuilding strategy needs to be considered which rebuilds some existing facilities in moderate risk areas, relocates schools in high risk areas, and reconfigures the design layout of schools to more efficiently and effectively cluster facilities.

- **Adopt and maintain a solid academic curriculum supported by well paid education professionals, an adequate supply of teaching and research materials, and support personnel to assist in the process.** In rebuilding the education infrastructure, BNOB, LRA, and the State Boards of Education have all emphasized the need for a coherent educational system focused on students learning needs and favorable educational outcomes. This needs to include: rigorous and integrated curriculum increasing student chances for success in continuing education, life work, and society; up-to-date texts, technology, and instructional materials; adequate learning support services and resources aligned to meet both the educational and experiential needs of students; well qualified school administrators supported by school boards that understand the role of boards is not to micro manage schools; and an engaged public who is knowledgeable about school activities, engaged in the educational process, and invited to participate on a long term basis in what is to be a community educational endeavor.
- **Support a strong and well supported college and university environment able to take and hold its place as a partner in the recovery effort.** New Orleans' largest private employer pre-Katrina was Tulane University including its medical school. There needs to be closer collaboration with community colleges, vocational colleges, four year colleges and universities in a joint effort to rebuild the community. Colleges and universities, both private and public, need additional resources to allow them to really recover from the effects of the storm and be able to take their rightful positions as leaders in the rebuild effort.

Policies, Programs, and Projects

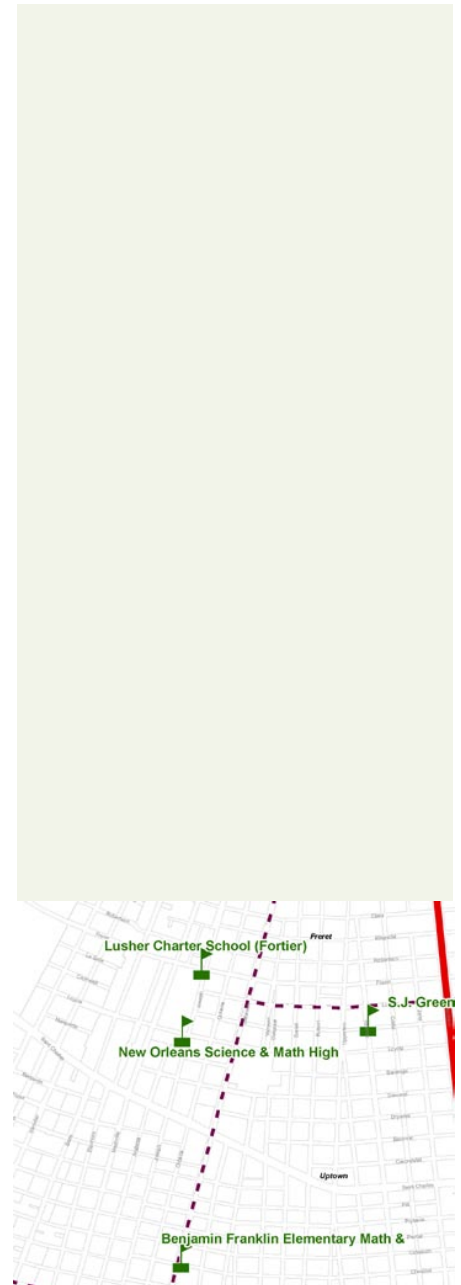
1. Provide temporary modular school facilities where facilities were most damaged yet there is demand for schools due to returning population.

Although the City's total student population is down post-Katrina, there is not an even distribution of schools available, and those schools which have reopened are at full capacity. In particular, those areas of the City hardest hit by the hurricanes have few facilities open and are busing students to available space. Construction of modular/portable facilities will provide much needed space for students closer to their homes and time for the State and the RSD to complete their assessment of existing facilities by the end of 2007. Currently the RSD has begun or is planning construction of modular facilities in the following areas: Planning District 4 (2 facilities), Planning District 5 (1 facility), Planning District 6 (2), Planning District 8 (2), and Planning District 9 (3). For more information, see Project Sheet #61.

2. Repair existing facilities or construct new facilities

First and foremost the recovery of the Orleans Parish School District and its facilities must focus on the repair and rehabilitation of existing facilities. Currently, the State of Louisiana, representing both the RSD and the OPSB is contracting for a Comprehensive Master Facilities Plan of all Orleans Parish school facilities. Until this plan is complete, the actual condition (storm damage and deferred maintenance) of many of the existing facilities is unknown. This comprehensive plan will include: detailed assessments of existing facilities, demographic assessments of the population, educational programming and facility standards, and a community engagement process designed to build upon the UNOP process.

Considerations in determining which existing facilities should be repaired and rehabilitated include: FEMA damage estimates, actual rebuilding costs (storm vs. deferred maintenance cost), which buildings are already open and/or under construction, short-term strategies



vs. long-term strategies, relative risk, and demand. Buildings currently open might need to be closed because of their current condition and the costs to upgrade and retrofit them to needed standards of security and quality. For more information, see Project Sheet #60.

3. Establish neighborhood community centers on school campuses.

Reconfigure schools as centers of community to provide effective spaces for teaching and learning, as well as a range of community services to meet local needs. The clustering of facilities will allow a more efficient delivery of services and coordination of services and transit. Whether housed in an existing facility or new construction in those areas hardest hit, the neighborhood-based community center concept may include all or a combination of the following: recreation/open space, early childhood education, K-8 or high school learning centers, public library, adult/technical education, community health center, social services, senior center, transit depot, and police sub-stations. To facilitate such clusters, the City Zoning Ordinance should be updated to permit neighborhood community centers outright with provisions to ensure that they are designed to be compatible with the scale of the surrounding neighborhood and potential adverse effects on surrounding neighborhoods are mitigated. The location of these centers has the potential to guide development and restore services to serve as civic anchors.

These facilities will also require larger parcels of land than available on existing school sites and/or may require new locations out of high-risk areas. Resources are necessary to acquire and consolidate the necessary parcels, whether they are residential properties acquired through a redevelopment authority (NORA, Road Home, etc.) or available commercial or public properties. Additionally, areas deemed appropriate for neighborhood community centers will need to be prioritized and reserved for redevelopment through a comprehensive redevelopment planning process. For more information, see Project Sheet #59.

4. Advocate for the establishment of small school incubators and conversions.

Implementation of a small schools model will enhance the best practices of teaching and learning, integrate small schools into community clusters with other public services, and build a flexible school infrastructure that is capable of adjusting to population mobility and fluctuation. This policy could include: waivers for small schools incubators, fast-track approval for small schools conversions, and retrofitting of existing sites as new small schools.

5. Advocate for best practices in PreK-12 education.

Recommend that the State set ambitious learning goals and provide all students a challenging and comprehensive PreK-12 curriculum, based on recognized best educational practices, including preparation for postsecondary education and careers. For pre-K-8 education, the State and district should ensure that all early learning is sustained by aligning guidelines, standards, and curricula for preschool, early childhood education, kindergarten, and primary grades. For high schools, the State and district should establish a standard, academically rigorous curriculum for every high school student, making career and technical courses available for a full range of post-high school options. State and local policy-makers should also define adequate learning support in K-12 education as those resources and interventions necessary to meet the academic and career preparation needs of students, which will ensure that all students attain the State academic standards.



6. Strengthen charter school laws.

Charter schools have become an integral component in the recovery of the New Orleans Public School system. Currently there are 25 charter schools in Orleans Parish. While non-profits at the local level have worked to facilitate charter schools, policy changes are needed at the State-level to guarantee a favorable environment for charters to start and thrive as an integral part of a unified New Orleans Public School system. These recommendations include: simplifying charter school guidelines, and providing start-up funds for charter schools like other public schools.

7. Advocate for the State to cultivate and sustain partnerships to attract and retain high quality teachers.

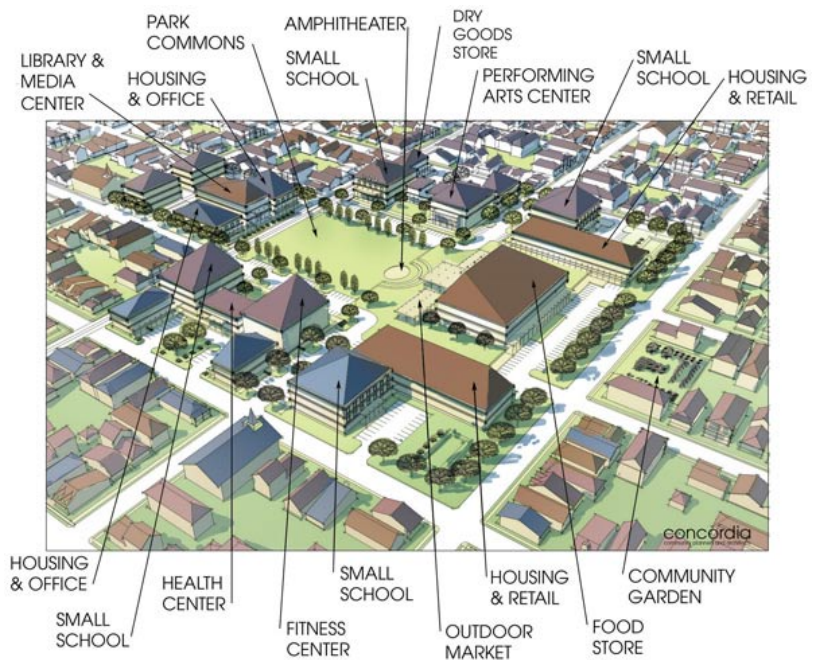
Post-Katrina, recruitment and retention of teachers has been an ongoing problem. While much of the focus has been on reopening damaged school buildings and placing modular facilities, there is a critical need to attract and retain quality teachers. Recommendations include: increasing the capability of Louisiana colleges and universities to attract and train teachers with appropriate expertise to staff a comprehensive school curriculum; expanding programs to attract talented individuals, especially from underrepresented groups, into PreK-12 teaching and postsecondary faculty careers, through forgivable loans and teaching fellowships; and establishing a career ladder, of competitive compensation schedules/bonuses and subsidized post-secondary education for top teachers.

8. Advocate for a unified Orleans Parish School Board with sufficient oversight, accountability, and transparency.

The State and district should ensure that all early learning sustained by aligning guidelines, standards, and curricula. However, a single, unified school board, whose "key emphasis will be on aligning focus on student achievement, not politics, and maintaining stability" is crucial to implement and sustain best practices system-wide. This plan calls for the governance of the school system to return to a single, aligned governing body. While it is not in the scope of this plan to determine the optimal configuration of this board, it is imperative that these members become appointed (rather than elected) positions. This will ensure that members are professionals in the field and bring knowledge of best practices to the school system. The State and local school systems need to establish a model for civic engagement that engage parents, stakeholders, and community service providers in planning for the future of the school district. Engaging the public early provides the opportunity to build trust; define community priorities and concerns; more equitably distribute resources; and overcome political obstacles to reform that have plagued the system.

9. Restore damaged technical colleges and evaluates the need for additional vocational programs and facilities.

The Sidney N. Collier campus of the Louisiana Technical College system has remained closed since Hurricane Katrina. The facility should be repaired or rebuilt. Communities have called for additional vocational training programs. The suitability of existing facilities to accommodate additional curricula should be examined, and additional facilities should be planned if deemed necessary.



Application Across Planning Areas

Some policies, programs or projects should be adjusted to accommodate the requirements of the three proposed planning areas.

For areas with very slow repopulation rates and high risk of future flooding:

- Provide temporary modular facilities in the short-term and make selective repairs and flood-proof existing facilities, with the emphasis on areas of lowest and moderate risk of flooding.
- Invest in upgraded facilities as population resettlement occurs. Use best design practices and the model of a “community education center” for new facilities, in line with community desires. Also consider upgrading existing facilities using the “community education center” concept.

For areas with moderate repopulation rates and moderate risk of future flooding:

- Strategically repair and flood-proof facilities for temporary reuse while providing temporary modular facilities when necessary.
- Invest in upgraded facilities as population resettlement occurs. Use best design practices and the model of a “community education center” for new facilities, in line with community desires. Also consider upgrading existing facilities using the “community education center” concept.

For areas with fast repopulation rates and low risk of future flooding:

- Where necessary, complete repairs and flood-proof existing facilities.
- Use best design practices and the model of a “community education center” to build versatile permanent schools designed to accommodate a growing student population.

Education Projects

Citywide Team Projects	District	Corresponding District Projects
EDUCATION		
Neighborhood Community Centers	4	Program and develop community centers in underutilized public buildings
	5	Conduct a feasibility study to assess Beth Israel Congregation for potential re-development of site as community center
	5	Restoration of Harrison Community Center including restoration of the Gernon Brown Gymnasium in City Park
	6	Renovate and re-open Pontchartrain Park Senior Community Center
	7 (Bywater/ Marigny)	Establish and improve community and recreation centers (including Stallings Recreation Center, Mandeville Center, and activity nodes at Colton Middle and Douglass High Schools)
	7 (Florida/ Desire)	Co-locate community centers, libraries, and other facilities/services with schools
	7 (St. Claude/ St. Roch)	Create community, cultural, and recreation centers
	8	Develop and Implement a "District Community-Based Youth at Risk" recovery program
	8	Establish new Nature Interpretive Education and Outreach Center
	8	Renovate and expand Sanchez Center
	9	Develop health centers with community centers at multiple locations (e.g. Chef/Michoud, Downman/Dwyer)
	9	Restore/rebuild community center at Abrams Elementary School
	10	Develop health centers with community centers at multiple locations (e.g. Chef/Michoud, Downman/Dwyer)
	11	Build or provide incentives for a 5,000 sq. ft. community center to be located between Ft. Macomb and Fort Pike. This community center could offer a myriad of activities for the community as part of the region's recovery and support economic development found in fishing, wetlands, and eco-tourism
	12	Plan, design and implement a co-location complex with educational, community and commercial facilities – add civic uses (site to be determined)
Repair and Renovate Existing School Facilities/Construct New School Facilities	1	Create new elementary school combined with refurbished or new library
	2	Complete comprehensive study of schools
	2	Renovate or provide new Lafon Elementary School
	5	Repair/reopen and harden Hynes Charter School
	6	Secure funding for reopening/replacement of district public schools
	7 (Bywater/ Marigny)	Provide schools within the community
	7 (Florida/ Desire)	Provide schools within the community (public preferences for initial reopenings are Moton Elementary and Carver Middle and High Schools)
	7 (St. Claude/ St. Roch)	Provide schools within the community (public preference is to locate at least one elementary and middle school within the community, and at least one high school within the district)
	8	Complete comprehensive study of school recommendations and re-openings
	9	Construct new school at Ray Abrams Elementary as hardened facility
	9	Rebuild schools at higher elevation
	9	Install high-quality modular units as soon as possible; rebuild and reopen damaged schools; mitigate damage to existing school building (gutting, mold remediation) as needed to accommodate repopulated areas
	10	Rebuild schools at higher elevation
	10	Install high-quality modular units as soon as possible; rebuild and reopen damaged schools; mitigate damage to existing school building (gutting, mold remediation) as needed to accommodate repopulated areas
	10	Fully renovate Sarah T. Reed High School via fast-tracking
Temporary Modular School Facilities	12	Reconstruct/reopen L.B. Landry High School
	12	Repair/reopen Rosenwald Elementary School
Rehabilitate Louisiana Technical College and Evaluate Need for Additional Facilities	9	Install high-quality modular units as soon as possible; rebuild and reopen damaged schools; mitigate damage to existing school building (gutting, mold remediation) as needed to accommodate repopulated areas
	10	Install high-quality modular units as soon as possible; rebuild and reopen damaged schools; mitigate damage to existing school building (gutting, mold remediation) as needed to accommodate repopulated areas
	7 (Florida/ Desire)	Reopen Sidney Collier Technical School and establish a community enhancement team/job training program
	11	Provide infrastructure/incentives for marine and fisheries vocational/technical school

Implementation Timeline

The following table provides guidance on the anticipated rate of investment as a percentage of total costs over 3 recovery phases for all the programs or projects in this sector.

	Short-Term (2007-08)	Mid-Term (2009-11)	Long-Term (2012-16)
Neighborhood Community Centers	25%	50%	25%
Repair Existing Facilities/Construct New Facilities	50%	50%	-
Temporary Modular School Facilities	70%	30%	-
Rehabilitate LA Technical College; Study New Facilities	25%	50%	25%

Community Services:

Public Safety

Public Safety includes the New Orleans Police Department (NOPD), the criminal justice system, fire (NOFD), and Emergency Medical Services (EMS).

Background/Statement of the Problem

A crucial component for the recovery of the City of New Orleans is a functioning, efficient, and coordinated public safety and emergency response sector. Prior to Hurricane Katrina crime was cited by residents as the main reason for the out-migration to surrounding parishes. To further strain the resources of these critical support systems, Hurricane Katrina caused significant damage to the fire, EMS, police, and the criminal court system's facilities, vehicles, and personnel. The system has been slow to recover and the publicity surrounding crime in post-Katrina New Orleans has impacted the pace of recovery. Projects include repair of the crime lab and district headquarters and substations, the improvement of crime-fighting techniques such as video surveillance, and the creation of an emergency communications center. Projects expected to receive FEMA reimbursement are not included in these recommendations, but would need to be added if FEMA funding is not provided.

Strategies

The strategies for public safety are to:

- **Renovate and restore damaged facilities and equipment.** Provide public servants with the equipment and facilities necessary to be effective. Facilities renovations include New Orleans Fire Department (NOFD) stations, the prison complex, Police HQ, and the Office of the District Attorney.
- **Develop a neighborhood-based police system.** Create police substations closer to the people in the communities to improve response times and ensure that residents feel secure. Explore opportunities to create civic anchors through the "community centers" model, by co-locating with other public facilities.
- **Maximize use of Public Safety Resources.** Invest in technology to contend with reduced personnel. "Force multipliers" and state-of-the-art technologies are needed to contend with having fewer officers.

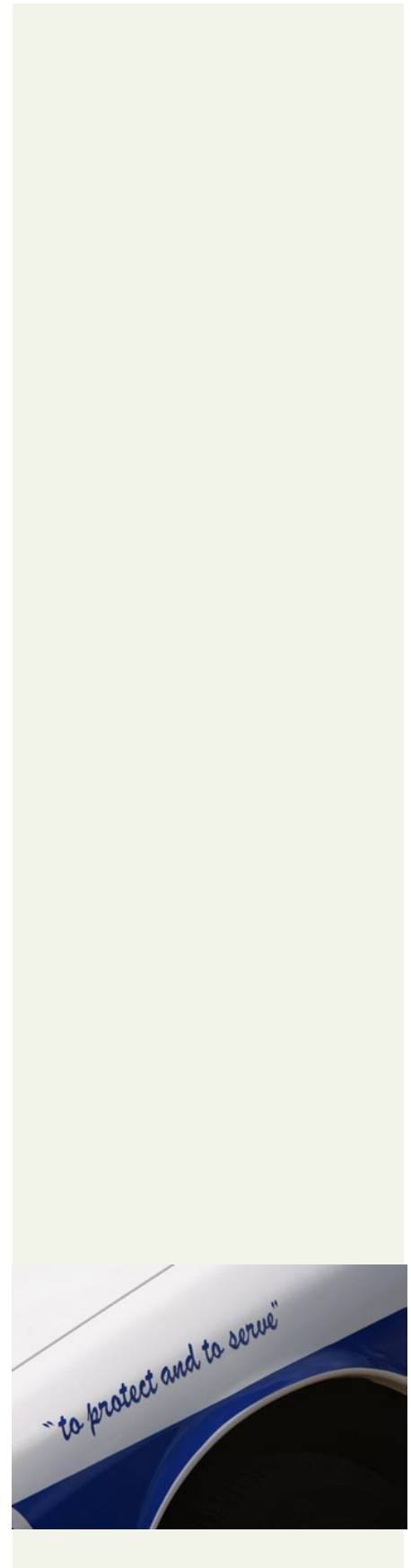
Policies, Programs and Projects

1. Repair and restore existing facilities and equipment.

Projects for this sector include a number of facilities as well as equipment which need repair or renovation. This includes the NOPD Headquarters at 715 North Broad St., the renovation and/or Repair of seven District Headquarters Buildings, and the renovation of the NOPD Special Operations Unit. For more information, see Project Sheet #65, #66, #67, and #68.

2. Develop a citywide network of state-of-the-art police substations.

As new police facilities come on line across the City, some will be developed as sub-stations. All residents will benefit from an increased police presence. Substations can be co-located with other facilities to create "community nexus." This project applies citywide. For more information, see Project Sheet #62.



3. Develop and integrate the crime lab and central evidence and property storage functions.

NOPD effectiveness is severely hampered due to the total loss of the crime lab, including building and equipment along with capacity for storing evidence and property. There is currently a backlog of approximately 1,800 narcotics cases because of the lack of a crime lab. To be able to deal effectively with criminal investigations, the NOPD must have a state-of-the-art crime lab. For more information, see Project Sheet #63.

4. Establish a citywide criminal surveillance system.

NOPD effectiveness is severely hampered due to the loss of officers and the prospects of continued attrition. The NOPD needs force multipliers. A state-of-the-art surveillance system will allow officers to monitor crime hot spots and efficiently dispatch officers to areas of critical need. This project will place 400 cameras throughout the city. For more information, see Project Sheet #64.

5. Replace or repair all storm-damaged NOPD equipment.

The capacity of the NOPD to undertake law enforcement activities is severely limited without adequate support equipment such as working vehicles and equipment, computers, and fully equipped offices. For more information, see Project Sheet #65.

6. Develop a multi-agency Parish emergency communications center.

Post-Katrina, due to severe damage sustained at the Public Safety Answering Points (PSAPs) located at NOFD Communications (Rosedale) and NOPD Communications (Police Headquarters on Broad Street). The Orleans Parish Communications District (OPCD), working in coordination with the City of New Orleans, built an Interim PSAP facility. Once all outstanding issues are resolved, additional funding sources will be required to build the permanent facility. For more information, see Project Sheet #69.

Application Across Planning Areas

Some policies, programs or projects should be adjusted to accommodate the requirements of the three proposed planning areas.

For areas with very slow repopulation rates and high risk of future flooding:

- Initially, repair NOPD substations as warranted by returning population, while continuing to use temporary facilities. Repair and restore NOFD facilities.
- Continue bringing NOPD sites on line as warranted by population, begin construction of new NOFD facilities based on resettlement patterns.
- Complete the restoration of existing NOPD facilities as warranted by population resettlement, and construct new NOPD and NOFD facilities where merited by population resettlement patterns.

For areas with moderate repopulation rates and moderate risk of future flooding:

- Initially, repair NOPD and criminal justice facilities for temporary reuse while renovation occurs on the NOPD District facilities and headquarters. Begin to repair, renovate, and rebuild NOPD facilities using FEMA PA and State match.



- Continue bringing damaged NOPD sites on line as warranted by population resettlement patterns, and begin to plan for the construction of new facilities where warranted by resettlement patterns. As new facilities come on line, prepare for the demolition or reuse of old facilities. Start planning for the location of new sites and construction of new NOFD facilities based on resettlement patterns.
- Complete the restoration of existing NOPD facilities as warranted by population, and construct new NOPD and NOFD facilities where merited by population resettlement patterns.

For areas with fast repopulation rates and low risk of future flooding:

- Initially, repair NOPD and criminal justice facilities while renovation and rebuilding occurs on the NOPD District facilities and headquarters. Also during this time frame, NOFD facilities are repaired and restored.
- Then, continue bringing NOPD sites on line as warranted by population, and begin to plan for the construction of new facilities determined by resettlement patterns. As new facilities come on line, prepare for the demolition or re-use of old facilities. Likewise, start planning for the locating of new sites and construction of new NOFD facilities based on resettlement patterns.
- Continue the restoration and construction of NOPD and NOFD facilities.

Public Safety Projects

Citywide Team Projects	District	Corresponding District Projects
COMMUNITY SERVICES: PUBLIC SAFETY		
Citywide Network of State-of-the-Art Police and Fire Substation	2	Study the feasibility of police security sub-stations and programs in the district
	5	Rehabilitate (3) and harden existing fire stations in District 5
	5	Rehabilitate and harden police station on Canal Blvd.
	7 (Bywater/ Marigny)	Establish a police precinct at Stallings Recreation Center
	7 (Florida/ Desire)	Enhance police and fire protection by reopening, rebuilding and adding appropriately staffed stations
	8	Study the Feasibility of Manned Police/Fire/Security Sub-Station and Programs in District
	9	Rehabilitate/restore existing fire stations (3) as hardened structures
	9	Rehabilitate/restore existing police station as hardened structure
	9	Construct two police substations as hardened structures
	10	Rehabilitate/restore existing fire stations (3) as hardened structures
	10	Rehabilitate/restore existing police station as hardened structure
	10	Construct two police substations as hardened structures
	11	Construct fire stations for Ft. Pike and Irish Bayou community volunteer fire department including a manned police substation
	11	Construct manned police substation in Venetian Isles
	11	Rebuild fire facilities in Venetian Isles and add a manned police substation
	12	Construct additional Police substations on Newton, Texas & Tullis Streets
	12	Restore/repair Fire Station #40
	12	Restore/repair or relocate and rebuild existing police station in a more visible location
	13	Conduct a study for coordinated emergency services and safe haven evacuation center
Develop and Integrate Crime Lab and Central Evidence and Property Storage Function		
Provide a Citywide Criminal Surveillance Program	7 (St. Claude/ St. Roch)	Install security cameras at certain intersections
Replace or Repair All NOPD Equipment		
Renovate NOPD Headquarters		
Renovate NOPD Special Operations Unit		
Renovate and/or Repair 7 NOPD District Headquarters Buildings		
Emergency Communications Center		

Implementation Timeline

The following table provides guidance on the anticipated rate of investment as a percentage of total costs over 3 recovery phases for all the programs or projects in this sector.

	Short-Term (2007-08)	Mid-Term (2009-11)	Long-Term (2012-16)
Citywide Network of Police and Fire Stations	25%	75%	-
Integrate Crime Lab and Central Evidence and Storage	25%	75%	-
Citywide Criminal Surveillance Program	25%	75%	-
Replace or Repair All NOPD Equipment	100%	-	-
Renovate NOPD Headquarters	100%	-	-
Renovate NOPD Special Operations Unit	100%	-	-
Renovate and/or Repair 7 NOPD District Headquarters	25%	75%	-
Emergency Communications Center	10%	80%	10%

Community Services: Environmental Services

Environmental Services includes solid waste disposal, sanitation, management of construction debris, recycling, sustainability, and brownfields remediation and redevelopment.

Background/Statement of the Problem

Solid waste collection and disposal in New Orleans is largely handled by private contractors who provide twice-a-week service in most areas and daily service in the French Quarter. Contractors lost equipment in the storm, and the Department of Sanitation also incurred significant losses as a result of Katrina. This included the loss of most vehicles, an operating budget reduced by 50%, and the staff reduced from 89 to 14. Initial demolition and storm debris removal was primarily carried out by FEMA and the U.S. Army Corps of Engineers at full federal expense, but this practice ended Dec. 31, 2006. Sanitation services are now once again provided by private contractor to the City of New Orleans, and regular curbside pickup has returned to much of the City, although recycling services have not.

Prior to Katrina, the City of New Orleans was reviewing hundreds of properties (both private and City-owned) within the City for possible brownfield-status, entitling them to federal/state funding for clean-up and redevelopment. In the first months following Katrina, the U.S. Environment Protection Agency and the Louisiana Department of Environmental Quality sampled sediment at 430 public property sites within Jefferson, Orleans, Plaquemines, and St. Bernard Parishes.¹ 145 of 430 sites exceeded state and federal risk screening criteria for select contaminants (e.g. elevated levels of lead, arsenic, and benzo(a)pyrene). Follow-up sampling was taken at 14 of the 145 exceedence sites; 4 of the 14 follow-up sites exceeded state and federal health risk criteria. EPA and LDEQ did not identify the precise location and scope of the “localized” contaminated areas – to the public or the City. EPA and LDEQ also did not conduct a formal Risk Assessment, as was done in New York City after the World Trade Center disaster, to analyze exposure pathways and short- and long-term health risks associated with these confirmed contaminants.

Strategies

The strategy for this sector is three-fold:

- Ensure all residents and businesses have continuous and reliable sanitation services, including support for the ongoing recovery and reconstruction efforts across the City for the foreseeable future.
- Promote ‘best practices’ in environmental and waste management, including brownfields development, waste recycling and promotion of ‘green’ building practices.
- Promote ‘best practices’ that ensure that the public is better informed of health risks associated with soil contamination and that remediation is a fundamental principle of the rebuilding process.

¹ Environmental Assessment Summary for Areas of Jefferson, Orleans, St. Bernard, and Plaquemines Parishes Flooded as a Result of Hurricane Katrina., U.S. EPA & LDEQ, December 9, 2005 (available at: <http://www.deq.louisiana.gov/portal/portals/0/news/pdf/LDEQDEC9EnvAssesSum.pdf>)

Policies, Programs and Project

1. Provide effective and efficient garbage and recycling services for residents.

Although curbside garbage collection has been restored to pre-Katrina levels of service in most parts of the City, recycling services have not. Plan for the restoration of these services. Explore opportunities to support existing non-profit recycling centers while studying the potential for the creation of recycling centers for small haulers. For more information, see Project Sheet #72.

2. Promote an aggressive State policy for a clean environment and explore opportunities for reuse and recycling at the macro-scale.

Work with State government officials to effectively address reuse opportunities for waste minimization of storm related construction and demolition debris.

3. Effectively manage both Municipal Solid Waste (MSW) as well as Construction and Demolition (C&D) Debris.

Reduce transportation costs for MSW by working with regional governments to explore potential for suitable future sites which do not degrade the environment or cause harm to citizens. Use Jefferson Parish model of ownership/contract services as an example.

4. Provide a clean and safe environment for residents to rebuild in.

The City, through leadership by the Mayor's Office of Environmental Affairs, should immediately reevaluate the list of candidate brownfield properties it was developing prior to Katrina to determine whether contamination worsened as a result of Katrina. The City should also identify any additional properties that may be eligible for brownfield-status subsequent to Katrina. NORA must ensure compliance with environmental regulations related to clean up contaminated soils within properties they own or manage. In addition, other City agencies must also comply to the extent that they are using federal funds to redevelop properties. Complying with environmental regulations includes conduct of an environmental impact study to the extent that federal money is being used to redevelop City-owned or operated property. The City should refer to US EPA and LA DEQ data collected after Hurricane Katrina to identify those properties within the City with contamination levels in excess of government risk criteria. The City must also inform residents within close proximity to contaminated sites and also conduct remediation measures to the extent that the property is City-owned or operated. For more information, see Project Sheet #71.

5. Promote energy efficiency, "green," and sustainable/hurricane resistant building practices as part of the rebuilding.

Provide incentives for energy efficient and sustainable rebuilding practices to be incorporated into new construction. In New Orleans, "sustainable" design refers both to resource energy-efficiency, durability, and wind and flood protection. Where feasible, City-owned buildings, schools and other infrastructure should be redeveloped following more sustainable and energy-efficient standards. For this reason, incentives should be targeted toward both stronger and more resource efficient structures. This program could result in the reduction of annual energy use costs of \$20 million or more and the more rapid recovery of structures and neighborhoods following a major storm. For more information, see Project Sheet #70. Also, the City must enforce the international building code and FEMA guidelines and also study the application of green building regulations. Cost effective strategies that reduce energy or resource use in all new construction need to be identified and applied. These policies should apply citywide and additional funding may be needed to supplement staffing of responsible agencies.

Application Across Planning Areas

All policies, programs, and projects will be applied citywide. There are no distinctions by proposed planning areas.

Environmental Projects

Citywide Team Projects	District	Corresponding District Projects
ENVIRONMENTAL CONCERNS		
Sustainable Environmental Strategies	1	Explore mechanisms currently being established in Boston and other cities that promote green buildings in the private sector
	2	Develop and implement a voluntary incentive based energy efficiency and sustainable materials program
	2	Develop and implement a voluntary incentive-based rain garden program
	2	Develop and implement a voluntary incentive based hurricane and flood building program
	8	Develop energy-efficiency sustainable materials program
	8	Develop a sustainable building program and incentivize sustainable materials
	8	Develop and institute a rain garden program
	8	Develop and institute storm/flood water retention and mitigation program
	8	Develop and institute voluntary hurricane and flood building program
	8	Develop and implement alternative energy sources
	9	Restoration of Lake Pontchartrain fishing camps as small "hardened" buildings, constructed to withstand wind and water
	13	Develop and implement a voluntary incentive based energy efficiency and sustainable materials program
	13	Develop and implement a voluntary incentive based hurricane and flood building program
	13	Develop and implement a voluntary rain garden program
Hurricane Recovery Soil Assessment and Remediation Program	2	Remediate Saratoga incinerator site and determine redevelopment options
	3	Investigate and, if required, remediate Sycor Facility
	7 (Bywater/ Marigny)	Assess needs and costs related to remediation of contaminated soils and other flood-related environmental issues through the oversight of EPA
	7 (Florida/ Desire)	Assess need and costs related to remediation of contaminated soils and other flood-related environmental issues through the oversight of EPA
	7 (St. Claude/ St. Roch)	Assess needs and costs related to remediation of contaminated soils and other flood-related environmental issues through the oversight of EPA
Re-institute a Citywide Recycling Program	6	Return to biweekly trash pick-up and implement effective recycling system
	7 (Bywater/ Marigny)	Increase city staffing to improve reliability of trash and recyclables collection
	9	Implement a comprehensive recycling program and conduct environmental mediation for existing landfills
	10	Implement a comprehensive recycling program and conduct environmental mediation for existing landfills

Implementation Timeline

The following table provides guidance on the anticipated rate of investment as a percentage of total costs over 3 recovery phases for all the programs or projects in this sector.

	Short-Term (2007-08)	Mid-Term (2009-11)	Long-Term (2012-16)
Sustainable Environmental Strategies	30%	60%	10%
Hurricane Recovery Soil Assessment and Remediation	25%	75%	-
Re-institute Citywide Recycling Program	50%	50%	-

Community Services: Recreation and Libraries

The park system in New Orleans is composed of over 130 neighborhood parks, playgrounds, recreation centers and pools. There is a system of regional parks which include Brechtel Park, Joe Brown Park, Pontchartrain Park and Lakeshore Park. The system also contains the two largest regional parks, Audubon and City Park. The Libraries section includes the twelve branches of the New Orleans Public Library.

Background/Statement of the Problem

Libraries and recreation facilities were both heavily damaged by the hurricane and have recovered at vastly different rates depending on the degree of damage and the availability of resources. Recovery of neighborhood parks and playgrounds has been sporadic with NORD opening about 15% of its facilities. Audubon Park which did not receive extensive damage reopened soon after the storm. City Park which received extensive damage has been able to reopen many of its facilities. Recovery of recreation facilities to date has depended mainly on private donations and volunteer efforts

Strategies

Quality libraries and recreation facilities are important components of the City's quality of life. Priority will be accorded to the restoration and improvement of facilities that serve a citywide population. The strategies for the recovery and improvement of neighborhood serving facilities vary between planning areas and are fluid over time as population returns and redistributes across the area. All major repairs and reinvestments will be coordinated with an implementation strategy for ongoing maintenance and operations. The provision of exemplary libraries and recreation facilities is recognized as a potential catalyst for private investment.

- **Repair, renovate or construct new state-of-the-art facilities for our main library, regional libraries, and district/neighborhood libraries that will be focal points for community-serving activities.** Public libraries are signature public buildings and as such should signify the rebirth of New Orleans and her neighborhoods. As repositories of information, they should better connect New Orleanians with a breadth of print and electronic media. In lieu of new facilities that have no primary function, libraries should be rebuilt in such a way as to accommodate neighborhood recovery resource centers and community centers. They should also be built in a flood resistant fashion to preserve the integrity of these functions in the event of a major flood.
- **Make major repairs to regional parks to address hurricane damage and longstanding capital needs.** New Orleans's signature public parks have long suffered from insufficient capital funding and deferred improvements. Restoring the parks' infrastructure will satisfy the community's need for restored green space, and it will spur investment in adjacent areas.
- **Make major capital repairs and improvements to neighborhood parks and playgrounds to transform them into useful public amenities.** Even prior to Katrina, many of the City's parks and playgrounds needed significant capital improvements. Improving the overall quality of these green spaces can not only provide residents with improved active and passive recreation facilities but can also spur the revitalization of the surrounding community.
- **Provide new parks and playgrounds in underserved areas.** In spite of the number of large parks in New Orleans, many neighborhoods were starved for local small parks.

Opportunities for new, neighborhood serving parks and greenways should be explored to serve existing residents and to attract additional residents to neighborhoods that have the capacity to accommodate additional residents.

Policies, Programs and Projects

To accomplish these strategies, several programs, policy directives, and projects will be instrumental:

1. Renovate the main library and safeguard the City archives – Phases I and II.

This project will safeguard one of the City's major assets—its historic archival records—by making the necessary structural changes to relocate them to an upper floor. Deferred capital investments, improvements to building wiring, and other modernization features, such as the provision of a café might also be included. Phase II will go beyond addressing the most immediate needs of archive preservation and basic renovation. It will expand the size of the library and transform it into a signature public building with provision for ample on-site parking. For more information, see Project Sheet #73.

2. Repair, renovate or build new regional libraries.

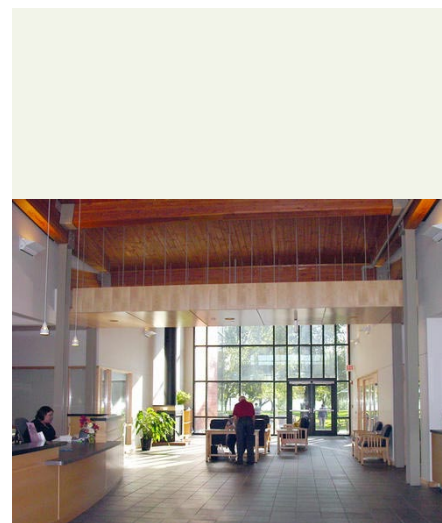
This project will renovate or construct new regional libraries on the previous sites or at other locations in Planning Districts 9 and 12. The previous libraries experienced substantial roof and water damage during Katrina. The new facilities will be significantly larger than the previous facilities and provide community meeting space and other community-serving functions. Due to the amount of flooding that District 9 experienced from Katrina, particular emphasis must be given to elevating and flood-proofing the replacement facility, regardless of location. For more information, see Project Sheet #74.

3. Repair, renovate or construct new district/neighborhood libraries in Planning Districts 3, 4, 5, and 6.

This project would address the present deficiency of libraries in Districts 3, 4, 5 and 6. This project would replace small and heavily-damaged existing libraries with larger facilities which would contain Recovery Resource Centers for community rebuilding that will serve as a model for other Recovery Resource Centers in the City. The new libraries might be sited near major intersections to capitalize on the planned town center concepts and existing transit lines. For more information, see Project Sheet #75.

4. Implement the City Park Master Plan.

This project would not only transform City Park into a first-rate cultural, recreational, and leisure facility for the City and the region, but it would also act as a catalyst encouraging investment in both surrounding neighborhoods and the City at large. This project would entail not only the repair of storm damage but also an additional \$115 million in badly needed capital improvements. For more information, see Project Sheet #76.



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5. Repair and renovate regional parks.

All of the City's regional parks – Brechtel, Joe Brown and Lakeshore Park, Pontchartrain Park – suffered heavy damage during Katrina. This project would address that damage and would improve their appearance, landscape features, and recreational amenities beyond their pre-Katrina condition. Improvements would include better accommodations for cyclists and pedestrians, flood- and erosion-resistant landscape features, and the implementation of an ambitious landscape plan. For more information, see Project Sheet #77.

6. Repair and renovate district/neighborhood parks.

This project would repair and renovate all district and neighborhood parks, including the Pontchartrain Park golf course, all ball fields and stadiums, playground equipment, and the community centers. This project would also transform functional neighborhood playgrounds into urban parks that function as the “front yard” of the surrounding communities. Park lighting, furniture, and fencing would be replaced; a unique landscape plan would be created and implemented for each park; and the park perimeter would be beautified. All plans to repair and renovate district and neighborhood parks will include a long-range plan for operations and maintenance. For more information, see Project Sheet #78.

7. Renovate New Orleans' public marinas.

This project would address storm damage to all marina facilities – Municipal Yacht Harbor, Orleans Marina and Southshore Harbor – and would make landscape and infrastructure improvements to park shelters, landscaping, and water features. Landscape improvements would also be made to Breakwater Drive. For more information, see Project Sheet #79.

8. Create new parks and greenways.

This project would create new parks in areas that are currently underserved by parks, accompanied by operations and maintenance plan. New parks would capitalize on underutilized land and would be designed not only as recreational amenities but as cornerstones for neighborhood stabilization, accommodating residents in areas suitable for additional population. For more information, see Project Sheet #80.

Application Across Planning Areas

Some policies, programs or projects should be adjusted to accommodate the requirements of the three proposed planning areas.

For areas with very slow repopulation rates and high risk of future flooding:

- Initiate renovations to large, regional parks; place libraries and recovery centers in temporary facilities; make basic repairs to neighborhood parks to prevent major deterioration.
- Continue renovations to large regional parks; identify locations for permanent regional libraries based on neighborhood stabilization plans and commence construction; begin repair of neighborhood parks and commence planning for new parks based on neighborhood stabilization.
- Complete renovations to regional parks; complete repair of neighborhood parks and



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complete regional libraries based on neighborhood stabilization.

For areas with moderate repopulation rates and moderate risk of future flooding:

- Initiate renovations to large, regional parks; initiate construction of regional libraries; locate recovery centers in temporary facilities or in other public buildings; initiate major rehabilitation of neighborhood parks.
- Continue renovations to large regional parks; continue rehabilitation of neighborhood parks based on evolving settlement patterns; complete regional libraries; re-locate recovery centers to regional libraries; commence planning and initiate construction of new parks based on evolving settlement patterns.
- Complete regional park renovations; complete renovations to neighborhood parks based on settlement patterns; initiate construction of new parks based on settlement patterns.

For areas with fast repopulation rates and low risk of future flooding:

- Initiate renovations to large, regional parks; initiate construction of regional libraries; locate recovery centers in temporary facilities or in other public buildings; initiate major rehabilitation of neighborhood parks and plan for new parks in those areas that can accommodate additional population and that are in need of revitalization.
- Continue renovations to large regional parks; continue rehabilitation of neighborhood parks and construct new parks, with greatest priority being those serving under-populated or disinvested neighborhoods; complete regional libraries and move recovery centers to libraries.
- Complete renovations to large regional parks; continue rehabilitation of neighborhood parks, with priority shifting away from focus areas to all neighborhoods in low risk/fast recovery areas.

Recreation/Library Projects

Citywide Team Projects	District	Corresponding District Projects
COMMUNITY SERVICES: RECREATION AND LIBRARIES		
Renovate and Expand Main Library, Phases I and II		
Repair, Renovate, or Construct New Regional Libraries	5	Repair/reopen/upgrade the Robert E. Smith Public Library
	6	Renovate, expand, and re-open Norman Mayer regional branch library or establish a new library within the area with resource center, planning center, and usable community meeting space
	9	Relocate/rebuild Read Branch Library
	12	Replace existing facility with a new, larger Algiers Regional Library ; an alternate selection may also be considered
Repair, Renovate, or Construct New District/Neighborhood Libraries	2	Study locations for neighborhood libraries
	3	Broadmoor cultural and commercial corridor
	12	Upgrade/restore Hubbell Library in Algiers Point
Implement Master Plan for City Park	5	Implement City Park Master Plan redevelopment and reconstruction
Repair, Renovate, or Construct New Regional Parks	1	Reopen and rehabilitate Armstrong Park (see District 4 plan)
	4	Improve Louis Armstrong Park and surrounding areas
	5	Design and implement landscape improvements for open space formerly maintained by Orleans Levee District
	5	New Basin Light House
	5	Facilitate West End Marina District mixed-use redevelopment project including addressing zoning and infrastructure requirements
	5	Implement Lake Pontchartrain Seawall repairs
	6	Restore Pontchartrain Park and golf course as district's signature public space
	9	Restore/rebuild Joe Brown Park and facilities including hardened gymnasium
	12	Brechtel Park Renovation – Repair pavilions and clean lagoons and remove Hurricane Katrina debris from grounds and construct hiking trails; repair/upgrade existing golf course
	12	Rehabilitate Behrman Memorial Park Community Center, pool, baseball fields and supporting structures.
	2	Complete district park system study
	2	Rehabilitate Edgar B. Stern Tennis Center
Repair and Renovate District/Neighborhood Parks	2	Restore existing parks, pocket parks, play spots, and recreational centers
	5	Rebuild neighborhood parks – including the proposed Levee Park/Katrina Memorial within West End Park
	6	Begin restoration of additional district green spaces: Eddie Gatto Playground, Filmore Gardens/Dauterive Playspot; Donnelly Playground, Wesley Barrow Stadium, Harris Playground, Union Playspot, Perry Roehm Park and Baseball Stadium, Duck pond at Dillard University, National Square/Rome Park/Boe Playspot, St. James/Milne/Mitenberger Playground
	7 (Florida/Desire)	Rehabilitate parks, including McGruder Park and Gym, Sampson Park, Odell Park, and Jackson Memorial Park
	8	Complete district park system study
	8	Restore existing parks, playgrounds and play spots in district
	9	Renovate/reopen neighborhood park facilities
	10	Renovate/reopen neighborhood park facilities
	12	Restore River Park Playground after trailers are removed
	11	Clean debris and sunken vessels from Venetian Isle, Bayou Delassaires and Bayou Sauvage Canals
	11	Provide infrastructure incentives for Irish Bayou Marina development
	11	Provide infrastructure/incentives for Fort Macomb Marina restoration to serve commercial and recreational fisheries
Renovate Public Marinas	11	Provide infrastructure/incentives for Fort Pike Marina redevelopment including full-service marina, icehouse and fuel docking area to serve commercial and recreational fisheries
	11	Provide infrastructure/incentives for Phase II of Fort Macomb Marina Village Redevelopment, including seafood market, shops, parking, restrooms, food services, and tourist-related facilities
	11	Provide infrastructure/incentives to redevelop Lake Catherine Marina
	11	Provide infrastructure/incentives to redevelop Sauvage Ridge marine/industrial and fisheries infrastructure area
	11	

Create New Parks and Greenbelts as Needed	3	New open space connections within network (including bike paths)
	3	Leake Ave. and levee park comprehensive planning study
	4	New open space connections within network (including bike paths)
	4	Redevelop the Lafitte corridor as an urban/mixed-use district with central greenway
	5	West End bomb shelter removal – potential community open space combined with New Basin Park
	6	Demolish Avery Alexander School and retain site for open space; no private development on site
	6	Enclose Dwyer Drainage Canal; develop linear park
	6	Work with ACOE to "green" the London Avenue Canal
	7 (Bywater/ Marigny)	Enhance and create parks--Press St., Plessy, Markey, and Chartres
	7 (Bywater/ Marigny)	Retain riverfront wharfs as park facilities
	7 (Florida/ Desire)	Restore, enhance, and create new parks and open spaces
	7 (Florida/ Desire)	Cover the Florida Avenue canal; study removal of railroad tracks
	7 (St. Claude/ St. Roch)	Restore, enhance, and create new parks and open spaces
	9	Construct NORD playgrounds on sites of open schools and new schools within the district
	9	Study an opportunity to restore Lincoln Beach swimming and amusement facilities
	9	Construct drainage improvements in impacted areas such as Morrison and Dwyer Rds--cover canals to provide more amenity value; add sidewalks and bike paths
	10	Construct NORD playgrounds on sites of open schools and new schools within the district
	10	Construct drainage improvements in impacted areas such as Dwyer Rd.--cover canals to provide more amenity value; add sidewalks and bike paths
	13	Create a new public park in a low topographic zone along Highway 406

Implementation Timeline

The following table provides guidance on the anticipated rate of investment as a percentage of total costs over 3 recovery phases for all the programs or projects in this sector.

	Short-Term (2007-08)	Mid-Term (2009-11)	Long-Term (2012-16)
Renovate and Expand Main Library, Phases I and II	10%	40%	50%
Repair, Renovate, or Construct Regional Libraries	25%	25%	50%
Repair, Renovate, or Construct Dist./Neigh. Libraries	25%	25%	50%
Implement Master Plan for City Park	25%	25%	50%
Repair, Renovate, or Construct New Regional Parks	25%	25%	50%
Repair and Renovate District/Neighborhood Parks	10%	40%	50%
Renovate Public Marinas	25%	75%	-
Create New Parks and Greenbelts as Needed	5%	35%	60%

Other Municipal and Cultural Resources

New Orleans Culture is defined by its music, food, architecture, festivals, and all that gives New Orleans its unique 'sense of place.' Specific structures include the Mahalia Jackson Theater for the Performing Arts, Gallier Hall, and Municipal Auditorium. These physical buildings not only embody the City's architecture but also provide an outlet for various art forms to be enjoyed by its citizenry.

Background/Statement of the Problem

Over 260 non-profit cultural institutions such as museums, arts centers, performance halls and other venues were severely damaged or destroyed. The BNOB has calculated that uninsured damage to cultural properties, arts, businesses and artists was in excess of \$80 million. Total employment in the creative economy suffered a 66% reduction with a loss of more than 11,000 creative sector workers. The social aid and pleasure clubs, Mardi Gras Indians, brass bands, and second line companies have been scattered across the Diaspora.

Municipal resources were also damaged. The Mahalia Jackson Theatre for the Performing Arts was badly damaged but is now to be restored on a priority basis. Other facilities have not fared as well. This Sector does not address facility repairs covered by FEMA PA.

Strategies

- **Invest in culture.** Provide support for the organizations that provide the educational opportunities, facilities, and support to artists. Support mechanisms to sustain our creative sector resource persons.
- **Renovate cultural facilities.** Support the renovation, repair and rebuilding of municipally owned and privately-owned cultural facilities including auditoriums, public performing venues and museums.
- **Promote the arts.** Market the art, culture, and theatre of New Orleans internationally, as well as locally, through the establishment, support and expansion of art and theater districts

Policies, Programs and Projects

1. Expand the existing Arts District and create a Theater District.

Expand the existing Arts District to continue from Howard and St Joseph to South Rampart over to Oretha Castle Haley Blvd in order to engage and unite the emerging arts activities on Oretha Castle Haley. Likewise, establish a theater district to create a destination based cultural identity for an identified geographic area. For more information, see Project Sheet #81 and #82.

2. Advocate for the NOLA Culture Restored Program.

Advocate for the NOLA Restored Cultural Program, which invests in the return of cultural organization, artists, and cultural traditions through four projects: Culture Invests, Culture Works, Culture Returns, and Culture Transforms. These projects would assist with the funding of operations for cultural organizations, could subsidize artist's salaries in the rebuilding of New Orleans, create cultural employment opportunities and assist with displaced artists travel costs and/or housing, as well as pairing culture with education in school based programs.

3. Advocate for the NOLA Rebuilds Culture Program.

Advocate for the NOLA Rebuilds Cultural Program, which is facility-based and would be overseen by a Cultural Community Development Corporation. Its major functions would be to document and coordinate housing and workspace and administer a fund to support uninsured damage to cultural facilities. For more information, see Project Sheet #83.

Application Across Planning Areas

All policies, programs, and projects will be applied citywide. There are no distinctions by proposed planning areas.

Cultural Projects

COMMUNITY SERVICES: OTHER MUNICIPAL AND CULTURAL FACILITIES		
Expansion of Existing Arts District		
Downtown Theater and Cultural District	1	"Broadway South" proposal
	1	Develop the New Orleans Music Hall of Fame, new jazz museum and cultural center and explore ways they may be integrated
	1	Rehabilitate existing theater buildings
	1	Increase financial support for cultural economy including an entertainment tax credit (comparable to the film tax credit) to promote Broadway South and performing arts elsewhere downtown
Invest in Cultural Recovery Programs		

Implementation Timeline

The following table provides guidance on the anticipated rate of investment as a percentage of total costs over 3 recovery phases for all the programs or projects in this sector.

	Short-Term (2007-08)	Mid-Term (2009-11)	Long-Term (2012-16)
Expansion of Existing Arts District	100%	-	-
Downtown Theater and Cultural District	100%	-	-
Invest in Cultural Recovery Programs	20%	30%	50%

Historic Preservation/Urban Design

These sectors were combined because of the intricate linkages in New Orleans between our present and our past. New Orleans, with 20 historic districts consisting of a range of 18th, 19th and 20th Century architecture, is not only an economic asset leveraged for cultural tourism but is part of how New Orleans defines itself. New Orleans has a number of both National Register of Historic Places historic districts (such as the Lower Garden district) as well as locally designated districts. There are also several other locations (such as Pontchartrain Park) eligible for nomination to the National Register as districts and there is local interest in making application.

Background/Statement of the Problem

Much of our historic housing stock is at risk as renovations of storm-damaged buildings accelerate. In January of 2006, it was estimated that a dozen of the City's 20 historic districts suffered significant damage. Some of New Orleans' most historic areas, located by the river, were only lightly damaged and have in many cases been restored. The greater damage to historic districts occurred in the more flood-prone areas.

Despite the high volume of historic designations in New Orleans, many people who live in such districts or in historic structures are not aware of either the regulations governing districts or the monetary and cultural value of preserving the historic integrity of their home or their neighborhood.

Strategies

- **Preserve the City's rich historic architectural tradition and overall aesthetic character to the maximum extent possible while facilitating new development.**

As the City revives, many buildings are being demolished in whole or in part. Valuable architectural artifacts are leaving the City in the process, never to return. Work with both FEMA and the Office of Safety and Permits to assess what elements can be salvaged and recycled following demolitions. Develop a New Orleans Pattern Book that encourages homes and businesses to be rebuilt in traditional New Orleans styles, where appropriate.

- **Strengthen and Revitalize Urban Corridors and Nodes.** A number of the neighborhood plans and the District Plans have brought forth a series of recommendations for the restoration of these urban corridors which served as the "spines" of the communities before Katrina. As part of the planning for the recovery of such commercial corridors, action guidelines are to be adopted to insure that rebuilding is done in such a manner as to be both safe and respectful of the integrity of the surrounding neighborhoods.

Policies, Programs and Projects

1. Develop and implement design guidelines for repairs and reconstructions across the City.

Develop a New Orleans Pattern Book, similar to the Louisiana Speaks Pattern Book, which provides neighborhood and even corridor specific design guidance on the repairs, rehabilitation, and reconstruction across the City. The New Orleans Pattern Book should be specific to the architectural and aesthetic character of New Orleans neighborhoods. It should include guidelines for elevations, modular housing and structures, and reconstruction styles. This project will be preceded by a series urban design studies in select parts of the city. The recommendations and vision that these studies produce will be the basis for the specific recommendations contained within the pattern book. In certain corridors, expanded historic district protection and design review are called for, necessitating more staffing in the City Planning Commission, the HDLC, and the Office of Safety and Permits. In those areas subject to formal design review, the Pattern Book will be the document that will be the basis for the review process. For more information, see Project Sheet #86.

2. Provide a historic preservation and technical and financial assistance program.

Provide a technical/financial assistance program to owners both before and during the renovation of historic properties. Under professional oversight, technical assistance shall include interpreting historic district guidelines, design concepts, and preservation construction. This program will also provide direct financial assistance to property owners to cover some of the added cost of renovating structures to a historically sensitive standard. For more information, see Project Sheet #85.

3. Develop guidelines to assist in the revitalization of urban corridors.

Develop a set of guidelines and implementation mechanisms to assist in the rebuilding and revitalization of selected mixed use corridors and nodes. More information about this program can be found in the Economic Development Sector and on Project Sheet #24.

4. Construct a monument to New Orleans' recovery from Katrina.

A monument commemorating the City's recovery from the death and destruction of Hurricane Katrina should be erected in a prominent location (a key intersection) in time for the celebration of the City's tri-centennial in 2018. This project might be the centerpiece of one of the corridor revitalization plans. It should be a sizeable monument and a symbol of the City's spirit and resilience. It should be the subject of an international design competition. Such a high visibility project would keep the world's attention on New Orleans and its recovery process. For more information, see Project Sheet #84.

5. Restore New Orleans's historic forts.

Forts St. John, McComb, and Pike are three of the most underappreciated, overlooked historic sites in New Orleans. Immediate action should be taken to secure the sites and address any damage from Hurricane Katrina. Long term renovations should focus on stabilizing the structures and making them more accessible to visitors. For more information, see Project Sheet #88.

6. Make sidewalk, streetscape, and neutral ground improvements.

Many New Orleans neighborhoods would benefit from a re-visioning of streetscapes. Improvements to sidewalks and curbs, the provision of street trees, placing power lines

HOW TO USE THE PATTERN BOOK

The following sequence of steps will provide for an orderly and thorough application of the design principles and patterns contained in this Pattern Book to both restoration and new development projects.

STEP 1: IDENTIFY LOCATION

Before beginning your project, determine its location. Identify the type of Neighborhood (Residential, Civic, Commercial, and Industrial), and its location relative to the city's historic district boundaries. Consider the location and potential impact of the project on the surrounding area.



Step 1: Identify Location

STEP 2: IDENTIFY NEIGHBORHOOD TYPE AND CHARACTER

Within the Community Planning area, identify the character of the Neighborhood Pattern that includes an overview of the unique characteristics of each type of traditional neighborhood street, and how the Project Zone which identifies the scope of the project building type and architectural character.



Step 2: Identify Neighborhood Type and Character

STEP 3: IDENTIFY APPROPRIATE BUILDING TYPES

The following table will identify areas for different building types, ranging from small, single-story to large, multi-story buildings. Review the proposed building type in relation to the building character which will be used to determine the building type and architectural character.

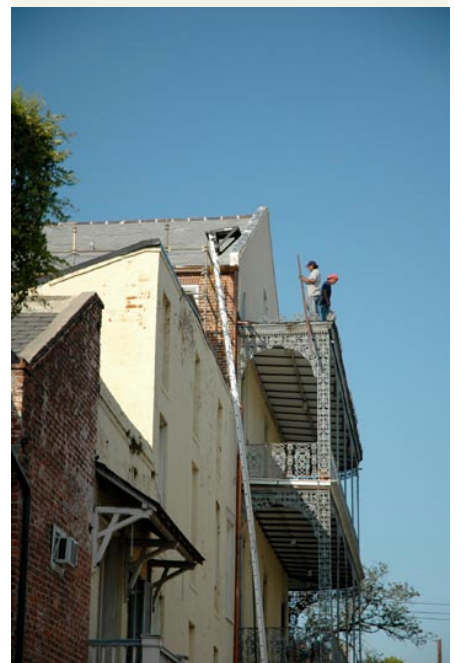


Single-Family House



Multi-Story Building

Step 3: Identify Appropriate Building Type



underground where feasible, and erecting modest landscape features will contribute greatly to more aesthetically pleasing, more accessible neighborhood streets. For more information, see Project Sheet #87.

Application Across Planning Areas

Some policies, programs or projects should be adjusted to accommodate the requirements of the three proposed planning areas.

For areas with slow repopulation rates and high risk of future flooding:

- In the short term, identify historic structures suitable for preservation and/or salvage and take steps to secure them.
- In the mid term, restore the structures and make them stable. Evaluate the potential for moving historic structures in accordance with neighborhood stabilization plans.
- Refrain from major streetscape improvements until neighborhood stabilization plans have been established.

For areas with moderate repopulation rates and moderate risk of future flooding:

- In the short term, identify historic structures suitable for preservation and/or salvage and take steps to secure them.
- In the mid term, restore the structures and make them stable.
- Initiate corridor revitalization program at key locations. As repopulation progresses, re-evaluate prioritization of remaining corridor improvements.

For areas with fast repopulation rates and low risk of future flooding:

- In the short term, take advantage of the corridor revitalization program at key locations (0-2 years).

Historic Preservation/Urban Design Projects

HISTORIC PRESERVATION/URBAN DESIGN		
Katrina Memorial		
Historic Preservation Technical and Financial Assistance	1	Expand State Historic Preservation Office's restoration grant program and increase funding for other state and federal programs that support historic preservation--for example, the federal termite program
	6	Advance historic preservation initiatives: Edgewood Park neighborhood and Pontchartrain Park designations as national historic districts; Gentilly Terrace grant applications to National Park Service Historic Building Recovery Program
	7 (Florida/ Desire)	Provide incentives for restoration of historic architecture
	7 (St. Claude/ St. Roch)	Create financial incentives for rehabilitation of historic structures
Develop Urban Design Plans and Pattern Books of New Orleans Architecture	1	Extend design review throughout downtown and create design guidelines for areas outside of the Historic Districts
	1	Create a detailed urban design plan for the Medical District and S. Rampart Street Corridor
	2	Create neighborhood urban designs for the district
	2	Create residential and commercial neighborhood architecture pattern book for district
	3	Develop neighborhood-specific design guidelines for rebuilding and flood protection
	4	Neighborhood-specific design guidelines for rebuilding and flood protection
	5	Prepare District 5 "Pattern Book" to address residential standards
	6	Create revised zoning and urban design guidelines where needed to advance community rebuilding priorities: Implement urban design overlay ordinance for Elysian Fields and Gentilly Boulevard commercial areas; Maintain existing residential zoning in Pontilly, Dillard, Milneburg, and Gentilly Terrace
	7 (St. Claude/ St. Roch)	Create design guidelines and offer technical assistance to encourage rehabilitation/new development consistent with historic character
	8	Create an neighborhood urban design plans for the district
Improve Sidewalks, Streetscapes, and Neutral Grounds	9	Adopt and enforce community design standards for lower-density multi-family development; address hardening and flood protection construction standards; address limitations on expansion of multi-family housing density not to exceed 16 units/acre
	1	Conduct a detailed assessment of gaps for historic streetscape restoration in all historic districts
	1	Enhance key pedestrian connector streets to promote a framework of inviting pedestrian connections
	1	Enhance public realm around Superdome and improve the pedestrian connections to the Superdome
	2	Develop and implement a "Green Streets" program
	2	Hardening of utility service and street infrastructure program
	2	Develop and implement a voluntary Incentive-based rain garden program
	3	District-wide street/infrastructure repair and replacement program
	4	Create new connections between Zion City/ Booker T. Washington/ B.W. Cooper
	4	District-wide street/infrastructure repair and replacement program
	5	Repair or reconstruct neutral grounds on West End, Canal, Argonne, Milne, Fleur de Lis, Orleans Avenue, Robert E. Lee Blvd.
	5	Restore and upgrade Veterans Boulevard landscape buffer
	5	Implement restoration of Magnolia Gardens Bridge
	6	Establish implementation strategy for renewal of streets and sidewalks: Institute pavement management system to prioritize street improvements; Repair/rebuild all damaged streets, including sub-base; Reassess functional classification of streets to secure federal funding; Prepare inventory of existing street lights; Rebuild all sidewalks to be ADA-compliant, including curb cuts, truncated domes
	6	Restore all telephone line damage; implement system to withstand hurricane winds and flooding; investigate underground line placement.
	6	Install electric lines underground to protect them from winds/flooding
	6	Extend existing St. Anthony walking path to lakefront and Agriculture Street
	6	Implement CPC and RPC-adopted pedestrian improvements for Elysian Fields/Gentilly Blvd. and Elysian Fields/I-610 intersections
	6	Create gateway signage for neighborhoods/subdivisions along Congress, Press, Elysian Fields, St. Roch, Franklin, Lee, and Leon C. Simon
	6	Replace/repair street trees, street lights, and landscaping
	6	Prepare neutral grounds landscape master plan, tree inventory, and tree-planting policy to rehabilitate them as the district's green spines
	7 (Bywater/ Marigny)	Increase the presence of street trees throughout the community

Improve Sidewalks, Streetscapes, and Neutral Grounds	7 (Bywater/ Marigny)	Undertake comprehensive repair/upgrade of all streets, including signals, signs, lighting, gutters, drains, sidewalks, and curbs
	7 (Florida/ Desire)	Consider burying utility lines
	7 (Florida/ Desire)	Undertake comprehensive repair/upgrade of all streets, including signals, signs, lighting, gutters, drains, sidewalks, and curbs
	7 (Florida/ Desire)	Undertake streetscape improvements (targeting Almonaster, Alvar, Higgins, Louisa, Desire, and Florida)
	7 (St. Claude/ St. Roch)	Install neighborhood identification signs
	7 (St. Claude/ St. Roch)	Study undergrounding of utility lines
	7 (St. Claude/ St. Roch)	Create monuments or other elements to honor neighborhood heroes
	7 (St. Claude/ St. Roch)	Install neighborhood identification signs
	7 (St. Claude/ St. Roch)	Undertake streetscape enhancements; focus on trees
	7 (St. Claude/ St. Roch)	Install street lights in underlit areas
	7 (St. Claude/ St. Roch)	Undertake comprehensive repair/upgrade of all streets, including signals, signs, lighting, gutters, drains, sidewalks, and curbs
	8	Develop a comprehensive green streets program
	8	Develop a comprehensive tree loss and damage study/tree canopy restoration program
	8	Develop and institute a rain garden program
	8	Develop and institute storm/flood water retention and mitigation program
	8	Repair and upgrade to hardened underground utilities corridor and street infrastructure program
	9	Construct neighborhood identification signs
	9	Improve/landscape neutral grounds
	9	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on primary streets (Chef Menteur, Alcee Fortier, Michoud Blvd., Dwyer Road)
	9	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on secondary streets
	9	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on tertiary streets
	10	Construct neighborhood identification signs
	10	Improve/landscape neutral grounds
	10	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on primary streets (Chef Menteur, Hayne, and Morrison)
	10	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on secondary streets
	10	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on tertiary streets
	11	Place all District 11 utilities underground
	11	Install Highway 90 lighting between Chef Menteur Bridge and Rigolets Bridge
	12	Address and implement revitalization for Old Algiers, McDonough and Algiers Point neighborhoods including Tunnisberg, McClendonville, Riverview, River Park and Cut-off
	12	General Meyer Avenue paving, curbs, access management, streetscape, lighting and pedestrian improvements
	12	Repair road paving, curbs, street lights, signalization & street signs on primary collector streets including General de Gaulle (focus from CCC to Holiday Drive)
	13	Develop and implement a voluntary rain garden program
	13	Hardening of utility service and street infrastructure program
Repair and Preserve Historic Forts	5	Implement Fort St. John stabilization / restoration
	11	Initiate Fort Pike Restoration--this facility needs substantial repairs and improvements after the eye of Hurricane Katrina passed directly over it.

Implementation Timeline

The following table provides guidance on the anticipated rate of investment as a percentage of total costs over 3 recovery phases for all the programs or projects in this sector.

	Short-Term (2007-08)	Mid-Term (2009-11)	Long-Term (2012-16)
Katrina Memorial	10%	25%	65%
Historic Preservation Technical and Financial Assistance	50%	50%	-
Urban Design Plans and Pattern Books	100%	-	-
Improve Sidewalks, Streetscapes, Neutral Grounds	20%	30%	50%
Repair and Preserve Historic Forts	10%	25%	65%

Recovery Project Priorities

The Citywide Plan prioritizes projects developed by both the Citywide and District Planning Teams in two ways: (1) Recovery Value/Community Interest and (2) Area of Significant Impact. These two classifications are discussed in the following sections.

Recovery Value/Community Improvement

Each project in the Citywide and District Plans has an assigned recovery value. These values are not quantifiable in the traditional sense but are judged to be related to the recovery process in some qualitative way. The following criteria are given to help in making recovery value determinations.

High Recovery Value Criteria (Very High = 5 points, High = 4 points)

High Value recovery projects are:

Directly• and unarguably related to storm-caused damages

- Have both community support and demonstrable community-wide benefits
- Incorporate professional “best practices” for reducing future loss
- Can be successfully linked to other recovery projects with mutual benefit
- Can be used to leverage other recovery projects

Moderate Recovery Value Criteria (3 points)

This type of project will have many of the characteristics of a High Value project but is more limited in scope and is not as obviously linked to other projects. Moderate Value recovery projects are:

- May not be demonstrably related in all aspects to storm-caused damage
- May benefit some sectors/populations but are neutral for others. (They may even have some opposition.)
- Make limited use of best practices for reducing future loss
- Less able to positively link to or leverage other recovery projects

Low Recovery Value Criteria (2 points)

Typically, Low Value projects will not be directly related to storm-caused damage, but will be indirectly related. It will have some community support but is not a project receiving a lot of support or opposition. Such projects are typified by:

- Indirect or only marginal links to storm-caused damages
- Not necessarily able to apply “best practices” to reduce future risk
- Their complexity, making it difficult to gain community acceptance

Projects of Community Interest (1 point)

Another category of Recovery Project is termed “Of Community Interest”. These projects are not demonstrably related to the storm-caused damage or don’t have identifiable benefits directly promoting recovery, but have high community value. Such projects are characterized as:

- Having significant visual, emotional or symbolic value to a community
- Speaking to a long term and ongoing community interest
- Having widespread public support on a broader than neighborhood or district basis

Area of Significant Impact

Recovery projects are supposed to create waves of activity throughout the community. In particular, public investment should stimulate private investment. How far those waves of investment extend is a key determinant of how important the project is in the recovery process. While some projects may acquire high visibility, and thus widespread interest, it is the degree to which they engender secondary and indirect recovery activity that determines their significance to the recovery process.

In this regard, a stratified rating system for recovery projects has been developed, focusing on the resonance the project creates in the community. Accordingly, there are 6 levels of significance for Citywide and District Recovery Projects:

- Projects of National Significance
- Projects of Statewide Significance
- Projects of Regional Significance
- Projects of Citywide Significance
- Projects of District-wide/Neighborhood Significance

This valuation set is provided to distinguish the geographic extent of the importance of projects. Some projects acquire high visibility and thus widespread interest. For these purposes, the more critical distinction is drawn between Recovery Projects of Citywide Significance versus those Recovery Projects of District (or Neighborhood) Significance. The following guidelines were used to indicate the relative significance of individual recovery projects.

Projects of National Significance (5 points)

- Projects that bring additional resources, financial or otherwise, to the assistance of the City in its recovery effort
- Projects that involve federal agencies and include a significant amount of federal funding
- Projects that focus on the preservation of national resources

Projects of Statewide Significance (4 points)

- Projects that directly impact the economic health of the State.
- Specific State systems (some redundancy), such as educational institutions (e.g. public schools under State control and governance), universities, museums, and State's public buildings
- Projects that the State creates as it attempts to recover from storm damage

Projects of Regional Significance (3 points)

- Meets most if not all of the criteria for citywide significance but the focus is on a facility or service that is used widely or needed widely by persons of the entire region
- Used by the City but part of a system that is supra-city and regional in scope
- Institutions established largely by public (but some private) sources for the use of the regional public and supported in whole or in part by public dollars to insure public access
- Part of a regional system of importance (e.g. flood control, coastal restoration).

Projects of Citywide Significance (2 points)

- Receives national or State or City awareness and attendant publicity
- Receives either financial or physical investment or both from both local and out of City sources and is watched accordingly
- Unarguably addresses a fundamental or essential public (or private) service that is widely used and of great value
- Plays or can play a key role in attracting outside funding or supporting such funding for related projects
- Impacts more than one geographic area in a highly visible way
- Major departure from past practice in a positive way directly related to the recovery process

Projects of District-wide Significance (1 point)

- Many of the citywide significance criteria apply but on a lesser scale
- Provides a demonstrable and acknowledged benefit to the residents of a particular district while being neutral or even beneficial to other districts

- Can be combined with a project in a neighboring district with resulting improvement in delivery of service to both
- Can be a symbolic effort of great value to a limited (district) audience
- Visionary in its proposed re-combining of resources to reflect post-Katrina realities
- Supports or enhances the cultural environment of the district
- Speaks to the identification of and preservation of historic buildings and land use patterns in the district
- Has the potential to attract outside public and private funding while offering a positive recovery value to the district

List of Prioritized Recovery Projects

The Citywide Plan identifies 91 programs or projects that promote the recovery of the City of New Orleans. These projects range from rebuilding the LSU/VA/University teaching hospital to studying the need for sound walls along I-10 and I-610. These projects have been reviewed and evaluated according to how well each project meets the sector strategies and contributes to the overall recovery effort. This list is provided on the following pages.

It should not be surprising that programs and projects related to economic recovery, housing, and flood protection dominate the top of the list. They are essential for both the recovery and long-term sustainability of the City. They are the types of projects that frame the “big picture of the recovery” – that the City is not just trying to pick itself up, but is actually looking and moving forward. These projects are also likely to stimulate additional investment.

This list should not be used, however, to determine funding or phasing, because only a handful of projects scored 7 points or better. Most of the projects are clustered in a group in the middle, ranging from 4 to 6 points, which includes many essential infrastructure projects, such as repairing major and minor streets, water and sewerage improvements, health clinics, schools and repairing the police and fire departments. Conversely, there are only a small number of projects that scored less than 4 points.

The ranking of projects points out the extent and importance of New Orleans’ recovery. A successful recovery is not possible if we only cherry-pick a handful of high profile, action-oriented projects and call them “the Plan.” As this Plan proposes, we must advance a phased approach for a broad-range of large and small projects over the next decade. This approach is discussed in more detail in the Implementation and Financing sections of this report.

Ranked List of Recovery Projects

Project #	Sector	Project Name	Recovery Value	Area of Impact	Score	Project Location
19	Economic Recovery	LSU/V.A./University Hospital	5	5	10	District 2
14	Housing	Rehab and Rebuild low income housing	5	5	10	Citywide
8	Neighborhood Stability	Neighborhood Cluster Program	5	4	9	Citywide
22	Economic Recovery	Replace Container Handling Capacity - Port of New Orleans	4	4	8	District 1
25	Economic Recovery	Relocation of New Orleans Cold Storage	4	4	8	District 2
1	Flood Protection	"Elevate New Orleans" Incentive Program: Residential and Small Business Owners	5	3	8	Citywide
6	Flood Protection	Slab-on-Grade Remediation Program	5	3	8	Citywide
16	Housing	Transient Worker Housing	5	3	8	Citywide
53	Transportation	Evacuation and Disaster Response Plan	4	4	8	Citywide
18	Economic Recovery	Bio-Innovation Center	4	3	7	District 1
21	Economic Recovery	Cruise Ship Terminal Expansion	4	3	7	District 1
2	Flood Protection	Floodproof Essential Public Equipment	5	2	7	Citywide
58	Health Care	Restore comprehensive medical services to N. O. East	4	3	7	District 9
12	Housing	Singles and Doubles Program: Homebuyer Assistance for Rental Properties	4	3	7	Citywide
90	Implementation	Regulatory Amendments - Zoning and Other Updates	5	2	7	Citywide
91	Implementation	Recovery Staffing Needs	5	2	7	Citywide
77	Recreation and Libraries	Implement Master Plan for City Park	4	3	7	District 5
20	Economic Recovery	Seed and Early Stage Equity Capital Fund	4	2	6	Citywide
23	Economic Recovery	Expansion of Louis Armstrong International Airport	3	3	6	Airport
27	Economic Recovery	Develop Louisiana Cancer Research Center	2	4	6	District 2
29	Economic Recovery	Canal St/Downtown Revitalization	4	2	6	District 1
60	Education	Repair and Renovate Existing School Facilities or Construct New Facilities	4	2	6	Citywide
61	Education	Temporary Modular School Facilities	4	2	6	Citywide
72	Environmental Concerns	Hurricane Recovery Soil Assessment and Remediation Program	4	2	6	Citywide
73	Environmental Concerns	Reinstitute a City recycling program and construct a recycling facility	4	2	6	Citywide
3	Flood Protection	Study: Internal Flood Protection measures for Selected N.O. East Neighborhoods	4	2	6	District 9,10
4	Flood Protection	Study: Hurricane Protection Levee System for Algiers	4	2	6	District 13
5	Flood Protection	Study: Hurricane Protection Levee System for Algiers Lower Coast	4	2	6	District 13
7	Flood Protection	Orleans/Jefferson Levee Study	3	3	6	Districts 1-7
87	Historic Preservation/Urban Design	Develop a Pattern Book of New Orleans Architecture	4	2	6	Districts 1-6
11	Housing	Implement Permanent Housing Development Strategy for All Displaced Residents	4	2	6	Citywide
13	Housing	Home buyer assistance -low & moderate homeowners	4	2	6	Citywide
17	Housing	Neighborhood Recovery Resource Centers	4	2	6	Citywide
31	Infrastructure and Utilities	Algiers Drinking Water Plant--Emergency Fuel Storage & Filter Valve Control System	4	2	6	District 12,13
32	Infrastructure and Utilities	Carrollton Drinking Water Plant--Additional Flocculation and Sedimentation Capacity	4	2	6	District 3
33	Infrastructure and Utilities	Carrollton Drinking Water Plant--Short Term Projects	4	2	6	District 3
34	Infrastructure and Utilities	Drainage Improvements--Short-term Projects	4	2	6	Citywide
35	Infrastructure and Utilities	East Bank Wastewater Treatment Plant--Levee Improvement Mitigation and Wetlands Project	4	2	6	District 11
36	Infrastructure and Utilities	Power Plant	4	2	6	District 3
37	Infrastructure and Utilities	Sewerage & Water Board--Technical Staff	4	2	6	Citywide
39	Infrastructure and Utilities	Wastewater Collection System--Short Term Improvement	4	2	6	Citywide
41	Infrastructure and Utilities	Water Distribution System--Asset Management Plan and Short Term System Replacement	4	2	6	Citywide
9	Neighborhood Stability	Small Area Adaptive Re-Use Studies	4	2	6	Citywide
10	Neighborhood Stability	Study: Streamline process for purchase of blighted housing and the lot-next-door program	4	2	6	Citywide

Ranked List of Recovery Projects

Project #	Sector	Project Name	Recovery Value	Area of Impact	Score	Project Location
89	Preservation/Urban Design	Repair and Preserve Historic Forts	1	5	6	Districts 11/5
63	Public Safety	Develop a Citywide Network of State-of-the-Art Police Substations	4	2	6	Citywide
64	Public Safety	Develop and Integrate Crime Lab and Central Evidence and Property Storage Function	4	2	6	Citywide
65	Public Safety	Provide a Citywide Criminal Surveillance System	4	2	6	Citywide
66	Public Safety	Replace or Repair all NOPD Equipment	4	2	6	Citywide
67	Public Safety	Renovate NOPD Headquarters at 715 N.Broad	4	2	6	Citywide
68	Public Safety	Renovation of NOPD Special Operations Unit	4	2	6	Citywide
69	Public Safety	Renovate and/or Repair 7 District Headquarters Buildings	4	2	6	Citywide
70	Public Safety	Emergency Communications Center	4	2	6	Citywide
74	Recreation and Libraries	Renovate Main Library - Phases I and II	4	2	6	District 1
75	Recreation and Libraries	Repair, renovate or construct new regional libraries	4	2	6	District 9 and 12
80	Recreation and Libraries	Renovate public marinas	3	3	6	Districts 5,9
43	Transportation	Repair/Restoration of High Priority Major Arterial Roads	4	2	6	Districts 1,3,4,5,6,7,9,12
44	Transportation	Repair/Restoration of High Priority Minor Arterial Roads	4	2	6	Districts 1,3,4,5,6,7,9,12
45	Transportation	Repair/Restoration of High Priority Collector Roads	4	2	6	Districts 1,3,4,6,12
46	Transportation	Repair/Restoration of High Priority Local Roads	4	2	6	Districts 2,3,5,12
47	Transportation	Ongoing Replacement of all Major and Minor City Streets	4	2	6	Citywide
49	Transportation	East-West Corridor/downtown Loop	3	3	6	District 1 Terminus
24	Economic Recovery	Commercial corridor revitalization program	3	2	5	Citywide
26	Economic Recovery	Small Business Incubator and Assistance Program	3	2	5	Citywide
28	Economic Recovery	Neighborhood Workforce Training Program	3	2	5	Citywide
30	Economic Recovery	Evaluation and Potential Adaptive Reuse of Publicly Owned Property	3	2	5	Citywide
59	Education	Neighborhood Community Centers	3	2	5	Citywide
62	Education	Study: Rehabilitate Louisiana Technical College and Evaluate Need for Additional Facilities	2	3	5	District 7
71	Environmental Concerns	Sustainable Environmental Strategies	3	2	5	Citywide
57	Health Care	Redevelopment of Neighborhood-Based Health Centers/Clinics	3	2	5	Districts 2,3,4,8
85	Historic Preservation/Urban Design	Katrina Memorial	3	2	5	TBD
86	Historic Preservation/Urban Design	Historic Preservation Technical and Financial Assistance Program	3	2	5	Citywide
15	Housing	Home Rehabilitation for low and moderate income homeowners	3	2	5	Citywide
38	Infrastructure and Utilities	Wastewater Collection System--Medium Term Improvement	3	2	5	Citywide
40	Infrastructure and Utilities	Water Distribution System-Medium Term System Replacement Program and High Lift Facility	3	2	5	Citywide
76	Recreation and Libraries	Repair, renovate or construct new neighborhood libraries	3	2	5	Districts 3,4,5,6
78	Recreation and Libraries	Repair, Renovate, or Construct New Regional Parks	2	3	5	Districts 9,10,11,12
51	Transportation	Implementation of Citywide Bike Path System	3	2	5	Citywide
52	Transportation	Study Feasibility of Expanding Streetcar and Light Rail Routes	3	2	5	Citywide
83	Other Municipal and Cultural Resources	Create a Downtown Theater District	1	3	4	District 1
84	Other Municipal and Cultural Resources	Invest in Cultural Recovery Programs	1	3	4	Citywide
88	Historic Preservation/Urban Design	Sidewalk, Streetscape, and Neutral Ground Improvements	2	2	4	Citywide
56	Transportation	Traffic and Parking Management Studies	2	2	4	Citywide
82	Other Municipal and Cultural Resources	Expansion of Existing Arts District	1	2	3	District 2
42	Infrastructure and Utilities	Citywide Wireless Network	1	2	3	Citywide
79	Recreation and Libraries	Repair, Renovate, or Construct New District/Neighborhood Parks	1	2	3	Citywide
81	Recreation and Libraries	Create new parks and green belts, as needed	1	2	3	Citywide
48	Transportation	Streetcar Travel Time Improvement Study	1	2	3	Districts 1,2,3
50	Transportation	Extension of Riverfront Streetcar Line	2	1	3	District 1,2,6,7
54	Transportation	Study of the Removal of I-10 between Hwy. 90 and Elysian Fields Ave.	1	2	3	Districts 1 and 4
55	Transportation	Study Installation of Soundwalls along I-10 and I-610	1	2	3	Citywide

Section 4: Implementation

Successful implementation of the Citywide Strategic Recovery and Rebuilding Plan (“Citywide Plan”) will require close and exceptional coordination and cooperation among all local agencies and local officials, in particular, as well as the public, State and federal agencies, and the private and non-profit sectors.

This section of the Plan defines responsibilities for action and implementation to key entities. The Plan also identifies the staffing needs of those key agencies that are charged with local recovery implementation. A premise of this discussion is that the task of recovery and rebuilding is immediate and that we must leverage and enhance existing agencies and organizational structures, rather than invent an array of new ones. This section broadly discusses the issues and regulatory approaches to be considered in the implementation of the plan recommendations. It is not, however, an exhaustive analysis of the implementation measures and regulatory changes needed to fully implement the emerging Citywide, District and neighborhood recovery plans.

Citywide Plan Approval and Adoption

The following timeline illustrate the approval and adoption process for the Citywide Plan:

- Presentation to the Community Support Organization and the New Orleans Community Support Foundation – January 29, 2007
- Submission to the City Planning Commission for review and modification – January 30, 2007
- Public presentation of the Citywide Plan (no public testimony) at the City Planning Commission’s regular meeting – February 13, 2007
- Public comment period, February through March 7, 2007
- City Planning Commission’s Public Hearing #1 – February 22, 2007
- City Planning Commission’s Public Hearing #2 – March 7, 2007

At its March 7 meeting, the City Planning Commission will make a recommendation to the City Council on adoption of the Citywide Plan. The City Council and Mayor will have final review and approval of the Citywide Plan; no dates yet set. When the plan is approved, it will become the City’s official blueprint for recovery and can be submitted to the LRA and other public and private entities for implementation funding and support.

Recovery Implementation Timeline

Timelines for project implementation were developed as part of the sector strategies defined in Section 3 of the Citywide Plan. In addition, the staffing needs and costs for key regulatory amendments are discussed in this Section of the Plan. All are summarized in Table 4.1 as an integrated Implementation Timeline across three phases of project execution for the next 10 years. The three phases are:

- **Short-term** shows the percentage of required investment during the 2-year period from 2007 to 2009
- **Mid-term** shows the percentage of required investment during the 3-year period from 2009 to 2011; and,
- **Long-term** shows the percentage of required investment in the 5-year period from 2012 to 2016.

Table 4.1 Citywide Implementation Timeline

	Short -Term (2007-2008)	Mid-Term (2009-2011)	Long-Term (2012-2016)
Flood Protection	23%	58%	19%
Neighborhood Stabilization	20%	40%	40%
Housing	42%	58%	0%
Economic Development	57%	34%	9%
Infrastructure and Utilities	47%	39%	14%
Transportation	7%	16%	77%
Health Care	72%	28%	0%
Education	51%	47%	2%
Community Services: Public Safety	52%	45%	3%
Community Services: Environmental Services	34%	58%	8%
Community Services: Recreation and Libraries	22%	46%	32%
Other Municipal and Cultural Resources	20%	30%	50%
Historic Preservation/Urban Design	19%	31%	50%
Implementation – Staffing and Regulatory Amendments	31%	39%	30%

The Citywide Plan estimates of duration are based upon assumptions that the resource commitments defined in the Plan are made prior to planned start of execution for each project, and that the necessary resources can be effectively deployed by the City and other key agencies charged with implementation.

Table 4.2 shows the Implementation Timeline for the three key voluntary programs that are the cornerstone of the strategic and risk-based recovery approach proposed by the Citywide Plan: “Elevate New Orleans,” “Slab-on-Grade” Remediation, and Neighborhood Cluster programs. Their implementation is phased across 10 years.

Table 4.2 Implementation Timeline for Key Voluntary Programs

	Short -Term (2007-2008)	Mid-Term (2009-2011)	Long-Term (2012-2016)
Key Voluntary Programs			
Elevate New Orleans	40%	55%	0%
Slab-on-Grade Remediation	10%	60%	30%
Neighborhood Cluster Program	20%	40%	40%

Recovery Management and Governance

Coordination and collaboration are difficult in any large organization, especially one as old and complex Orleans Parish, with its many governing institutions. The implementation of this Plan will require close and unprecedented coordination and cooperation between agencies and government officials working for the good of New Orleans. Collaboration will improve the productivity of City/parish government in New Orleans by eliminating duplication of services, and provide a forum to plan for the strategic investment or leveraging of City/parish resources. A local recovery governance model needs to leverage the skills and institutional knowledge of different governing bodies, promotes an integrated approach to management across organizations, and keeps the public involved through information-sharing and participatory methods. The implementation section of the Citywide Plan identifies key roles and responsibilities for recovery management and governance. It also calls upon specific agencies to provide leadership for the implementation of policies, programs and projects proposed in the Citywide Plan.

Parishwide Recovery Council

The Citywide Plan calls for the establishment of a Parishwide Recovery Council. The Mayor should appoint the chair, which this Plan recommends to be the City's Executive Director of Recovery Management.

The Parishwide Recovery Council should serve as the "recovery voice" for the entire City. Some of its main objectives should be to articulate a unified strategy and set priorities for implementation of the Recovery Plan, streamline decision-making, and manage the deployment of recovery resources. The Council must involve the key public agencies charged with managing recovery for core functions. The agency representatives on the Council must be fully authorized to represent their respective agencies, in providing input from and reporting back to their agency regarding recovery matters.

Participation must include those agencies that are called upon to provide leadership for the policies, programs and projects defined for each Sector of the Citywide Plan. It is recommended to include, but is not necessarily limited to, the following agencies: the co-chairs of the New Orleans City Council Recovery Committee; City Planning Commission (CPC); New Orleans Redevelopment Authority (NORA); Regional Transit Authority (RTA); Regional Planning Commission (RPC); New Orleans Sewerage and Water Board (S&WB); Housing Authority of New Orleans (HANO); New Orleans Public Belt Railroad (NOPBR); Louis Armstrong New Orleans International Airport (LANOIA); Port Authority; Orleans public schools; and other municipal/parish agencies.

The Council could adopt a model similar to the Louisiana Recovery Authority (LRA) in adopting action plans for the priorities and use of multi-agency funds, including the potential prioritization and programming of key recovery funds, such as Public Assistance and Hazard Mitigation funds. The Parishwide Recovery Council should also serve as the lead interface to State and federal recovery funding agencies so that priorities are clearly defined and funds optimized. This should include working with State and federal agencies to maximize the reimbursement and use of key recovery funds, such as Public Assistance, over the next two years.

Office of the Mayor and Executive Staff

The Mayor of New Orleans is the executive leader of the City's recovery. The Mayor can grant the authority to various departments to carry out recovery operations and also has the ability to gain a full commitment from City agencies to constructively participate in the Parishwide Recovery Council. The Mayor has the lead role in promoting the City's recovery



CITY OF NEW ORLEANS

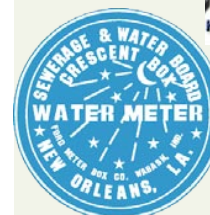
C. Ray Nagin, Mayor



Regional Planning Commission



CITY PLANNING
COMMISSION
of New Orleans



plan to residents, non-residents, business leaders, and funding entities. The Mayor is the lead advocate for funding at all levels and from all sources: City, State, federal and private. The Mayor also has responsibility for advocating local legislative actions that facilitate recovery, including ordinances, regulatory amendments and any recommended changes to the City Charter.

The Mayor's executive staff includes the Office of the Chief Administrative Officer, Office of Economic Development, Office of Intergovernmental Affairs, and Office of Recovery Management. Each has responsibilities for managing and overseeing the implementation of projects under the City's departmental areas of responsibility. The Citywide Plan calls upon the executive staff to provide leadership and oversee the policies, programs and projects recommended for the Recreation, Libraries, and other Municipal and Cultural Resources sectors of the Citywide Plan.

The Mayor's executive staff is also called upon to help create recovery communications infrastructure for project implementation planning and citizen outreach in coordination with the Office of Recovery Management. The Mayor's Office and executive staff should promote integrity and transparency in all recovery-related matters. They should develop and implement a host of recovery communications mechanisms (through the web, email, the media, faith-based organizations, and other grass-roots and civic outreach) to provide up-to-date and continuous information to residents (both local and displaced), businesses and investors on the status of recovery efforts in the City. They should also oversee the creation of Recovery Resource Centers in neighborhoods across the City as proposed by the Citywide Plan. As the recovery progresses, the Mayor's staff is also called upon to consider implementation of two District Plan proposals – creation of a “livability court”¹ that deals with quality of life issues, and a housing/blighted property court.

New Orleans City Council

New Orleans City Council is the City's governing authority and legislative body, and likewise is the legislative authority for the City's recovery. The City Council will be responsible for adopting the recovery plan and for evaluating and adopting disaster- and recovery-related legislation that will facilitate the recovery implementation. This will include ordinances, regulatory amendments and any recommended changes to the City's Charter. They should also continue to provide leadership and support to the citizen participation and neighborhood planning processes.

The City Council recently created a Recovery Committee² that can provide an effective interface between the City Council and City recovery activities. They can package and review disaster- and recovery-related legislation for quick passage and provide Council policy direction to City departments and agencies. The Recovery Committee's effectiveness will be enhanced by staff assistance in setting agencies and priorities. The co-Chairs of the City Council Recovery Committee should serve on the Parishwide Recovery Council.

City Planning Commission

Under the City Charter, the City Planning Commission (CPC) is responsible for preparing disaster recovery plans. The CPC will be the first to review the Citywide and District Recovery Plans and make a recommendation to the City Council for adoption.

¹ Charleston, South Carolina has a model system to consider.

² Los Angeles' City Council created a recovery committee to authorize and legislate recovery policy and programs following the Northridge Earthquake. Its role and actions provide a “best practice model” for the New Orleans City Council to evaluate.

Implementation of a Citywide Plan requires an empowered CPC with adequate staff and resources to administer various processes and simultaneously revise plans and planning regulations. The CPC should work with the City's Office of Recovery Management to determine the scope and needs of planning implementation; this includes both technical staff and resources to access technical assistance and support.

Once adopted, the CPC should consider incorporating the Citywide Plan as an official element of the City's Master Plan. Work on development of a Housing Element of the City's Master Plan should begin immediately and be coordinated closely with the Office of Recovery Management and the Housing Authority of New Orleans (HANO) to ensure that a comprehensive housing strategy is developed for all residents in the short-, mid- and long-term.

The Citywide Plan and the District Plans can also serve as the foundation for updates and revisions to other administrative rules and key regulatory devices, including the City's Master Plan and Comprehensive Zoning Ordinance to ensure consistency with the Citywide Plan. Consider developing a Unified Development Code or, alternatively, update the City's Subdivision Regulations to ensure consistency with the Citywide Plan. The CPC is also responsible for revising and adopting a hazard mitigation plan that is consistent with the Recovery Plan and other regulatory devices, and ensuring consistency with the Citywide Plan.

The CPC is called upon to provide leadership and oversight for policies, programs and projects proposed in the Historic Preservation/Urban Design Sector of the Plan. The CPC should also work with the Office of Recovery Management, Office of Safety and Permits, and New Orleans Redevelopment Authority (NORA) to implement key policies, programs and projects proposed for the Flood Protection and Neighborhood Stabilization Sectors of the Plan. In particular, CPC should help refine the recovery planning areas and the criteria and strategies for recovery investment in the key programs for these Sectors: the elevation, slab-on-grade, and neighborhood cluster programs. The CPC should also advise the Office of Recovery Management on where the first phase of voluntary programs (particularly where the proposed neighborhood cluster program) should be offered. Likewise, as voluntary programs are implemented, the CPC should work with the Office of Recovery Management to monitor progress, advise on where the next phases of voluntary programs should be offered, and make program alterations, as necessary. The CPC should also oversee the planning and design of resettlement, including cluster locations, and the proposed future land uses of lands acquired by the Road Home program or the City as part of the resettlement.

In accordance with the City Charter, the CPC is responsible for working with the NORA to prepare a redevelopment plan for blighted properties that NORA would then implement. The CPC should also set priorities to help encourage and facilitate the redevelopment of underutilized areas of the City that are located in higher elevation areas. The CPC should oversee and coordinate with NORA on the series of small area studies and plans that resulted from the District Plans and are proposed as part of this Citywide Plan.

The CPC staff also must assist with the education and coordination of all boards and commissions involved in implementation of the Citywide Plan. They may include: training members of the City Planning Commission, the Board of Zoning Adjustments, the Historic District Landmarks Commission (HDLC), and the Vieux Carré Commission. The CPC should also work with the HDLC to determine the appropriateness of expanding local historic district boundaries, an idea that features prominently in many District Plans. The CPC should work with the Office of Safety and Permits and the HDLC to develop design guidelines for the rebuilding that protect historic districts and respect architectural and neighborhood character across the City.

Office of Recovery Management

The Office of Recovery Management was established in December 2006 and, in January 2007, it has an Executive Director and staff hires are underway. The Office of Recovery Management is charged with delivering technical solutions and program management to the recovery effort. It is recommended that the Office of Recovery Management serve as staff to the Parishwide Recovery Council (recommended for establishment by the Citywide Plan). In a key role as staff for the Parishwide Recovery Council, the Office of Recovery Management should lead in the preparation of action plans for the multiple agency participants in the council to adopt and implement, and oversee the financing and implementation strategies for all public recovery initiatives. The Office should also establish the compliance guidelines for public recovery initiatives, as well as the program and performance management solutions and 'best practices' for the multiple agency participants in the Parishwide Recovery Council to follow. The Office of Recovery Management should develop a tracking tool that assists management and staff with key decision making as it relates to recovery activities. The use of a performance dashboard to understand short and long-term achievement of strategic objectives enables citizens and public officials to make objective value judgments regarding the specific or overall recovery efforts/initiatives. The dashboard should include quantitative as well as qualitative indicators of recovery activities. This means that it is not only important that work is accomplished in a timely/cost effective manner but also that the quality of the work product meets or exceeds the desired quality standards. The Office should also work with State and federal agencies to develop a more integrated fund tracking system for the parish-wide agencies.

The Office of Recovery Management is called upon to provide leadership and oversee the implementation of key programs of the Neighborhood Stabilization and Flood Protection Sectors of the Plan. In doing so, the Office should work with the CPC to determine where the first phase of voluntary programs (particularly where the proposed neighborhood cluster program) should be offered. It should also work with NORA, the CPC, and the Road Home program to establish the program, funding, and implementation structure for the voluntary elevation, slab-on-grade, and neighborhood cluster programs. Likewise, as these voluntary programs are implemented, the Office of Recovery Management should monitor progress and work with the CPC to decide where next phases of voluntary programs should be offered, and make program alterations, as necessary. The Office of Recovery Management should also coordinate with the CPC in its planning and design of resettlement, including cluster locations, and its proposals for future land uses of lands acquired by the Road Home program or the City as part of the resettlement. It should also work with the CPC and NORA on redevelopment planning for blighted properties. In partnership with the Office of Economic Development (OED), it should also develop a framework to incorporate the Citywide and District Recovery Plans into funding applications, while identifying supplemental funds and investment opportunities.

The Office of Recovery Management should also be responsible for monitoring resettlement in the City. To this end, the Office should work with the Housing Authority of New Orleans (HANO) and other key public, private and non-profit agencies to develop and implement a comprehensive information system to track all residents (local and displaced), understand their recovery decisions, impediments, and status. Efforts should be made to link the system together with FEMA and the Road Home case management. Using a case management approach, the Office of Recovery and other agencies could work together with local and displaced residents to resolve their relocation impediments and promote the various recovery programs funded as part of this Plan as well as from State, federal, and other non-profit and private programs. It should also work with HANO and the CPC to ensure that a comprehensive housing strategy is developed for all residents in the short-, mid- and long-term. The strategy also must be reflected in the development of a Housing Element of the City's Master Plan.

The Office of Recovery Management should also be the coordinator and advocate for recovery volunteer programs. As we have seen throughout the first year of recovery, countless

universities, colleges, faith-based and other civic groups have volunteered manpower and resources to the recovery. A volunteer clearinghouse could provide for better skills and needs matching across parish-wide agencies and neighborhoods in the City. In particular, national and local partnerships with university planning and social/urban studies programs should be established to provide technical assistance and citizen/recovery assistance for resettlement. Considerable technical assistance will be needed to help residential property owners, neighborhood-serving small businesses and renters to return and rebuild in more sustainable clusters within their neighborhoods (as part of the voluntary neighborhood cluster program proposed in this Plan).

New Orleans Redevelopment Authority

The New Orleans Redevelopment Agency (NORA) has a new Board and a new Director. Under State law and through its land banking capability, NORA can acquire and resell individual adjudicated properties and package together blighted properties for buyers to acquire.

In implementing the Citywide Plan, NORA is called upon, with the Office of Recovery Management, City Council, CPC and other key City agencies, to develop guidelines for post-Katrina adjudication that ensure transparency, careful consideration of post-Katrina challenges of owners to rebuild, and provide proper notification and public participation. NORA should also work with Neighborhood One, the City Council and other agencies to streamline the processes for making abandoned and adjudicated properties available for sale at attractive, below market rates so that additional residents and businesses can purchase and rehabilitate the properties, as proposed by the programs in the Plan.

NORA is called upon to work with Neighborhood One and other key City agencies to identify and coordinate the reuse of blighted, abandoned and adjudicated properties, which is expected to significantly increase post-Katrina. NORA should help prioritize the current backlog of abandoned and adjudicated property for reuse based upon its elevation and viability for reuse as part of the City's recovery. It should then work to expedite these properties for reuse within the next 6 to 8 months. NORA should also partner with the City Property Management Office to evaluate the status of, and potentially adaptive reuse of publicly-owned buildings.

NORA should work with the CPC and the Office of Recovery Management to design the property transfer mechanisms necessary to implement the neighborhood cluster program, and to coordinate financing on behalf of the City and with the State's Road Home program so that resident received coordinated benefits and services. NORA should also work with the CPC in the development of plans for the reuse of properties acquired by State's Road Home, including recommendations for buyout with hazard mitigation funds and resale and packaging for redevelopment.

NORA should also work with the Neighborhood One, the CPC and Office of Recovery Management to monitor recovery blight and the reuse of underutilized properties. As the recovery progresses, these agencies should study the use of alternative mechanisms for residents and business to purchase and rehabilitate blighted properties, including the 'lot next door' program. This study should be undertaken in the mid-term, after other policies and programs to stabilize neighborhoods have been implemented.

Office of Economic Development

The Office of Economic Development (OED) carries out economic development initiatives on behalf of the City. Historically, execution of initiatives has been affected by changes in Mayoral administrations and lack of reliable financial support. The Office must be strengthened and additional consideration should be given to improving the economic delivery infrastructure in Orleans Parish. There are good examples from other Louisiana communities including, but not limited to the Jefferson Economic Development Commission (JEDCo).

In implementing elements of the Citywide and District Recovery Plans, the OED should partner with the CPC and Office of Recovery Management to facilitate the relocation assistance for small neighborhood-serving businesses participating in the proposed neighborhood cluster program, establish a neighborhood corridor revitalization program, and help establish a seed and early-stage capital fund to help fuel ‘entrepreneurship’ throughout the City. It should also study the needs of existing businesses for their long-term retention and expansion, help create small-business incubators and work-force training programs, enhance the City’s economic development marketing and promotions functions, provide better marketing of existing tax incentives, and lobbying for new federal, State, and local tax incentives. OED, in partnership with the HANO and the Office of Recovery Management, should develop a system to deliver worker housing immediately. OED, in partnership with the Office of Recovery Management, should also develop a framework to incorporate the Citywide and District Recovery Plans into funding applications, while identifying supplemental funds and investment opportunities.

Housing Authority of New Orleans

The Housing Authority of New Orleans (HANO) is charged with “providing safe, decent, affordable housing to low-income citizens by creating and sustaining viable communities; and to facilitate resident self-sufficiency and upward mobility through productive collaboration³.” Prior to Katrina, HANO, led by a HUD-installed Receiver Team, was working on the revitalization and major redevelopment of the public housing portfolio. “Opportunity for all to return” is a core principle of the Citywide Plan, and HANO is called upon to work closely with the Office of Recovery Management, NORA, and CPC to provide leadership for the policies, programs, and projects proposed for the Housing Sector of the Citywide Plan. To assist in implementing the housing strategies outlined in the Plan, HANO must have additional staffing and federal, State, and local support to meet the vast array of post-Katrina housing needs in the City.

The Citywide Plan recommends that there be a sufficient number of low-income housing units rehabilitated or rebuilt to accommodate all displaced former public housing tenants who want to return. HANO is also called upon to work with the federal department of Housing and Urban Development (HUD) to ensure that all public housing in the City be rehabilitated or rebuilt to the highest standards, to incorporate low-income housing and potentially mixed-uses, and to be of a higher density than current HOPE VI policies suggest. HANO also should work with other agencies and oversee the creation and implementation of the many other programs and projects proposed in the Plan, including: homebuyer assistance programs; rental housing and relocation assistance programs; and transient worker housing.

HANO is also called upon to work with CPC and the Office of Recovery Management in developing/reusing HANO’s citizen-tracking system and developing a comprehensive housing strategy for all residents in the short-, mid- and long-term. HANO should also work with the CPC on the development of a Housing Element of the City’s Master Plan. HANO should work with the Office of Recovery Management, NORA, Neighborhood One, and

the CPC to develop all housing programs and strategies proposed in the Citywide Plan. It should also work with State and federal agencies to expand the provision and enhance local marketing of all the federal and State housing support programs, including vouchers, tax credits and public housing.

Office of Safety and Permits

The Office of Safety and Permits is responsible for the permitting and enforcement of the City's building codes for the construction and use of buildings and property. Among other responsibilities it issues building, electrical, and mechanical permits, and inspects occupational license applications. The Office called upon to provide technical support to the Office of Recovery Management, NORA and the CPC to implement the key programs proposed for the Flood Protection and Neighborhood Stabilization Sectors of the Plan. This Office must also ensure that the many building code, safety and permitting recommendations of the Citywide and District Recovery Plans are evaluated and implemented as appropriate. First and foremost, these Plans call for enhanced and comprehensive code enforcement across the City. To accomplish this, the Office needs adequate staffing and resources to improve the administration of various processes, and ensure that both administrative and inspection personnel are qualified and well-trained. Other key recommendations include:

- Enforcement of the 50% post-disaster damage determination
- Implementation of the International Building Code for all new construction, with strong emphasis on hurricane wind and flood construction elements
- Enforcement of, at a minimum, FEMA Base Flood Elevation standards for all new construction and repairs of properties with post-disaster damage determinations of 50% or greater
- Work with the CPC to develop and implement design guidelines for repairs and reconstruction across the City. This includes standards and guidelines for structural elevations, slab-on-grade reconstructions, and sustainable cluster designs.
- Work to prevent post-Katrina blight through stronger code enforcement on permitting and demolition. Working with the Office of Recovery Management, careful attention must be paid, to identifying property owner's intentions before enforcement actions are taken. Policies and procedures must target the truly abandoned properties.
- Align the City's codes and permitting processes with plan, regulation and development code changes.
- Modify the City's codes for new structures to set progressive standards for sustainability and energy efficiency (e.g. LEED platinum, gold or silver). This includes ensuring that all City-owned structures are renovated to meet the 2006 International Residential Energy Code or Energy Star standards.
- Work with alliances, as well as business and trade organizations, to encourage the use of local contractors, and provide professional training programs for contractors and builders on energy efficiency, architectural and historic preservation, and wind/flood protection measures.

Department of Public Works

The Department of Public Works constructs, maintains, and administers the City's transportation elements affecting vehicular, pedestrian, and rail movement within the public rights-of-way. It is also responsible for stormwater drainage of City streets. The Department is called upon to coordinate with the Regional Transportation Authority (RTA) to provide leadership for implementation of the policies, programs and projects defined the Citywide Plan. It calls first for repair of the heaviest damages across the City to ensure that additional damages are not caused by lack of repair. System improvements and recovery action plans must be coordinated with the resettlement effort and the work of other agencies through the Parishwide Recovery Council. The Citywide Plan also calls for the creation and implementation of a long-term maintenance and renewal plan to ensure that street and stormwater drainage system repairs and investments made as part of the recovery will be maintained and that the City's entire

systems will eventually be upgraded with on-going maintenance assured. The Department should also work with the CPC and other key agencies to implement the City Bike Master Plan, and conduct the traffic and parking management studies defined in the Citywide and District Recovery Plans.

New Orleans Sewerage and Water Board (SW&B)

The SW&B provides sewer, water and drainage services for the City. SW&B has a significant role in restoring and improving the sewer and water systems across the City over the next decades. The Citywide Plan calls first for repair of the heaviest damages across the City to ensure that additional damages are not caused by lack of repair. System improvements and recovery action plans must be coordinated with the resettlement effort and the work of other agencies through the Parishwide Recovery Council. The Citywide Plan also calls for the creation and implementation of a long-term maintenance and renewal plan to ensure that the water and sewer systems investments made as part of the recovery will be maintained and that the City's entire system will eventually be upgraded with on-going maintenance assured. The SW&B must also continue its efforts to provide additional (and more reliable) pumping capacity to reduce the risk of flooding in the short-term until the USACE permanent pump stations are in place.

Office of Homeland Security and Public Safety

The Office of Homeland Security & Public Safety has operational and planning authority for the New Orleans Police Department, New Orleans Fire Department, New Orleans Office of Emergency Preparedness, and the Office of Criminal Justice Coordination. This Office has responsibility for several policies and projects identified in the Citywide and District Plan:

- Restoration of damage public safety facilities and equipment and development of state-of-the-art facilities and system citywide
- Enhanced citywide communication infrastructure
- Provision of state-of-the-art emergency planning and training (both with City and State personnel and the public) for hurricane/flood evacuation.
- Assess the effectiveness of evacuation and disaster response plans in light of lessons learned from Hurricane Katrina. The Office should work with the RTA to establish a convenient system of transit pick-up and distribution points and a multimodal evacuation system.
- Conduct public information campaigns about plans and available training through a host of communications media (including but not limited to the web, email, the media, faith-based and neighborhood organizations, and other grassroots outreach).

All improvements and recovery action plans must be coordinated with the resettlement effort and the work of other agencies through the Parish-wide Recovery Council.

Office of Environmental Affairs

The Mayor's Office of Environmental Affairs was established to enhance and protect New Orleans' environment for current and future generations. It is responsible for broad-based initiatives, such as brownfield redevelopment, climate protection, and coastal and wetlands preservation. The Office of Environmental Affairs is called upon to provide leadership and oversee the implementation of some of the key policies, programs and projects proposed for the Environmental Services sector in the Citywide Plan. In particular, the Office, in partnership with the Louisiana Department of Environmental Quality (LA DEQ), the U.S. Environmental Protection Agency (EPA), the City and NORA, to provide leadership for soil remediation and brownfield redevelopment policies and programs proposed in the Citywide Plan.

Department of Health

The City's Health Department is the central healthcare hub connecting institutions and services to individuals and communities throughout the City. Restoration of neighborhood comprehensive care and the provision of state-of-the-art regional medical care are the primary strategies of the Citywide Plan, and the Health Department is called upon to provide leadership and oversee the implementation of all policies, programs and projects proposed for the Health Care sector in the Citywide Plan. Some key projects include: restoration of comprehensive medical services to New Orleans East, support for redevelopment of the New Orleans Medical District, and implementation of the State's Department of Health and Hospitals Plan. All improvements and recovery action plans must be coordinated with the resettlement effort and the work of other agencies through the Parishwide Recovery Council.

Regional Transportation Authority

The Regional Transportation Authority (RTA) constructs, maintains, and administers New Orleans' public transportation system. In keeping with other transportation and infrastructure strategies, the Citywide Plan calls for the repair and replacement of the heaviest damages to transit systems across the City to ensure that additional damages are not caused by lack of repair. Transit system improvements and recovery action plans must be coordinated with the resettlement effort and the work of other agencies through the Parishwide Recovery Council. The RTA should provide leadership for the regional and statewide policies and project proposed by the Citywide Plan, such as the regional commuter rail system. The RTA should also work with the Office of Homeland Security & Public Safety to assess the effectiveness of evacuation and disaster response plans in light of lessons learned from Hurricane Katrina, particularly for transit pick-up and distribution points and assurance of a multimodal evacuation system.

Regional Planning Commission

The Regional Planning Commission (RPC) has transportation functions and responsibilities as the Metropolitan Planning Organization for the New Orleans urbanized area. It oversees the planning, construction and maintenance of all the major streets and highways. In keeping with other transportation and infrastructure strategies, the Citywide Plan calls for the repair and replacement of the heaviest damages to the major streets systems across the City to ensure that additional damages are not caused by lack of repair. Systems improvements and recovery action plans must be coordinated with the resettlement effort and the work of other agencies through the Parishwide Recovery Council. The RPC should also work with the CPC and other key agencies to conduct the I-10 studies and implement the East-West corridor plan. The RPC should also work with the Office of Homeland Security & Public Safety and RTA to assess the effectiveness of evacuation and disaster response plans in light of lessons learned from Hurricane Katrina.

Recovery School District and Orleans Parish School Board

The Recovery School District (RSD) now manages the majority of school-related facilities in Orleans Parish. The primary strategies of the Citywide Plan are to: create and maintain an equitable, competitive and unified school system; restore and rebuild the local physical plant according to "best practices;" and adopt and maintain a solid academic curriculum. The RSD, in coordination with the Orleans Parish School Board, is called upon to provide leadership and oversee the implementation of all policies, programs and project proposed for the Education sector in the Citywide Plan. Some key projects include: repair of existing facilities, provision of temporary, modular facilities, and establishment of neighborhood community centers on school campuses. All improvements and recovery action plans must be coordinated with the resettlement effort and the work of other agencies through the Parishwide Recovery Council.

Citizen Participation

The citizens of New Orleans have invested their time, their hearts and their vision in creating a plan for their neighborhoods and their city. In return, the City must now and forever invest in its citizens as shareholders in the Plan and as stakeholders in the City.

New Orleans now has an educated army of “citizen-planners” who have found their voice and worked tirelessly over the many months of planning. They can provide a meaningful voice in implementing their plan and guiding all future government policy-setting and decision-making. Neighborhood residents need to be involved as their plans go forward: to ensure that their spending priorities are followed, that their neighborhoods revitalize as they envision, that their city becomes a vibrant home with opportunity for all.

With development comes opportunity; with development also comes social and civic responsibilities. Going forward, neighborhoods, developers and the City must act as partners in determining the site, scope and nature of major development projects. All such projects should include community benefit agreements for the common good of the community and the City.

A formal process for citizen engagement must be developed and implemented to facilitate neighborhood recovery and future development, and to ensure that citizens continue to have a voice in the City’s future. Cities as diverse as Birmingham, New York, Atlanta and Portland have formal citizen participation programs that involve residents in formal decision-making development and decision-making; such a program must be established in New Orleans, with a legal mandate and a formal role in making decisions on land use, zoning and quality of life issues that impact citizens and neighborhoods. Linkages to both the City Council and the City Planning Commission need to be explicit. Several organizational models exist in New Orleans and many new proposals were developed as part of the District Plans. All these need to be considered in developing the ultimate structure that links neighborhood community groups with City recovery governance. Citizens must be involved in the final design and implementation of a citizen participation program and it is recommended that steering committee be formed to assist with the effort. It should be comprised of the Mayor’s Office, City Council and CPC leaders as well as representatives of community groups and expert advisors. The City should also provide training and technical assistance to nascent community organizations (in particular the Community Development Corporations) emerging from the recovery planning processes. This might be accomplished through partnerships with national organizations, such as the Enterprise Foundation, and universities.

Also, as part of the recovery, regular, up-to-date information about the status of recovery must be made publicly-available in order for residents, businesses, and investors to make individual and collective judgments about the recovery process. Additionally, formal opportunities must be created for the citizens of New Orleans to come together on a regular basis to review the progress of their City’s recovery and shift rebuilding priorities. New Orleanians who have not been able to move back to the City must have an opportunity to remain involved and have a continuing voice in rebuilding.

All parish-wide agencies need to expand their use of public participation, make their decision-making more transparent, and provide greater opportunities for public input in decision-making processes. Agencies can use websites and e-mail to communicate new actions, publicize opportunities for public participation, and receive comments electronically. Agencies can also change the way they report their work, describing accomplishments, findings, and changes in the regulatory process in plain language that is easy to understand. Agencies should adopt and implement ‘best practices’ in effective public participation and workshop processes. These should include provision of opportunities for public comments, enhanced information dissemination about performance goals and progress in accomplishing those goals.



State and Federal Participation

Both the state and federal government are critical to helping fund and support the City's recovery efforts. Representatives at both levels of government should interface with the City, through the Office of the Mayor and the Parishwide Recovery Council to help the City and all key agencies involved with recovery overcome obstacles that may be impeding the reasonable flow of current recovery funds to the recovery effort. In particular, this Plan calls for a comprehensive review of the approval and reimbursement of Public Assistance requests made to eligible entities, parish-wide, particularly in light of gaps and needs identified through the Citywide and District plan process. Representatives at both levels of government should also interface with the City, through the Office of the Mayor and the Parishwide Recovery Council to identify State and federal sources of both disaster- and non-disaster-related funds. These representatives should also work with the City and Parishwide Recovery Council to establish a means of facilitating a more rapid recovery. Mechanisms must be established for improving the flow of funding, directly from State and federal sources to local agencies, over the course of the recovery.

A cornerstone of the Citywide Plan is safety and mitigation of hazards, both natural and manmade. There are four federal funding programs authorized by the Stafford Act (as amended) and focused on hazard mitigation. All are funded through the Federal Emergency Management Agency (FEMA) and administered by the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP)⁴. Two of the programs, Public Assistance and Hazard Mitigation Grant Program funds, are already available as a result of the 2005 presidential disaster declarations. Pre-Disaster Mitigation Grant Program (PDM) and Flood Mitigation Assistance Grant Program (FMA) are appropriated by Congress on an annual basis. PDM can be used for a wide variety of projects to mitigate all hazard types, while FMA focused on specific flooding problems. Both PDM and FMA are available to fund pre-disaster projects.

Federal and State agencies are strongly encouraged to work with the Office of the Mayor and the Parishwide Recovery Council to help maximize the use of the available funds for the safety and hazard mitigation programs and solutions proposed in the Citywide Plan. It may be necessary to identify areas where current enabling legislation and regulations for these funding programs runs counter to the City's proposed programs and request the issuance of new guidance permitting activities on a limited or pilot basis. For example, in requests from several States following Katrina and Rita, FEMA has allowed HMGP funding to be used for a new mitigation technique called "mitigation reconstruction." This technique was not previously eligible for funding but now, under this pilot program, if certain conditions are met, existing at-risk or substantially damaged structures can be demolished and a new, elevated and more resilient structure built on the same property.

Other specific recommendations from the Citywide and District Plan processes that require federal and/or State support in implementation are:

- Federal and State commitment to provide Cat 5 levee protection and wetlands restoration to protect all citizens and property in the Parish. This includes secured funding and oversight to ensure that the U.S. Army Corps of Engineers and the Sewerage and Water Board complete 2007 plans and 2010 construction projects on time, and develops and initiates long-term plans for Cat 5 levee protection and wetlands restoration.
- Federal support to ensure that a sufficient number of low-income housing units are rehabilitated or rebuilt to accommodate all displaced former public housing tenants who want to return.
- Federal support to ensure that all public housing in the City be rehabilitated or rebuilt

⁴ Specific requirements and criteria for these different grant programs are available at <http://www.fema.gov/government/grant>



to the highest standards, to incorporate low-income housing and potentially mixed-uses, and to be of a higher density than current HOPE VI policies suggest.

- Federal and State support for the development of a low-income housing technical assistance strategy that accommodates all displaced former public housing tenants both in the short- and long-term.
- Federal and State support to expand the provision and enhance local marketing of all the housing support programs, including vouchers, tax credits and public housing.
- Federal and State support to develop tax incentives to attract and retain businesses, and also strengthen the City's economic development linkages across the State and nation
- State conduct of a comprehensive reexamination of the Road Home program funding and implementation in Orleans Parish. This includes review of eligibility criteria, award and loan calculations, and efficiency in delivery.
- State support to integrate the Road Home and City recovery programs (i.e. for elevation, slab-on-grade, and neighborhood clusters) to provide a more comprehensive and seamless complete package of recovery funding for New Orleans residents and businesses.
- State support for the redevelopment of the New Orleans Medical District and implementation of its Department of Health and Hospitals Plan.
- State and federal support for the institution of best practices in public education, implementation of a small school model, strengthening of charter school laws, development of partnerships to recruit and retain teachers, and re-unification of an Orleans Parish School Board.

Non-Profit and Private Sector Participation

The commitment and generosity of the non-profit and private sectors has already been extraordinary, and hopefully will continue and even expand. A major principle of the Unified New Orleans Plan process has been to provide individuals, businesses and investors with the necessary information to facilitate recovery and rebuilding in the City.

Many of policies, programs, and projects articulated in the Citywide Plan will require non-governmental support and participation. The Plan's strategic framework and strategic management approach aims to integrate the work of parish-wide agencies, citizens, and state and federal agencies to assure investors that the recovery can be successfully achieved and investments safeguarded in every neighborhood of the City. Through the Office of Recovery Management and Parishwide Recovery Council, it also can provide a more centralized and streamlined access point for non-profit and private sector participation in the recovery implementation. Key sectors and areas of the Plan that are in need of non-profit and private investment are Housing, Economic Development, Citizen Participation, Health Care, Education, Recreation and Library Cultural Resources, and Historic Preservation/Urban Design.

Local Recovery Operations: Staffing Requirements

While New Orleans recovery and rebuilding effort is massive, it is still a temporary process. The personnel needed to implement the recovery will vary over time and human resources need to be coordinated and scaled appropriately to meet the needs. The Citywide Plan calls for the overall recovery leadership and management to be provided by the Parishwide Recovery Council and senior staff from the City's Office of Recovery Management.

Agencies charged with key recovery activities will need to recruit and retain some senior staff with specific expertise needed for recovery. But to the extent feasible, the Citywide Plan recommends that temporary/contract personnel be used across agencies in recovery

implementation teams, coordinated through the Parishwide Recovery Council and Office of Recovery Management. This structure allows agencies to leverage best-practices across multiple organizations throughout multiple areas of expertise, and maximize the needed flexibility to share resources as the recovery progresses and situations change. Standards for transparency, best-practices, and performance, should be established to guide the contracting teams in their work.

Key Local Regulatory Amendments

A successful recovery depends equally upon the effective implementation of two basic fiscal investment strategies – a steady stream of primarily public investment in infrastructure projects and a steady stream of private dollars into real estate development projects. Both the private and public sector must be encouraged to significantly invest in the new, New Orleans. For such development to occur in a timely manner and, more importantly, for the results to be respectful and complementary to the historic and cultural character of the City, new zoning and new regulatory approaches will be needed that remove barriers and provide incentives for desirable development. Many of the new approaches discussed herein have been successfully utilized in other large American cities. New Orleans needs to employ the best of those ideas to achieve the type of community and neighborhoods that its citizens, businesses and political leaders desire.

The City must remove any unnecessary regulatory roadblocks and develop up-to-date land development rules, laws and ordinances that are designed to achieve the type of community and neighborhoods that its citizens, businesses and political leaders desire and articulated in the Citywide and District Recovery Plans.

As a first task, it is recommended that the Parishwide Recovery Council, with leadership from the Office of Recovery Management and City Planning Commission, evaluate the adopted Plan and develop a prioritized list of regulatory and policy changes that are needed for the City and key parishwide agencies to effectively implement the Plan. Three key regulatory issues identified through the Citywide and District Plan processes that have been specifically studied and addressed by this Plan are:

- Updates to the Master Plan
- Updates to the Comprehensive Zoning Ordinance
- Updates to the Subdivision Regulations and Unified Development Code

More information about the scope of these projects is available on Project Sheet #90.

Updates to the Master Plan

Of the twelve official elements of the City's Master Plan, eight were completed prior to Katrina. The Citywide and District Recovery Plans and plan recommendations provide a tool for the City to use to re-evaluate the completed elements and also provide a set of metrics and standards for completing the outstanding elements of the Master Plan. Update and review of the Master Plan should begin immediately, starting with preparation of the Housing Element of the Master Plan. The Citywide Plan should be adopted as an element of the City's Master Plan.

Updates to the Comprehensive Zoning Ordinance

The current New Orleans comprehensive zoning ordinance contains 49 base districts, including 9 zones for just the Central Business District. There are 12 residential zoning districts, including three "single-family" zones; four "two-family" zones, and five "multi-family" zones. All districts follow a conventional zoning model, with each spelling out the types of uses allowed and establishing density and dimensional standards, such as lot size, setback and height requirements. In addition, there are 15 overlay districts, including four design overlays⁵, four corridor overlays, and four planned development overlays⁶.

⁵ The overlay district is a special zone placed over an existing base zoning district, and includes regulations that are applied to specific properties in addition to the requirements of the underlying base district.

⁶ Most conventional zoning ordinances also make extensive use of the "planned development," that promotes higher quality development design through site-specific planned developments.

Additionally, the code contains supplemental use regulations that affect at least 62 different uses, ranging from heliports to world fairs and including such common uses as restaurants, funeral homes and bed-and-breakfast facilities.

To more effectively implement the land use development proposals evolving out of the City and District Planning efforts, it must overhaul the Comprehensive Zoning Ordinance (CZO). New Orleans need not “re-invent the wheel” in deciding which approach to use in re-structuring its current zoning regulations. The City should determine which features of conventional zoning have not been as effective as desired locally and then replace those features with more appropriate tools based on performance and form-based approaches. This structure is called “hybrid zoning” – the incorporation of performance and form-based zoning techniques within the framework of conventional zoning. A new CZO should address the following:

1. Improve the user-friendliness of the CZO document.

New Orleans zoning ordinance needs to be less of a collection of rules and more of a reference tool for all potential users: citizens, developers, staff and decision-makers. It should be more readable and include more graphics and tables to supplement, explain and clarify text. Code provisions can be much clearer if they are in illustrative format. Tables could be made showing: who may submit what types of development review applications (i.e. property owner, City Planning Commission, City Council, etc.); what development review applications require a public hearing; or summary of development review saying which bodies make recommendations and final decisions on what applications. The CZO needs a consolidated table of contents. The current code contains a definitions section at the beginning of the document, but no index at the end. A well-crafted index can be extremely useful to the general public and to those who use the ordinance on a regular basis.

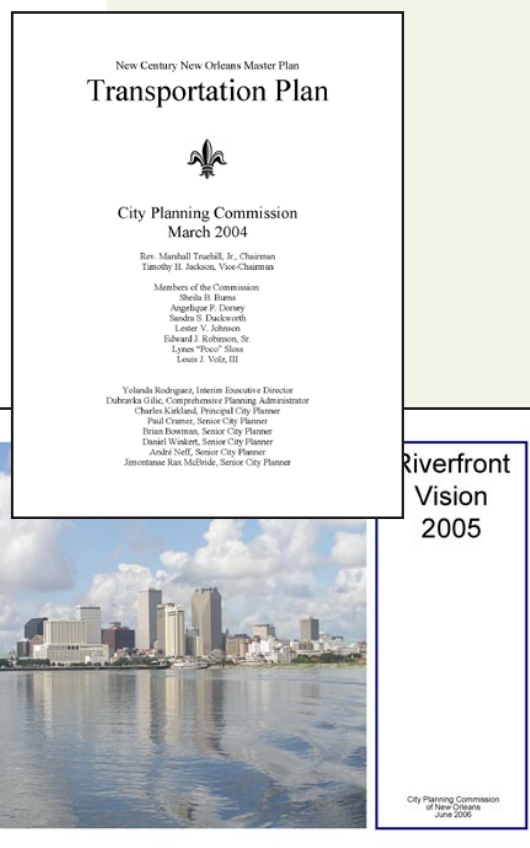
2. Reverse-engineer the zoning requirements based on the recovery planning outcomes.

District Plans provide the starting point for the City to essentially reverse engineer the standards for zoning districts, in order to facilitate rebuilding of what was there and of what has been recommended through the planning processes.⁷ When the new zoning ordinance goes into effect, there should be little unintentional nonconformity. The only uses, lots or structures that should be nonconforming under the new ordinance should involve situations where the City has made a conscious policy decision that a former or existing use or development pattern is so undesirable that it should be eliminated. It will be particularly important to reverse engineer setback standards and requirements for on-site parking, loading and stormwater management; such standards are impeding rebuilding of some damaged or destroyed buildings in the City.

3. Preserve historic and cultural character.

New Orleans has survived years of development, redevelopment and Hurricane Katrina with a significant number of its historic buildings intact. There are abundant structures and sites throughout the City, which are particularly valuable to the City’s unique historic, cultural and aesthetic character. In New Orleans, much of this character has been the result of community ethos, as opposed to design regulations. In the aftermath of Katrina,

⁷ This type of reverse engineering of district standards was a key element in the recent update of the Chicago Zoning Ordinance.



however, there is the risk that rebuilding will occur in a less than desirable manner that reflects that haste and pressures of recovery. Design guidelines or “pattern books” are needed in many neighborhoods to preserve their historic and cultural character.

Often, the initial response to protecting historic or significant buildings is to seek some type of historic designation through either a district or individual designation. Historic designation alone, however, will not ensure a building’s continued viability or even continued existence. Past experience in large urban areas has shown us that to help ensure a structure’s continued existence, it is important that the structure remain functionally and economically viable. Many cities are discovering that the facilitation of a strong adaptive reuse program is one solution. Policies to encourage the reuse of existing buildings began to emerge in the late 1970s.

As local governments identified more effective regulatory approaches, the successful reuse of existing buildings, either individually, or as part of a larger downtown revitalization effort, began to steadily increase. The increase in successful reuse projects is the result of the growing recognition of the inherent benefits in recycling older buildings, including:

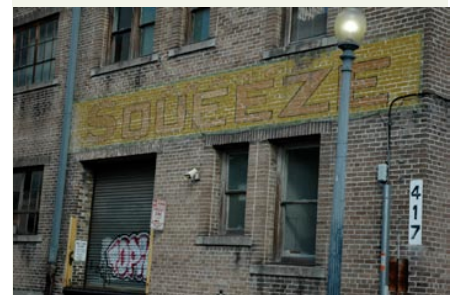
- Ability to strengthen and maintain City’s historic character and unique identity,
- Potential to bring new life downtown and to resurrect City’s tax base,
- Intrinsic economic value in using existing infrastructure and buildings,
- Utilization of basic spatial capacity and flexibility of many older buildings.

4. Facilitate reuse of older structures.

In many communities, adaptive re-use of older buildings for new purposes is a key redevelopment mechanism. Communities have seen successful revival of older buildings refitted as residential lofts, often with ground-floor retail uses. In New Orleans, the availability of buildings appropriate for such re-use is extensive. While the existing zoning ordinance allows new uses in such structures, more modern development standards are needed to guide modifications or improvements to drainage, parking, lighting and landscaping.

Many existing zoning ordinances inadvertently create impediments to redevelopment and adaptive reuse by focusing primarily on future development. They provide a specific set of standards that effectively relates only to new development. There is no recognition of the different characteristics of older structures, nor is there adequate flexibility to address varying re-use situations. The constraints may not be immediately obvious. For example, if a zoning district allows the development of significantly larger structures than existing significant buildings, it increases the likelihood of demolition of older structures and the construction of new buildings. If, however, existing structures are developed to the maximum size allowed by the zoning ordinance, reuse becomes a more realistic option. Reducing certain development standards such as lot sizes, setbacks, drainage and parking requirements for targeted infill areas will also bring some structures back into conformance with the zoning code, allowing these to become viable redevelopment sites.

The CZO update should clarify the rules for “nonconforming” buildings. There are probably hundreds of “nonconforming” buildings in New Orleans. Originally built in compliance with existing rules, they no longer “conform” since zoning regulations have evolved since their construction. Their nonconformity could be anything, including failure to meet current yard, floor area, height, parking, drainage, landscaping, or density standards. Many people, unfortunately, confuse nonconforming with illegal. A much better description for these structures might be “previously conforming,” denoting that they did comply when originally built.



5. Streamline design review processes.

The current regulations have a complex web of architectural and site design standards, some of which are embedded within zoning districts, overlay districts, in “supplemental use standards” for some uses, and in “supplemental standards” and the article on signs. Although anyone developing in the core of Vieux Carré or another significant historic area will expect to encounter a rigorous design review, other parts of the City do not necessarily need the same level of architectural and design scrutiny. The design review process can be streamlined by:

- Establishing a citywide design template for fences, landscaping, parking lot design, signs and other site features;
- In districts where it is necessary or important to vary the site design requirements, simply specifying what standards from the citywide template are to be modified;
- Creating some model, conceptual site plans that illustrate easy ways to conform with the basic site-planning standards on typical lots that occur in the City;
- Carefully review the various historic districts to ensure that all the design standards contribute to the character of the district and are essential to the purposes of the district;
- Creating checklists of architectural features that will automatically be considered to meet the standards of particular districts; this may not be practicable in the core of the Vieux Carré and in some other areas, but it ought to be workable for many of the corridor districts and even for some of the historic districts.

6. Ensure adequate mixed-income housing.

All the Citywide, District and neighborhood planning efforts, and accompanying community input, call for more mixed-income housing on higher ground. While single-family homes will continue to be the primary residential resource in New Orleans, existing single-family zoning districts do not adequately offer many residential development options. Allowing duplexes and attached houses on corner lots where each unit is oriented towards a different street might also be a consideration. Those now wishing to develop alternative housing types under the existing ordinance have only two options: (1) develop as planned development, or (2) rezone to a duplex or multi-family district, both of which necessitate more complex development approval procedures than detached dwelling units in conventional subdivisions.

Density or floor-area-ratio (FAR) bonuses might also be used to effectively promote the provision of more housing and more affordable housing in commercial districts. Current regulations provide a FAR bonus incentives for community priorities – greater incentives are currently offered for parks, galleria, arcades, and pedestrian plazas, than for residential uses. The City should consider revising FAR requirements to provide increased incentives for all residential development, and possibly create a special FAR bonus for construction of affordable housing downtown and in other higher ground areas.

7. Consider an inclusionary housing program.

Inclusionary housing programs require “the mandatory inclusion of affordable housing units, or financial set-aside, as a quid pro quo for new residential zoning or development approval.” An inclusionary housing program should focus on providing more housing in the lower risk areas of the City. An inclusionary housing program for New Orleans would include dispersal of affordable housing throughout higher ground elevations and the mandatory production of such housing by the private sector in conjunction with other new residential development. Potential adverse impacts include possible negative effects upon the value of adjacent market units. In addition, inclusionary programs by themselves impact only the residential development sector and not the commercial development sector, thus creating the perception of market unfairness.

Once produced, inclusionary housing units should be secured by deed restrictions designed to guarantee that the units provide housing for target income groups over the long term.

Administration of deed restrictions will have some budgetary implications on the City, although fees may be established to cover some costs. In that so many UNOP district plans call for the clustering of affordable housing on higher ground, the City might want to consider allowing increased densities and varieties of housing types, and to enact inclusionary housing requirements.

7. Encourage vertical mixed-use development

Zoning in most other cities, including New Orleans, is two-dimensional – if a building falls in a zoning district that allows apartments, it can have apartments on the first floor and on the eighth. Full implementation of the Citywide and District Recovery Plans will require an increased mixing of uses, with the City having a greater stake in how and where those uses occur. To rebuild the City with reasonable densities, the revitalized City must have residences in virtually every area. In the CBD, much of the Vieux Carré and other major commercial and destination areas, however, it is essential to maintain lively activity at street level – bars, restaurants, boutiques and shops. Thus, any new zoning ordinance for New Orleans should include use standards in some districts that are different for the street level than for the rest of the building. For a City characterized by its lively mixture of restaurants, bars, shops and residences, New Orleans has a surprising number of districts that permit only one general category of use. Based on district plans, the new zoning ordinance should facilitate additional mixed-use activities in other areas.

8. Reevaluate off-street parking requirements.

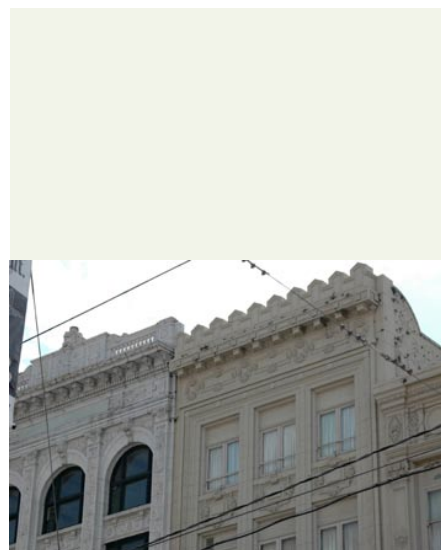
The current New Orleans zoning ordinance contains off-street parking standards for all areas of the city, except the downtown and Vieux Carré. As the City recognized in not requiring off-street parking in those districts, the pedestrian is more important than the automobile in certain situations. People drive places where they could walk in part because cities have elected to make it easy for them to do so. Thus, as part of the zoning ordinance update, it will be important to make a critical review of off-street parking standards throughout the document and eliminate unnecessary requirements. Neighborhood businesses and churches are among the types of uses for which more than adequate parking is often required. Off-street parking requirements often act as a disincentive to residential and affordable housing in non-residential districts. UNOP goals include the development of new commercial or shared downtown parking structures to be managed by the Downtown Development District. To incentive upper floor residential in Commercial districts, the City may wish to reduce or eliminate parking requirements to encourage residential development, and particularly for affordable housing in locations near employment and transit centers.

9. Facilitate infill and redevelopment.

Current zoning codes are generally designed to regulate development on “greenfield” sites (undeveloped suburban land), rather than on “greyfield” or “brownfield” sites within the central City. Due to the many variances needed, developers are often discouraged from infill development. Current regulatory requirements, such as access and off-street parking, on infill lots may not be achievable. Commercial infill may be similarly affected by fire codes, handicapped parking and building code requirements.

Many older commercial strips lie along roadways that have been widened since original construction, leading to exceptionally shallow lots. These commercial lots often have too little parking available, and no landscaping. Residential structures that were once on a two-lane road may have their front yards cut off and now lie in close proximity to new arterials. It is difficult to retain residential tenants in such a setting. Many existing nonresidential lots in the City are too small to accommodate viable commercial infill or development projects.

One of the primary reasons that redevelopment occurs is through an increase in the intensity of a site. An example might be demolishing a one-story retail building and replacing it with a multi-story retail and residential structure. This has multiple benefits for the City, in that it



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provides modern retail space, improves overall site appearance, and adds “eyes on the street” for increased public safety by including residential units. Many of the City’s districts do not permit this kind of mixed-use development. And current commercial districts severely constrain the ability to develop small-scale mixed-use projects that include residential development.

10. Enhance relationship between buildings and streets.

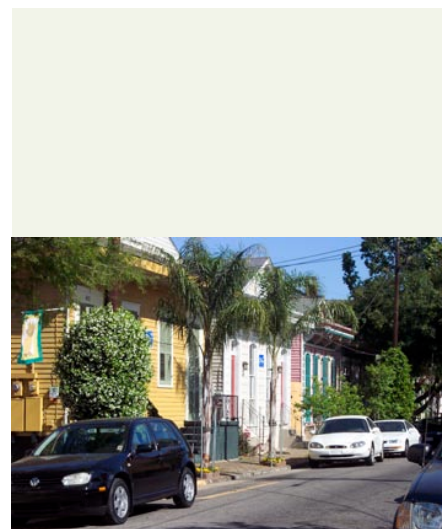
Regulations in historic districts in New Orleans contain basic standards for building form and the relationship of buildings to streets. Regulations in other districts in New Orleans deal with building form only by limiting height and imposing setback requirements. Yet much of the character of the City is established by the relationships of buildings to streets. Walking along a narrow street with a series of four-story buildings set back only a few feet from the sidewalk creates a very different experience from walking along a wide street with buildings set back large distances. This focus on street corridors appears to be a major element in many of the district plans. At a minimum, barriers to achieving the desired relationship between buildings and streets (such as excessive setbacks) should be eliminated. In many districts, the City might want to consider minimum building heights and maximum setbacks, to create the kind of streetscape its citizens’ desire.

11. Strengthen signage and billboard regulation throughout the City.

Create a comprehensive regulatory program for signs and billboards. Include standards for sign design, materials, lighting and movement (where allowed) that are context-sensitive, varying not only by district but by streetscape; size regulations that ensure that new signs are proportional to the sites, streets and neighborhoods in which or on which they are located; significant restrictions on signs in residential neighborhoods; neighborhood protection standards, to provide additional limitations on signs in commercial districts that face or are very near exclusively residential neighborhoods; flexibility to encourage creative sign design, within the standards suggested above; limitations of billboard-sized signs to areas and corridors where they are consistent with the plan; limitations on electronic and moving signs to minimize driver distraction on busy corridors; protection for expression of opinions on signs citywide; and a complete Constitutional review of current and proposed regulations to ensure that they are defensible under principles of law evolving from the U.S. Supreme Court, the Fifth Circuit Court of Appeals and the Louisiana Supreme Court

12. Ensure livability of the French Quarter and other areas with live, adult entertainment.

Create a comprehensive regulatory program for adult entertainment. This includes; new zoning controls to ensure livability of District 1 and other areas by mitigating impacts of uses on residents and other sensitive uses; improved permitting process with provisions to revoke or suspend permits for establishments with record of violations of local ordinances; interior design and operating standards tied to permitting process; complete review of existing and proposed regulations to ensure Constitutionality in an evolving legal environment; local study and legislative record to explain new regulations and to be used if necessary in defense of them. Note that this approach would not attempt to ban adult entertainment, which has traditionally had a role on Bourbon Street and elsewhere, but it would provide better management tools consistent with the livability goals of the District 1 Plan.



Updates to the Subdivision Regulations within a newly formatted Unified Development Code (UDC)

The City should consider adopting a new UDC, including an update of subdivision standards and procedures to include a new, expedited minor subdivision procedures for small-scale projects with infrastructure in place, major subdivision procedures, procedural flowcharts (graphical), and improved and streamline improvements bonding and release procedures. The UDC should also include hybrid (i.e. conventional, performance and form-based) zoning principles and approaches, which are more effective in implementing land use development proposals evolving out of the Citywide and District Recovery Plans.

An update of subdivision standards and procedures should include a legal review of State enabling legislation; an update of subdivision standards and procedures to include a comprehensive review of infrastructure requirements, with modifications needed to implement specific Citywide and District plan recommendations (e.g., inclusion of “rain gardens” and other low maintenance drainage features); expedited review procedures and delegation of approval authority to the extent allowed by State law; addition of a new minor subdivision procedure for small-scale projects with infrastructure in place; and improvements and streamlining of the bonding and release requirements and procedures for improvements. The Subdivision Regulations should also include new graphical flowcharts illustrating procedures for each subdivision type.

Section 5: Financial Plan

Overview

Funding the First Recovery Phase

A large-scale investment will be required to carry out the comprehensive recovery program detailed in the Citywide Strategic Recovery and Rebuilding Plan (“Citywide Plan”). Specifically, the Citywide Plan contemplates expenditures of approximately \$4.1 billion in the first phase (0-2 years) of the recovery plan period. The following table summarizes the estimated funding requirements in the first phase of the recovery:

ALL SECTORS

Incremental Required Investment

Sector Name	0-2 Years
Flood Protection	787,100,000
Neighborhood Stabilization	210,380,000
Housing	340,800,000
Economic Development	544,500,000
Infrastructure & Utilities	1,027,734,250
Transportation	227,015,478
Healthcare	26,150,000
Education	511,255,000
Public Safety	55,049,500
Environmental Services	46,104,500
Recreation & Public Libraries	91,062,500
Other Municipal & Cultural Resources	54,360,000
Historic Preservation/urban Design	48,680,000
Implementation	127,093,942
All Sectors Total	\$4,097,285,171

The table also demonstrates a balanced plan to invest in all the areas needed to execute an effective recovery for New Orleans. Consistent with the priorities outlined from broad public input, the financing plan emphasizes funding for Flood Protection and Neighborhood Stabilization, the two cornerstones of the City’s vision for a more safe and sustainable resettlement. Additional amounts are identified to provide for necessary infrastructure, public services, economic development, and cultural preservation investments.

The amount of investment shown in the table above represents *incremental funding* to monies which have already been committed or expended in the recovery effort. In other words, the amounts shown above represent the funding “gap” in fulfilling the Plan.

In filling this gap, local investment will be critical to ensuring that local residents have an important stake in the future development and economic benefit associated with the City’s recovery. Local investment also demonstrates to external investors, both public and private, that New Orleanians are committed to the rebuilding of their own community and are

assuming significant financial responsibility for the recovery of New Orleans.

In addition to a diversity of funding from local and external sources, funding for the first phase of the recovery must be diversified between public and private sources as well. We believe that a target of 15%+ in private financing will boost the effectiveness of fundraising from public sources.

Funding Later Phases of Recovery

To complete New Orleans' recovery, an additional investment of approximately \$9.9 billion is budgeted for the two additional phases of the Plan. Like the funding for the first recovery phase, this investment is expected to come from a mix of public and private sources as well as a combination of local and external investors. The following table gives the total amount of required funding required by recovery sector and the targeted mix of financing from all sources to complete the recovery process in New Orleans over a 10-year period:

ALL SECTORS

Incremental Required Investment

Sector Name	2-5 Years	5+ Years
FLOOD PROTECTION	1,974,000,000	630,000,000
NEIGHBORHOOD STABILIZATION	420,370,000	419,600,000
HOUSING	480,200,000	-
ECONOMIC DEVELOPMENT	328,500,000	88,000,000
INFRASTRUCTURE & UTILITIES	861,425,750	296,400,000
TRANSPORTATION	485,566,370	2,336,600,000
HEALTHCARE	10,000,000	-
EDUCATION	478,970,000	14,275,000
PUBLIC SAFETY	47,162,500	3,200,000
ENVIRONMENTAL SERVICES	78,313,500	10,000,000
RECREATION & PUBLIC LIBRARIES	184,362,500	129,425,000
OTHER MUNICIPAL & CULTURAL RESOURCES	80,040,000	133,400,000
HISTORIC PRESERVATION/URBAN DESIGN	77,145,000	126,475,000
IMPLEMENTATION	160,866,250	125,314,808
ALL SECTORS TOTAL	\$5,666,921,869	\$4,312,689,808

Financing Plan Principles and Strategies

Financing Principles and Priorities

Several principles and priorities guided the development of the Citywide financing plan. Specifically, the following objectives shaped its design:

1. Comprehensiveness – All sectors and all citizens are accounted for in the determination of the financing need.
2. Support for Individual Choice – Emphasis is placed on supporting individual choice, regardless from which district a citizen hailed, and regardless of the resettlement area to which an individual might choose to return. Importantly, the financing plan does not pit one neighborhood against another.

3. Effective Incentives – In order to encourage citizen choices in favor of flood protection and neighborhood stability, sufficient resources should be available to citizens/small businesses such that those individuals/businesses would not be financially disadvantaged by their choice to act in the best interest of the city’s future development.
4. Diversity of Funding Sources – Funding should tap both local and external sources as well as private and public sources. Such diversity in funding increases the chances for success in obtaining enough resources to execute the entire Plan. Also, diversifying the funding of the Plan gives a variety of parties a stake in our City’s future and spreads the financial risk and responsibility among a larger group of investors, including citizens and businesses of New Orleans.

General Financing Strategies

Funding for the Plan will come from three general sources – a) public disaster related funds, b) public non-disaster related funds and c) private funds.

Public Disaster Related Sources

Public disaster related funds in this category might generally be expected to be used primarily in the first two years of the recovery period. Types of funding in the public disaster related category include:

- FEMA Public Assistance (PA) funds
- FEMA Incremental Cost of Compliance (ICC) funds
- Community Development Block Grants (CDBG)
- Hazard Mitigation Grant Program (HMGP) funds

Strategies for maximizing the yield from these funding categories include:

1. Process PA Applications Better and Faster – Professional consultants may be used to augment staff in the submittal of new PA applications and to review already submitted applications to speed the processing of those applications and ensure that the maximum yield is achieved from those applications.
2. Employ Strategies for Use of CDBG and HMGP Funds – Judicious use of CDBG and HMGP monies may stretch the amount of funding received and achieve other recovery goals, simultaneously. For example, HMGP monies may be used to help fund neighborhood stabilization programs like clustering instead of merely buying out properties which must then be held as unused “green space.” In this case, using the HMGP funding would support an important initiative and preserve land made available through the clustering program for further resettlement or for economic development purposes. Also CDBG funding may be made more productive by using such funds in private/public economic development projects such that income earned from such projects may be used to replenish previous expenditures of CDBG monies. In that way, CDBG funds may be recycled, producing a “multiplier effect” for such funds.
3. Seek Certain Waivers to Use PA and HMGP Funds for Strategic Purposes – Current rules for PA and HMGP funds do not function well with large-scale disasters, such as the 2005 presidential declarations that affected the entire Gulf Coast. Because of the widespread destruction and slow pace of repopulation and recovery, the City must not merely put itself back together, but it must do so in a smarter fashion. As an example, certain rules penalize PA applicants that would use funding for strategic rather than simple repair purposes, thus reducing the amount of funding available.

Public Non-Disaster Related Sources

In the public non-disaster related category, funding and other assistance for economic development may be obtained from federal, state and local resources. The following is a non-exhaustive list of various departments, agencies and potential initiatives from which the City may draw actual funding or other economic development assistance:

Federal Sources

- Housing and Urban Development (non-disaster CDBG funding)
- Department of Energy
- Department of Transportation
- Department of Commerce
- Department of Education
- Environmental Protection Agency
- Department of Health and Human Services
- U.S. Congress (through special tax legislation or appropriations)

State of Louisiana

- Department of Culture, Recreation and Tourism
- Department of Economic Development
- Department of Environmental Quality
- Department of Health & Hospitals
- Department of Insurance
- Department of Education K-12
- Housing Finance Agency
- Office of Financial Institutions

City of New Orleans/Orleans Parish

- Short-term public financings
- Long-term public financings
- Restructuring of existing debt
- Asset disposition programs (to find alternate uses/value for idle facilities)
- Improved revenue collection techniques
- Property tax assessment rationalization

Private Funding Sources

The private sector holds tremendous promise for financing the recovery of New Orleans. It is a very deep and diverse source of financing. Additionally, it is one which offers some of the most creative options. Private funds can take the form of foundation grants, corporate gifts, equity investments, loans, public/private partnerships, training services, individual wealth, private insurance proceeds, etc.

With regard to philanthropic organizations, the following is a brief list of potential benefactors, some of which have already provided assistance toward the rebuilding of New Orleans (including in the UNOP planning effort):

Private Foundations

- Rockefeller Foundation
- Greater New Orleans Foundation
- Clinton Foundation
- Clinton Climate Initiative
- Bush-Clinton Katrina Fund
- Entergy Foundation
- W.K. Kellogg Foundation
- Bill & Melinda Gates Foundation
- Ford Foundation
- Bank of America Foundation
- The Build Initiative
- The Lucent Technologies Foundation
- Lilly Endowment
- Community Reinvestment Act (CRA) funds of various financial institutions

Many large corporations have already become partners in New Orleans' recovery. They include: Home Depot, Lowe's, Chrysler Corporation, Ford Motor Company, British Petroleum, Entergy Corporation, General Electric Corporation, and Wal-Mart to name only a few corporate-givers. According to the U.S. Chamber of Commerce, over 350 companies have pledged over \$500 million to the Katrina recovery effort.

Financing Requirements

Summary of Sector Costs by Phase

ALL SECTORS

Incremental Required Investment

Sector Name	Total	Capital Expenditures	Implemen. Staff
FLOOD PROTECTION	3,391,100,000	3,391,100,000	-
NEIGHBORHOOD STABILIZATION	1,050,350,000	1,050,350,000	-
HOUSING	821,000,000	821,000,000	-
ECONOMIC DEVELOPMENT	961,000,000	961,000,000	-
INFRASTRUCTURE & UTILITIES	2,185,560,000	2,185,560,000	-
TRANSPORTATION	3,049,181,848	3,049,181,848	-
HEALTHCARE	36,150,000	36,150,000	-
EDUCATION	1,004,500,000	1,004,500,000	-
PUBLIC SAFETY	105,412,000	105,412,000	-
ENVIRONMENTAL SERVICES	134,418,000	134,418,000	-
RECREATION & PUBLIC LIBRARIES	404,850,000	404,850,000	-
OTHER MUNICIPAL & CULTURAL RESOURCES	267,800,000	267,800,000	-
HISTORIC PRESERVATION/URBAN DESIGN	252,300,000	252,300,000	-
IMPLEMENTATION	413,275,000	1,940,000	411,335,000
ALL SECTORS TOTAL	\$14,076,896,848	\$13,665,561,848	\$411,335,000

Incremental Required Investment

Sector Name	0-2 Years	2-5 Years	5+ Years
FLOOD PROTECTION	787,100,000	1,974,000,000	630,000,000
NEIGHBORHOOD STABILIZATION	210,380,000	420,370,000	419,600,000
HOUSING	340,800,000	480,200,000	-
ECONOMIC DEVELOPMENT	544,500,000	328,500,000	88,000,000
INFRASTRUCTURE & UTILITIES	1,027,734,250	861,425,750	296,400,000
TRANSPORTATION	227,015,478	485,566,370	2,336,600,000
HEALTHCARE	26,150,000	10,000,000	-
EDUCATION	511,255,000	478,970,000	14,275,000
PUBLIC SAFETY	55,049,500	47,162,500	3,200,000
ENVIRONMENTAL SERVICES	46,104,500	78,313,500	10,000,000
RECREATION & PUBLIC LIBRARIES	91,062,500	184,362,500	129,425,000
OTHER MUNICIPAL & CULTURAL RESOURCES	54,360,000	80,040,000	133,400,000
HISTORIC PRESERVATION/URBAN DESIGN	48,680,000	77,145,000	126,475,000
IMPLEMENTATION	127,093,942	160,866,250	125,314,808
ALL SECTORS TOTAL	\$4,097,285,171	\$5,666,921,869	\$4,312,689,808

Individual Sector Costs by Project and Phase

FLOOD PROTECTION

Incremental Required Investment

Project Name	Capital Expenditures	0-2 Years	2-5 Years	5+ Years
Elevate New Orleans	1,200,000,000	540,000,000	660,000,000	-
Flood Proof Essential Public Equipment	90,000,000	36,000,000	54,000,000	-
Study: Internal Flood Protection Measures for Selected N.O. East Neighborhoods	500,000	500,000	-	-
Study: Hurricane Protection Levee System for Algiers	200,000	200,000	-	-
Study: Hurricane Protection Levee System and Flood Protection for Algiers Lower Coast	200,000	200,000	-	-
Slab on Grade Remediation	2,100,000,000	210,000,000	1,260,000,000	630,000,000
Study: Flood Protection Between Orleans and Jefferson Parishes	200,000	200,000	-	-
FLOOD PROTECTION TOTAL	\$3,391,100,000	\$787,100,000	\$1,974,000,000	\$630,000,000

NEIGHBORHOOD STABILIZATION

Incremental Required Investment

Project Name	Capital Expenditures	0-2 Years	2-5 Years	5+ Years
Neighborhood Cluster Program	1,049,000,000	209,800,000	419,600,000	419,600,000
Small Area Adaptive Re-Use Studies	250,000	250,000	-	-
Streamline Process for Blighted Housing and the "Lot Next Door" Program	1,100,000	330,000	770,000	-
NEIGHBORHOOD STABILIZATION TOTAL	\$1,050,350,000	\$210,380,000	\$420,370,000	\$419,600,000

HOUSING

Incremental Required Investment

Project Name	Capital Expenditures	0-2 Years	2-5 Years	5+ Years
Implement Permanent Housing Development Strategy for all Displaced Residents	10,000,000	4,000,000	6,000,000	-
Establish "Singles and Doubles Loan Program"	50,000,000	25,000,000	25,000,000	-
Home Buyer Assistance for Low to Moderate Income Homeowners	50,000,000	25,000,000	25,000,000	-
Rehabilitate and Rebuild 5,000 Low Income Housing Units	650,000,000	260,000,000	390,000,000	-
Home Rehabilitation Program for Low to Moderate Income Homeowners	50,000,000	20,000,000	30,000,000	-
Transient Worker Housing Program	10,000,000	6,000,000	4,000,000	-
Neighborhood Recovery Resource Centers	1,000,000	800,000	200,000	-
HOUSING TOTAL	\$821,000,000	\$340,800,000	\$480,200,000	\$0

ECONOMIC DEVELOPMENT

Incremental Required Investment

Project Name	Capital Expenditures	0-2 Years	2-5 Years	5+ Years
Implement Bio-Innovation Center	55,000,000	27,500,000	27,500,000	-
LSU/VA/University Hospital	300,000,000	150,000,000	150,000,000	-
Seed and Early Stage Equity Capital Fund	100,000,000	100,000,000	-	-
Cruise Ship Terminal Expansion	50,000,000	50,000,000	-	-
Replace Port Container Capacity	100,000,000	50,000,000	50,000,000	-
Expansion of Louis Armstrong International Airport	220,000,000	66,000,000	66,000,000	88,000,000
Commercial Corridor Revitalization Program	15,000,000	7,500,000	7,500,000	-
Relocate of New Orleans Cold Storage (NOCS)	49,000,000	49,000,000	-	-
Small Business Incubator and Assistance Program	15,000,000	15,000,000	-	-
Develop Louisiana Cancer Research and Treatment Center	55,000,000	27,500,000	27,500,000	-
Canal Street Revitalization	1,000,000	1,000,000	-	-
Study Adaptive Reuse of Publicly Owned Property	1,000,000	1,000,000	-	-
ECONOMIC DEVELOPMENT TOTAL	\$961,000,000	\$544,500,000	\$328,500,000	\$88,000,000

INFRASTRUCTURE & UTILITIES

Incremental Required Investment

Project Name	Capital Expenditures	0-2 Years	2-5 Years	5+ Years
Algiers Drinking Water Plant-Emergency Fuel Storage & Filter Valve Control Sytem	3,845,000	3,076,000	769,000	-
Carrollton Drinking Water Plant-Additional Flocculation and Sedimentation Capacity	26,000,000	6,500,000	14,300,000	5,200,000
Carrollton Drinking Water Plant-Short Term Projects	73,610,000	58,888,000	14,722,000	-
Drainage Improvements - Short Term Projects	20,830,000	16,664,000	4,166,000	-
East Bank Wastewater Treatment Plant - Levee Improvement Mitigation and Wetlands Project	67,000,000	16,750,000	16,750,000	33,500,000
Power Plant	125,000,000	100,000,000	25,000,000	-
Study: Sewerage & Water Board Technical Staff	200,000	50,000	50,000	100,000
Wastewater Collection System - Medium Term Improvements	333,000,000	133,200,000	133,200,000	66,600,000
Wastewater Collection System - Short Term Improvements	361,000,000	288,800,000	72,200,000	-
Water Distribution System - Medium Term System Replacement and High Lift Facility	955,000,000	238,750,000	525,250,000	191,000,000
Water Distribution System - Asset Management Plan & Short Term System Replacement	208,000,000	156,000,000	52,000,000	-
Citywide Wireless Network	12,075,000	9,056,250	3,018,750	-
INFRASTRUCTURE & UTILITIES TOTAL	\$2,185,560,000	\$1,027,734,250	\$861,425,750	\$296,400,000

TRANSPORTATION

Incremental Required Investment

Project Name	Capital Expenditures	0-2 Years	2-5 Years	5+ Years
Repair/Restoration of High Priority Major Roads	83,763,458	67,010,766	16,752,692	-
Repair/Restoration of High Priority Minor Roads	82,946,261	66,357,009	16,589,252	-
Repair/Restoration of High Priority Collector Roads	24,277,859	19,422,287	4,855,572	-
Repair/Restoration of High Priority Local Roads	3,844,270	3,075,416	768,854	-
Ongoing Replacement of all Major and Minor City Streets	2,200,000,000	-	176,000,000	2,024,000,000
Study: Streetcar Travel Time	150,000	150,000	-	-
East West Corridor/Downtown Loop	600,000,000	60,000,000	240,000,000	300,000,000
Extension of Riverfront Streetcar Line	42,000,000	4,200,000	25,200,000	12,600,000
Implement City Bike Path Master Plan System	9,000,000	3,600,000	5,400,000	-
Study: Expanding Streetcar and Light Rail Routes	650,000	650,000	-	-
Evacuation and Disaster Response Plan	750,000	750,000	-	-
Study: Removal of I-10 Over Claiborne Ave.	500,000	500,000	-	-
Study: Soundwall Along I-10 and I-610	850,000	850,000	-	-
Study: Traffic and Parking Management	450,000	450,000	-	-
TRANSPORTATION TOTAL	\$3,049,181,848	\$227,015,478	\$485,566,370	\$2,336,600,000

OK
100.0%

HEALTHCARE

Incremental Required Investment

Project Name	Capital Expenditures	0-2 Years	2-5 Years	5+ Years
Redevelop of Neighborhood-Based Health Centers/Clinics	16,150,000	16,150,000	-	-
Restore Comprehensive Medical Services to New Orleans East	20,000,000	10,000,000	10,000,000	-
HEALTHCARE TOTAL	\$36,150,000	\$26,150,000	\$10,000,000	\$0

OK
100.0%

EDUCATION

Incremental Required Investment

Project Name	Capital Expenditures	0-2 Years	2-5 Years	5+ Years
Neighborhood Community Centers	57,000,000	14,250,000	28,500,000	14,250,000
Repair, Renovate Existing and Build New School Sites	831,000,000	415,500,000	415,500,000	-
Temporary Modular School Facilities	116,400,000	81,480,000	34,920,000	-
Restore Vo-Tech Campuses/Study Need for New Ones	100,000	25,000	50,000	25,000
EDUCATION TOTAL	\$1,004,500,000	\$511,255,000	\$478,970,000	\$14,275,000

OK
100.0%

PUBLIC SAFETY

Incremental Required Investment

Project Name	Capital Expenditures	0-2 Years	2-5 Years	5+ Years
Develop A Citywide Network of State of the Art Police Substations	9,650,000	2,412,500	7,237,500	-
Develop and Integrate Crime Lab and Central Evidence and Property Storage	7,000,000	1,750,000	5,250,000	-
Provide A Citywide Criminal Surveillance System	5,600,000	1,400,000	4,200,000	-
Replace or Repair all NOPD Equipment	30,000,000	30,000,000	-	-
Renovate NOPD Headquarters	10,262,000	10,262,000	-	-
Renovation of NOPD Special Operations Unit	4,400,000	4,400,000	-	-
Renovate and/or Repair 7 District Headquarters Buildings	6,500,000	1,625,000	4,875,000	-
Permanent Emergency Communications Center	32,000,000	3,200,000	25,600,000	3,200,000
PUBLIC SAFETY TOTAL	\$105,412,000	\$55,049,500	\$47,162,500	\$3,200,000

OK
100.0%

ENVIRONMENTAL SERVICES

Incremental Required Investment

Project Name	Capital Expenditures	0-2 Years	2-5 Years	5+ Years
Implement Sustainable Environmental Strategies	100,000,000	30,000,000	60,000,000	10,000,000
Develop A Hurricane Recovery Soil Contamination Survey and Remediation Program	30,000,000	15,000,000	15,000,000	-
Reinstitute Citywide Recycling Services and Construction of Recycling Center	4,418,000	1,104,500	3,313,500	-
ENVIRONMENTAL SERVICES TOTAL	\$134,418,000	\$46,104,500	\$78,313,500	\$10,000,000

RECREATION & PUBLIC LIBRARIES

Incremental Required Investment

Project Name	Capital Expenditures	0-2 Years	2-5 Years	5+ Years
Renovate Main Library and Safeguard City Archives Phase 1 and Phase 2	36,000,000	3,600,000	14,400,000	18,000,000
Repair, Renovate, or Build Regional Libraries	19,850,000	4,962,500	4,962,500	9,925,000
Repair, Renovate, or Build Neighborhood Libraries	35,000,000	8,750,000	8,750,000	17,500,000
Implement the City Park Master Plan	115,000,000	28,750,000	28,750,000	57,500,000
Repair and Renovate Regional Parks	24,000,000	6,000,000	6,000,000	12,000,000
Repair and Renovate District Neighborhood Parks	5,000,000	500,000	2,000,000	2,500,000
Renovate Public Marinas	150,000,000	37,500,000	112,500,000	-
Create New Parks and Greenways	20,000,000	1,000,000	7,000,000	12,000,000
RECREATION & PUBLIC LIBRARIES TOTAL	\$404,850,000	\$91,062,500	\$184,362,500	\$129,425,000

OTHER MUNICIPAL & CULTURAL RESOURCES

Incremental Required Investment

Project Name	Capital Expenditures	0-2 Years	2-5 Years	5+ Years
Expansion of Existing Arts District	500,000	500,000	-	-
Create a Downtown Theatre District	500,000	500,000	-	-
Invest in Cultural Recovery Programs	266,800,000	53,360,000	80,040,000	133,400,000
OTHER MUNICIPAL & CULTURAL RESOURCES TOTAL	\$267,800,000	\$54,360,000	\$80,040,000	\$133,400,000

HISTORIC PRESERVATION/URBAN DESIGN

Incremental Required Investment

Project Name	Capital Expenditures	0-2 Years	2-5 Years	5+ Years
Katrina Recovery Monument	3,500,000	350,000	875,000	2,275,000
Technical/Financial Assistance Program for Owners of Historic Properties	300,000	150,000	150,000	-
Develop a Pattern Book of New Orleans Architecture	100,000	100,000	-	-
Sidewalk, Streetscape, and Neutral Ground Improvements	240,400,000	48,080,000	72,120,000	120,200,000
Restoration of Historic Forts	8,000,000	-	4,000,000	4,000,000
HISTORIC PRESERVATION/URBAN DESIGN TOTAL	\$252,300,000	\$48,680,000	\$77,145,000	\$126,475,000

IMPLEMENTATION

Incremental Required Investment

Project Name	Capital Expenditures	Implemen. Staff	0-2 Years	2-5 Years	5+ Years
Implementation - Regulatory Amendments	1,940,000	-	1,940,000	-	-
Implementation Staffing	-	411,335,000	125,153,942	160,866,250	125,314,808
IMPLEMENTATION TOTAL	\$1,940,000	\$411,335,000	\$127,093,942	\$160,866,250	\$125,314,808

Required Investment for the City's Successful Recovery

Funding the required investment to complete the recovery of New Orleans will present significant challenges. All sources, public and private must be tapped to successfully complete the recovery. The table below displays one potential scenario for funding the recovery. This scenario is meant as a discussion piece to illustrate how the investments required for this Plan could potentially be funded. ***This scenario is not an official plan, and actual funding of this Plan is likely to vary substantially from the scenario given below. Accordingly, no reliance should be placed on this scenario:***

ALL SECTORS

Potential Financing Sources

Sector Name	Total	Total Public Sources	Total Private Sources
FLOOD PROTECTION	3,391,100,000	3,391,100,000	-
NEIGHBORHOOD STABILIZATION	1,050,350,000	1,050,350,000	-
HOUSING	821,000,000	310,000,000	511,000,000
ECONOMIC DEVELOPMENT	961,000,000	476,000,000	485,000,000
INFRASTRUCTURE & UTILITIES	2,185,560,000	2,148,485,000	37,075,000
TRANSPORTATION	3,049,181,848	2,749,181,848	300,000,000
HEALTHCARE	36,150,000	36,150,000	-
EDUCATION	1,004,500,000	506,900,000	497,600,000
PUBLIC SAFETY	105,412,000	60,412,000	45,000,000
ENVIRONMENTAL SERVICES	134,418,000	74,418,000	60,000,000
RECREATION & PUBLIC LIBRARIES	404,850,000	277,350,000	127,500,000
OTHER MUNICIPAL & CULTURAL RESOURCES	267,800,000	134,400,000	133,400,000
HISTORIC PRESERVATION/URBAN DESIGN	252,300,000	120,600,000	131,700,000
IMPLEMENTATION	413,275,000	213,275,000	200,000,000
ALL SECTORS TOTAL	\$14,076,896,848	\$11,548,621,848	\$2,528,275,000
% of Total Required Investment	100.0%	82.0%	18.0%

First, it will take time to secure the funding necessary for the City to successfully recover. Advocacy and fund-raising will require a concerted and sustained effort from City officials and the public. The Flood Protection and Neighborhood Stabilization programs are the cornerstones of this Plan. These two initiatives are the foundation for a viable and sustainable future for our City and its residents and businesses. These are our citizens' priorities for recovery investment and therefore this scenario's top-candidates for federal funding. Investments in Infrastructure, Transportation and Education are also well-matched candidates for a special appropriation and/or increased apportionment of annual federal budget allocations.

Regardless of what scenario may be envisioned, it is clear that a substantial portion of the recovery investment required will have to come from private sources, such as foundation grants, corporate gifts, equity investments, loans, public/private partnerships, training services, individual wealth, and private insurance proceeds. In the scenario above, approximately 18% of the total funding or \$2.5 billion is targeted for private funding.

Conclusion

Although the price-tag of New Orleans' recovery is large, the financing will come in stages and the City will be able to build momentum as the recovery progresses. Staging the recovery and the financing of the recovery are important management efforts that must be aligned in order for the City and its citizens to achieve an effective and equitable recovery. Diversity of funding is also a key to achieving success. The New Orleans recovery management team will have to carefully construct the detailed financing plan, raise sufficient capital, and then execute in a manner that best serves the recovery at the lowest cost to the City, its residents, and its businesses.

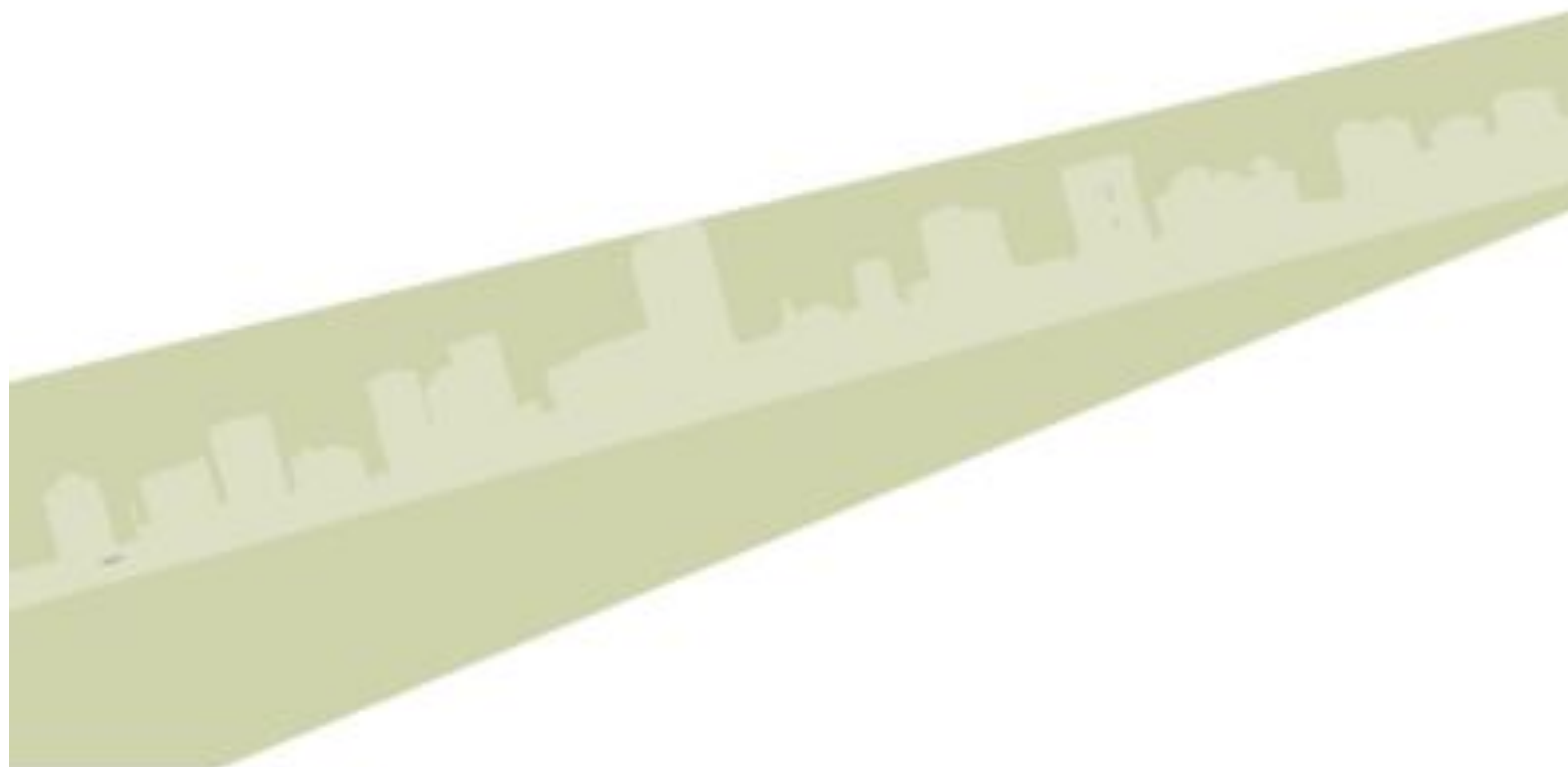


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The Unified
New Orleans Plan

CITYWIDE STRATEGIC RECOVERY
AND REBUILDING PLAN

Appendix A CITYWIDE PROJECT LIST



Project Description Sheet #01

Project Name:	“Elevate New Orleans” Incentive Program for Residential and Small Business Owners
Recovery Value:	Recovery – Very High Value
Area of Project Impact:	Regional
Category:	Flood Protection
Project Location:	Citywide
Project Description:	The purpose of this project is to encourage owners of raised houses, whose properties are located in low-lying, flood prone areas, and which flooded in Katrina or in any other flood event, to elevate their house to the new FEMA Base Flood Elevation (BFE) or higher. This program is intended to fill the gap between what the LRA or FEMA will pay (up to \$65,000 combined for those who had flood insurance) and the true costs to elevate, said to average \$45,000 for raised structures.
Project Cost Estimate:	\$1.2 billion. Assumptions: There are approximately 85,000 housing units that would be eligible for this program. Approximately 75% (63,750) will participate. 60% of homeowners had flood insurance, 40% did not. For those with insurance, The LRA and FEMA funds cover the full costs. For those without, the Elevate New Orleans Program will pay the full \$45,000.
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	The purpose of this project is to mitigate damage from future storms.

Project Description Sheet #02

Project Name:	Floodproof Essential Public Equipment
Type of Project:	Recovery – Very High Value
Category:	Flood Protection
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	The purpose of this project is to “harden” essential equipment in key public buildings so that they are impervious to high winds and rising flood waters. This could include such things as back-up generators in hospitals, police and fire stations, courts, jails and prisons, airports, emergency medical service facilities, hazmat response facilities.
Project Cost Estimate:	\$90,000,000. Maintenance Costs = Negligible (most facilities already have back-up equipment but many of them flooded). Operations Costs = No additional costs over current
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	The purpose of this project is to mitigate damage from future storms and speed up the recovery process by being able to operate emergency services during and immediately after the storm

Project Description Sheet #03

Project Name:	Study: Internal Flood Protection measures for New Orleans East
Type of Project:	Recovery – High Value
Category:	Flood Protection
Area of Project Impact:	New Orleans East
Project Location:	Planning District #: 9, 10 Neighborhood: to be determined by study
Project Description:	<p>The primary purpose of this project is to study the possibility of protecting individual neighborhoods, or groups of neighborhoods, from flooding during a hurricane storm surge by constructing interior levees or berms and pumping stations as a secondary flood protection system. This concept is endorsed by the Coastal Protection and Restoration Authority Master Plan.</p> <p>The second component of this project is to provide an independent, third party assessment of the existing hurricane and flood protection system for District 9 and 10, any improvements that are being made to the hurricane protection system and an on-going assessment of risk to District residents. This review team would draw upon local, national, and international hurricane modeling and engineering expertise.</p>
Project Cost Estimate:	Capital costs = \$500,000 (Feasibility Study) Maintenance Costs = to be determined by study Operations Costs = to be determined by study
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	The purpose of this project is to mitigate damage from future storms and provide improved flood protection for neighborhoods in N. O. East.

Project Description Sheet #04

Project Name:	Study: Hurricane Protection Levee system for Algiers
Type of Project:	Recovery - High Value
Category:	Flood Protection
Area of Project Impact:	Citywide
Project Location:	Planning District #: 12
Project Description:	<p>The primary purpose of this project is to study the possibility of providing storm surge flood protection to Algiers and to separate Algiers from Jefferson Parish in terms of flood protection. This concept is endorsed by the Coastal Protection and Restoration Authority Master Plan.</p> <p>The second component of this project is to provide an independent, third party assessment of the existing flood protection system for District 12 and an on-going assessment of risk to District residents. This review team would draw upon local, national, and international hurricane modeling and engineering expertise.</p>
Project Cost Estimate:	<p>Capital costs = \$200,000 (Feasibility Study)</p> <p>Maintenance Costs = to be determined by study</p> <p>Operations Costs = to be determined by study</p>
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	The purpose of this project is to protect against storm surge from future storms that attack the City from the west.

Project Description Sheet #05

Project Name: **Study: Hurricane Protection Levee System and Flood Protection Study for Algiers Lower Coast**

Type of Project: Recovery – High Value

Category: Flood Protection

Area of Project Impact: Citywide

Project Location: Planning District #: 13

Project Description: The primary purpose of this project is to study the possibility of providing storm surge flood protection to Algiers Lower Coast and to separate Algiers Lower Coast from Plaquemines Parish in terms of flood protection. This concept is endorsed by the Coastal Protection and Restoration Authority Master Plan.

The second component of this project is to provide an independent, third party assessment of the existing flood protection system for District 13 and an on-going assessment of risk to District residents. This review team would draw upon local, national, and international hurricane modeling and engineering expertise. Due to the unique geography of District 13 and the presence of natural wetlands and forests, the role of these natural features in mitigating against rain related flooding will also be examined as part of this study. Suggested measures for preserving these natural features will also be examined.

Project Cost Estimate: Capital costs = **\$200,000** (Feasibility Study)

Maintenance Costs = to be determined by study

Operations Costs = to be determined by study

Estimates Prepared by: Citywide Planning Team

Anticipated Outcomes: The purpose of this project is to protect against storm surge from future storms that attack the City from the west.

Project Description Sheet #06

Project Name:	Slab-on-Grade Remediation Program
Recovery Value:	Recovery – Very High Value
Area of Project Impact:	Regional
Category:	Flood Protection
Project Location:	Citywide
Project Description:	<p>The purpose of this project is to encourage residential property owners, whose slab-on-grade homes were flooded, to demolish those homes and rebuild in a more traditional New Orleans style, either on piers or chain walls or with first floor basements, in order to raise their first floors above flood waters.</p> <p>This program may be used in conjunction with the Neighborhood Stabilization Program, in which homeowners are encouraged to relocate in clusters at higher elevations, where infrastructure and community services can be provided more efficiently. The funds indicated below are intended to provide gap financing between the costs of construction of an equivalent slab-on-grade home and elevating the new home to the required BFE.</p>
Project Cost Estimate:	\$2.1 billion. Assumptions: there are approximately 60,000 housing units that would be eligible for this program. Approximately 50% (30,000) will participate. The average additional incremental cost increase to build a 2,000 – 2,500 SF house at the new BFE, or better, is \$70,000. It should be strongly advocated that the LRA and FEMA consider participating in this program as an Increased Cost of Compliance (ICC).
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	The objective of this project is to mitigate damage from future storms, to re-establish the tradition of individual homeowners taking responsibility for protecting their own homes from flooding, and to promote a more “New Orleans” architectural approach to home design.

Project Description Sheet #07

Project Name:	Orleans/Jefferson Levee and Flood Protection Study
Recovery Value:	Recovery – Medium Value
Area of Project Impact:	Regional
Category:	Flood Protection
Project Location:	Planning Districts #: 1 - 7
Project Description:	<p>Pre-Katrina models of hurricane storm surge developed by LSU scientists identified storm surge through St. Charles Parish and Jefferson Parish as a potential threat to New Orleans. The primary purpose of this project is to study the feasibility of creating a barrier (berm or levee) that would prevent flooding that is occurring in either Orleans or Jefferson Parishes from encroaching into the adjoining parish. This concept is endorsed by the Coastal Protection and Restoration Authority Master Plan.</p> <p>A secondary component of this project would be to study the feasibility of an internal system of berms, levees, or floodwalls in the portion of New Orleans between the Industrial and 17th Street Canals. Such a system would serve as a redundant, secondary levee protection system in the event of primary levee failure. There are serious concerns about the effect that such a system would have upon drainage from rain events, but a preliminary study would examine the conceptual feasibility of an internal system.</p> <p>The final component of this project is to provide an independent, third party assessment of the pace of flood protection improvements and an on-going assessment of risk to residents on the East Bank of New Orleans, excluding New Orleans East (which is covered by a separate project). This review team would draw upon local, national, and international hurricane modeling and engineering expertise.</p>
Project Cost Estimate:	Capital costs = \$200,000 (Feasibility Study)
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	The objective of this project is to limit the effects of storm surge related flooding in the event of another catastrophic levee breach and to provide on-going analysis of the protection afforded by proposed and recently implemented flood protection improvements.

Project Description Sheet #08

Project Name:	Neighborhood Stabilization Program (Clustering)
Type of Project:	Recovery – Very High
Category:	Housing, Flood Protection, Economic Development, Infrastructure
Area of Project Impact:	Statewide
Project Location:	Moderate and high flood risk zones with slow and moderate paced recovery
Project Description:	<p>This program is completely voluntary and incentive-based, and only offered in those areas of the City with the slowest rates of repopulation, lowest natural elevations, and high risk of future flooding. It provides the funds and technical assistance to help residents and businesses return and resettle in more sustainable neighborhood clusters. The program is proposed to be applied in the areas where population return is slowest (<15% return across city blocks) and the risk of future flooding is highest. This project description sheet accounts for the funds for both the financial costs of resettlement (for single-family homeowners, renters of relocated residences, and small, neighborhood-serving businesses who also want to relocate near the neighborhood cluster), and the technical assistance necessary to contact and assist residents and businesses in their collective decision-making and assist in the cluster development. All reconstruction will follow FEMA flood guidelines and sustainable/green building practices.</p> <p>During early 2007, the City Planning Commission and City of New Orleans Office of Recovery Management are charged with working with neighborhoods to identify those areas within the City where the first phase of voluntary participation in the Neighborhood Stabilization program will be offered. These agencies will also work with State and federal officials to determine how Hazard Mitigation Grant Program and Road Home program funds can be packaged to help finance the first phase of the program. These agencies will also modify elements of the hazard mitigation plan to reflect the program plans.</p> <p>During early 2007, the City's Office of Recovery Management will also work with the staff of the State's Road Home program to develop the educational material and also a strategic outreach plan to present to phase one neighborhoods about voluntary, financial options for clustered resettlement and how the financing options will work in relation to the Road Home program. The Office of Recovery will work with the proposed Parishwide Recovery Council to coordinate with other agencies</p>

(e.g. Public Works, Recovery School District, public safety departments, New Orleans Redevelopment Authority, etc.) for property acquisition, building site development, infrastructure development, and public service development work that is linked to the program. The New Orleans Redevelopment Authority will be the responsible for the land-banking of properties purchased and their transfer into reuse, based upon the plans developed by the City Planning Commission. The first phase of the voluntary cluster program will be implemented over the next two years.

During the mid-term recovery (2 to 5 years), the City Planning Commission and New Orleans Office of Recovery will reevaluate neighborhood-level recovery progress and determine whether adjustments are needed with the first phase program and also identify candidate neighborhoods for a potential second phase of the program. These agencies will then work with neighborhoods to identify those areas where the second phase of voluntary participation in the Neighborhood Stabilization program will be offered and implement the second phase program.

Also for these areas, additional policies, programs and projects for small businesses and residents are provided in the Economic Development and Housing sector discussions, respectively. Likewise, additional policies, programs and projects are also provided in the Flood Protection, Utilities and Infrastructure, Transportation/Transit, and Community Services Sector discussions.

Project Cost Estimate:

\$1.049 billion. Approximately 6,000 residents are projected to participate in this program. Costs will cover 100% reimbursement for home buyout, demolition of structures determined to be used for open space, temporary living, and relocation costs. It will also cover costs for business and renter relocation costs. Costs will also cover technical assistance to work with neighborhoods to administer the program. Costs also account for homeowners who already rebuilt and now elect to participate in the voluntary buyout program. Average cost to the program per house is \$175,000.

Estimates Prepared by:

Citywide Planning Team

Anticipated Outcomes:

This project promotes neighborhoods coming back, instead of just individuals coming back, and will reduce the guesswork among residents and businesses about their neighborhood's future viability by restoring communities and reducing blight. Provides the City a more rationale framework to better manage, coordinate and effectively implement the recovery. Also provides a guide to the City and other agencies to use in restoring infrastructure and services, and targeting investments to

enhance infrastructure and services, and improve quality of life, which can stimulate additional investments.

Project Description Sheet #09

Project Name:	Small Area Adaptive Re-Use Studies
Type of Project:	Recovery – High Value
Category:	Neighborhood Stabilization
Area of Project Impact:	Citywide
Project Location:	Many high elevation/low risk districts/neighborhoods
Project Description:	<p>A policy that was strongly supported by the participants in Community Congress II is the idea of “clustering” residents in areas of higher elevation and less risk. There is ample land in the lower risk areas of New Orleans to accommodate substantial additional population. Surface parking lots, suburban style uses that constitute an inefficient use of land, and underutilized commercial buildings or districts that no longer have commercial utility would all be ideal locations for new mixed use communities. Before development got underway in these areas, however, it would be necessary to first compile a list of candidate areas. Subsequently, a comprehensive evaluation of current infrastructure, zoning, open space, transportation, preservation, and aesthetic conditions would be conducted in each of these areas. Following this analysis would be an equally detailed set of recommendations for specific regulatory changes and capital improvements that could best “re-vision” these areas in an attractive, sustainable, context sensitive fashion. The final component of these small area plans would also look carefully at the staging of infrastructure repairs and replacement to support evolving population growth in the area.</p> <p>This project would not be limited to areas of the highest elevation, though. Underutilized sites in lower portions of the city that could accommodate clusters; active industrial areas in need of additional infrastructure or a new vision for their long-term viability; and environmentally sensitive, less developed portions of the City would all be included in this project.</p>
Project Cost Estimate:	\$250,000 (Feasibility Study)
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	This project would provide safer, more densely populated redevelopment in higher elevation, less flood prone areas.

Project Description Sheet #10

Project Name:	Study: Streamline and Improve Process for Purchase of Blighted Housing and the “Lot Next Door” Program
Type of Project:	Recovery - High Value
Category:	Neighborhood Stabilization and Housing
Area of Project Impact:	Citywide
Project Location:	Moderate and low flood risk areas with fast and moderate paced recovery
Project Description:	<p>This project is two-fold. Initially, it is an independent study of best-practices methods for blighted and adjudicated property acquisition and redevelopment. This study would take their results to determine the funding requirements, legislative changes, support mechanisms and resources necessary for the implementation of an improved program. In the implementation phase, it could include additional staff support to walk participants through the process, changes in legislation which will simplify the process and/or increase eligibility and/or profitability, resources to increase the capacity of the non-profit sector engaged in the program, resources allocated to encourage private sector use of program, funding which will support NORA’s efforts to target specific areas which clear titles and forgiveness on taxes to new owners.</p> <p>Clarity and ease of use of “lot next door” programs will be a priority in all areas of the city.</p>
Project Cost Estimate:	Phase 1: Independent Study - \$100,000 . Phase 2: Implementation - \$1,000,000
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	Promotes the expedited reuse of the existing housing stock in areas where the risk of flooding is low or moderate and population resettlement has been rapid in order to accommodate additional population in these areas.

Project Description Sheet #11

Project Name: **Implement Permanent Housing Development Strategy for All Displaced Residents**

Recovery Value: Recovery - High Value

Category: Housing

Area of Project Impact: Citywide

Project Location: Citywide

Project Description: This project provides transitional staffing and technical assistance support to the Housing and Redevelopment agencies of the City of New Orleans to revive and expand pre-disaster housing production and rehabilitation programs in the City to citywide levels needed to address the extraordinary demands for affordable housing and housing for the elderly created by the Hurricanes Katrina and Rita. This project will build on the successful pre-disaster experiences of the smaller and limited scope programs the City had developed in conjunction with the lending and non-profit communities and will provide an enlarged mechanism to address the need for housing production, estimated to be 134,000 housing units and 67,000 home-owner units.

Home Purchase Assistance: Part of the project implementation strategy is creation of a loan fund to assist home purchasers.

Home Rehabilitation Assistance: The project will provide low interest loans to low/ moderate income residents to repair damaged homes through a partnership between local banks, the city, and local non-profit housing corporations.

Empty Lot and Abandoned Property Redevelopment (Single-family and Multi-family sites): In cases where there is no readily-discernible market demand for an abandoned property or lot that is owned by the city, a non-profit or CDC can be given the opportunity to redevelop the property.

Project Cost Estimate: **\$10,000,000**

Estimate Prepared by: City of New Orleans, New Orleans Redevelopment Authority

Anticipated Outcomes: New Orleans needs housing strategies now. Eighty percent (80%) of the city flooded and more than half of the city's population remains displaced. This program would affect the entire displaced population as well as anyone trying to move into the area. It is expanding limited existing housing redevelopment programs to address the entire parish as a result of the expanse of the need post-disaster.

Project Description Sheet #12

Project Name:	Singles and Doubles Program: Homebuyer Assistance for Rental Properties
Type of Project:	Recovery – High Value
Category:	Housing
Area of Project Impact:	Citywide
Project location:	All Districts
Project Description:	<p>A new “Singles and Doubles” project is proposed. This project will be similar to the Freddie Mac ‘Doubles’ Program where qualified borrowers can finance the purchase, purchase-and-rehabilitation, or refinance-and-rehabilitation of one-to two unit properties with personal down payments of as little as 2% of the purchase price or the appraised value. This initiative is designed to help reduce the cost of homeownership by enabling duplex borrowers to subsidize their monthly mortgage payments with rental incomes from the second unit. This program is part of the With Ownership, Wealth (WOW) campaign launched by the Congressional Black Caucus, Freddie Mac and other organizations in an attempt to add one million African-American homeowners nationwide by the year 2005.</p> <p>Approximately 40 percent of all of the housing in Greater New Orleans consists of duplex houses. Considering local conditions and the type of housing involved is vital. Duplexes have always played an important historical role in the revitalization of neighborhoods because they provide both affordable homeownership and rental opportunities at the same time. Duplexes also help support families by enabling grandparents, parents, and children to live together and to take care of each other.</p> <p>Participants in the existing Doubles Program include: Freddie Mac - Committing \$25 million in flexible, affordable mortgage products, Wells Fargo Home Mortgage Inc. - Originates the mortgages and sells them to Freddie Mac, The Neighborhood Development Foundation - Provides consumer outreach, credit counseling, and landlord counseling to prepare borrowers for the responsibility of leasing and maintaining a rental unit.</p>
Project Cost Estimate:	\$50,000,000
Estimate Prepared By:	Citywide Planning Team, Housing and Community Development Class (CUPA Spring 2005)
Anticipated Outcomes:	Address the housing shortage by providing assistance to rebuild or purchase thousands of damaged or destroyed doubles and rental units and rehabilitate occupied homes. This will provide quality, affordable

housing options for displaced residents and low and moderate income families by the end of 2008. Appropriate and required mitigation measures will be included in this assistance.

Project Description Sheet #13

Project Name:	Home Buyer Assistance for Low and Moderate Income Homeowners
Type of Project:	Recovery – High Value
Category:	Housing
Area of Project Impact:	Citywide
Project Location:	All Districts
Project Description:	<p>These are soft second funds, which are utilized for down payment, closing cost, and to buy down interest rates. It is critical that residents who want to return home and others that are interested in purchasing homes are given assistance in overcoming obstacles they encounter as they transition into the community.</p> <p>Another possible resource for “soft seconds”, Home Free (which is a HUD funded program) with a budget of \$12.5 million. These funds will be available to assist low-moderate income families with soft second mortgages. These are usually forgivable mortgages of up to \$25,000.00 and have requirements for the homeowner to reside in the house for a certain period of time, usually 10 years.</p>
Project Cost Estimate:	\$50,000,000
Estimate Prepared by:	NeighborWorks, Citywide Planning Team
Anticipated Outcomes:	Address the housing shortage by providing assistance to homeowners and small landlords to purchase damaged or destroyed owner occupied and rental units. Appropriate and required mitigation measures will be included in this assistance.

Project Description Sheet #14

Project Name:	Rehabilitate and Rebuild Low Income Housing
Type of Project:	Recovery – Very High Value
Category:	Housing
Area of Project Impact:	National
Project Location:	Citywide
Project Description:	<p>The federal Department of Housing and Urban Development (HUD) has declared its intention to rehabilitate and rebuild Public Housing in the City of New Orleans. The dimensions and timeframe of this undertaking are unknown at this time. The purpose of this project is to ensure that HUD provides a sufficient number of public housing units to accommodate all displaced former public housing tenants in their own neighborhoods. In light of post-Katrina conditions, a housing strategy is required that accommodates all displaced former public housing tenants both in the short- and long-term. Public housing should be rehabilitated and/or built to the highest sustainable standards, incorporating mixed-income and mixed-uses, and be of a significantly higher density than current HOPE VI policies to establish a critical mass that will support and sustain retail, social services and community programs. Redevelopment plans should also account for seniors and individuals with disabilities.</p>
Project Cost Estimate:	\$650,000,000. To renovate 2,000 apartment units at a cost of \$100,000/unit would equal \$200,000,000. To rebuild 3,000 singles, doubles and four-plexes at \$150,000 per unit would equal \$450,000,000.
Estimates Prepared by:	City Wide Team
Anticipated Outcomes:	This project would address a basic tenet of the Recovery Plan, that every resident of New Orleans has a right to return home, including all residents of public housing.

Project Description Sheet #15

Project Name:	Home Rehabilitation Program for Low to Moderate Income Homeowners
Type of Project:	Recovery – Medium Value
Category:	Housing
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	<p>This will be a low interest loan program for low to moderate income home owners. Many homeowners did not suffer enough damage from Katrina to be eligible to Road Home disbursement. However, they are now facing rehabilitation of their properties in an environment where construction costs and material costs have risen over 25%. These homeowners, if they can get funding, often have to provide the first rehabilitation costs and will be reimbursed after inspection by their lender. Moreover, many homeowners lack the skills or the time to effectively oversee a contractor during the rehabilitation process. This project will speak to the need to design and implement a program to assist the low to moderate income homeowner with both technical assistance and low interest financing.</p>
Project Cost Estimate:	\$50,000,000
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	<p>There are many low to moderate homeowners whose property was damaged but not destroyed by Katrina. Their properties can be rehabilitated which will be a benefit to the community but the lack of low interest rehabilitation financing is an impediment and the lack of capital actually encourages disinvestment in housing units that could otherwise be reclaimed for use, either as home owner units or as rental units. Many units could be renovated for rental use in a city that has a dramatic shortage of affordable rental housing.</p>

Project Description Sheet #16

Project Name:	Transient Worker Housing
Type of Project:	Recovery – Very High Value
Category:	Housing
Area of Project Impact:	Regional
Project Location:	All areas of the City
Project Description:	This comprehensive program would make 10,000 to 20,000 units of worker housing available immediately, by identifying units within the existing rental housing stock, through the application of modular facilities, or by whatever means are found to house transitional workers who are temporarily in the city for the purposes of construction or other recovery related employment.
Project Cost Estimate:	\$10,000,000
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	The program is intended to expedite the recovery effort by providing housing for migratory workers.

Project Description Sheet #17

Project Name:	Neighborhood Recovery Resource Centers
Type of Project:	Recovery - High Value
Category:	Housing
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	<p>A concern for local residents is the absence of a single reliable source of information on the myriad aspects of public assistance, public services, permitting, and the rebuilding process in general. Recovery resource centers would be fully staffed resource stations with expertly-informed, highly capable counselors who would be available before, during, and after customary business hours to assist residents with all manner of requests. Residents would be able to find out more information about the Road Home program, the availability of primary health care and public schools, job openings, housing assistance programs, and city permitting processes. It is envisioned that a number of basic functions of city government such as scheduling building inspections and filing for permits would also be accommodated at these sites. Recovery resource center staff would be supplemented by computer workstations with internet access and a website that would enable residents to obtain information and ask questions remotely.</p> <p>These resource centers would be conveniently located throughout the City, co-located within various publicly owned buildings such as libraries, community centers, and public schools.</p>
Project Cost Estimate:	Capital cost: \$1,000,000 (equipment) Staffing: \$5,000,000 (annual salaries)
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	This project will substantially improve the public's access to critical rebuilding information. These centers will prove particularly valuable to those who do not have access to a computer or automobile. They will play an invaluable role in expediting the pace of rebuilding, especially in communities of need.

Project Description Sheet #18

Project Name:	Bio-Innovation Center
Type of Project:	Recovery - High Value
Category:	Economic Development
Area of Project Impact:	Regional
Project Location:	Planning District #: 1
Project Description:	<p>The Bio-Innovation Center is a 130,000 square foot wet lab incubator designed to nurture new and emerging biotechnology enterprises. This facility will be located on Canal Street and serve as a new “gateway” to the Medical District. It will also focus national and global attention on the District’s biomedical initiatives and serve as a source of potential deal flows for venture capital investments.</p>
Project Cost Estimate:	\$55,000,000
Estimates Prepared by:	<p>Cost and design information is based on data made available by Mr. Aaron Misench who serves as the Bio-Innovation Center’s Executive Director; 1615 Poydras Street, Suite 1000, N.O., LA 70112; 504-680-2973; www.neworleansbio.com.</p>
Anticipated Outcomes:	<p>This project will help to define the entire focus of the redeveloping Medical District and serve as a place to nurture new fast growth technology-driven high performance companies that have the potential of creating quality jobs and economic diversification.</p>

Project Description Sheet #19

Project Name:	LSU/VA/University Hospital						
Type of Project:	Recovery – Very High						
Category:	Economic Development						
Area of Project Impact:	National						
Project Location:	Planning District #: 2						
Project Description:	The replacement of “Big Charity” through a joint venture of LSUHSC and the Office of Veterans Affairs is critical to the redevelopment of the Medical District. These combined teaching, research and clinical and acute care facilities and services represent the critical anchor, along with Tulane Medical Center, of the District’s rebirth. Without these facilities, the medical district will not be revived, at least not anywhere near its pre-Katrina economic importance. Without the revitalization of the medical district, the vitality and sustainability of the entire downtown area may be impaired.						
Project Cost Estimate:	<p>\$950,000,000. The estimated cost to the state is \$300,000,000. Dr. Donald Smithburg, Exec. VP, LSU System, CEO Health Care Services Division; 225-922-0490; smithb@lsuhsc.edu.</p> <table><tr><td>LRA</td><td>\$300,000,000</td></tr><tr><td>FEMA</td><td>100,000,000</td></tr><tr><td>Tax Exempt Bonds</td><td>550,000,000</td></tr></table>	LRA	\$300,000,000	FEMA	100,000,000	Tax Exempt Bonds	550,000,000
LRA	\$300,000,000						
FEMA	100,000,000						
Tax Exempt Bonds	550,000,000						
Estimates Prepared by:	The joint committee established to prepare a business plan has released preliminary cost estimates for the proposed project.						
Anticipated Outcomes:	These facilities will anchor the critically-needed redevelopment of the Medical District and help return jobs, capital investment and residents to the downtown area of New Orleans.						

Project Description Sheet #20

Project Name:	Seed and Early Stage Equity Capital Fund
Type of Project:	Recovery – High Value
Category:	Economic Recovery
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	<p>Establishing a seed and early stage equity capital fund would help fuel a “culture of entrepreneurship” throughout the City. This would provide <u>pure</u> equity investments through a professionally managed partnership that would have a life of not less than five years and not more than ten years. The fund would take equity positions in new and emerging firms with specific buyout or exit strategies determined at the outset of each investment. The partnership could seek additional equity capital investments to broaden its initial base funding amount. It is suggested that the portfolio investment strategy target critical economic sectors or clusters within the city. This would include sectors such as biomedicine that is crucial to the redevelopment of the medical district in particular and the downtown in general.</p>
Project Cost Estimate:	Initial cost to establish fund is \$100,000,000 .
Estimates Prepared by:	This funding level was originally proposed by the Bring New Orleans Back Commission.
Anticipated Outcomes:	<p>The major outcome would be the injection of much needed equity capital into the entire New Orleans business community. It would energize a much-needed culture of entrepreneurship. And, it would provide a broader base of potential leverage for entrepreneurial enterprises that find it difficult to access debt markets to finance expansion or diversification. The long term outcome is greater job growth within targeted sectors of the City’s economy that provides a higher standard of living and opportunities for advancement.</p>

Project Description Sheet #21

Project Name:	Cruise Ship Terminal Expansion
Type of Project:	Recovery - High
Category:	Economic Development
Area of Project Impact:	Regional
Project Location:	Planning District #: 1
Project Description:	<p>Redevelopment of the Naval Support Facilities as a result of the BRAC process included the construction of one and possibly two new cruise ship terminals. Pre-Katrina, the Julia Street terminal was handling approximately 750,000 passengers annually. With cruise ships resuming their calls in New Orleans, passenger handling capacity should be increased to better position the City to re-gain its pre-storm momentum as a cruise ship destination. This would help existing lines increase their calls to the city and serve as an incentive to other cruise ship lines to add New Orleans to their ports of call.</p> <p>In addition to completing construction of the Erato Street Cruise Terminal Complex, a \$50 million capital project to create a new parking garage and cruise terminal, the State has funded planning and design for a cruise terminal at Poland Avenue Wharf.</p> <p>Reportedly, cruise industry trends are expecting additional capacity of twenty five new vessels to be added in the next three years. Building a new first-class terminal is recommended to secure at least three of the ships.</p>
Project Cost Estimate:	\$50,000,000 , based on estimates prepared for the BRAC facilities adaptive reuse proposal.
Estimates Prepared by:	The Port of New Orleans
Anticipated Outcomes:	There is a direct correlation between the volume of cruise ship passengers who visit New Orleans and the vitality of the tourist business in the city. When cruise ships are in port, retailers (particularly in the French Quarter) experience higher per capita sales, restaurants have higher per guest sales receipts and local cultural and entertainment venues have higher visitor volumes.

Project Description Sheet #22

Project Name:	Replace Container Handling Capacity at the Port of New Orleans
Recovery Value:	Recovery - High Value
Area of Project Impact:	Statewide
Category:	Economic Recovery
Project Location:	Planning District #: 1
Project Description:	<p>The France Road Container Terminal was destroyed by Katrina and the MR-GO was closed to deep draft shipping. This lost capacity must be replaced on the river. Containerized freight represents an ever-growing share of cargo volume in world-wide maritime trade. Pre-Katrina port modernization significantly increased capacity to handle containerized freight in New Orleans. Large companies should be targeted to provide dedicated or shared terminal expansion on an economic long-term basis. Also, creating a “Captured Cargo” initiative that works with the State to induce local producers of products, like chemical, forest, and food related products, to more fully utilize the Port should be targeted. Also, the Port should continue to aggressively pursue exploiting and growing a container-on-barge strategy that is being implemented by the competition.</p> <p>Finally, Port and State officials should work directly with Central and South American entities to capture a growing business of import and export activity especially in light of the recently announced plans to implement a CAFTA strategy similar to the highly effective NAFTA agreements years ago. In conjunction with this activity there should be further exploitation of the Foreign Trade Zone Master Plan.</p>
Project Cost Estimate:	\$100,000,000
Estimates Prepared by:	The Port of New Orleans
Anticipated Outcomes:	Containerized freight more than most other types presents an opportunity to attract more cargo where value-added manufacturing, assembly or processing could be pursued. This would have the potential of creating new jobs, attracting capital investment and diversifying the local and regional economy.

Project Description Sheet #23

Project Name:	Expansion of Louis Armstrong International Airport
Type of Project:	Recovery – Medium Value
Category:	Economic Development
Area of Project Impact:	Regional
Project Location:	City owned Louis Armstrong International Airport in Kenner
Project Description:	<p>The Louis Armstrong New Orleans International Airport (“Airport”) plays an integral role in the local economy as the gateway to the tourism industry, one of the mainstays of employment, and one of the few sectors that had experienced continuous growth before the storm. The economic activities directly related to the Airport generate hundreds of millions of dollars of income and thousands of jobs. The Airport also provides crucial services to local business and industry.</p> <p>The Airport’s new five year plan calls for an investment of over \$220 million, mostly in the expansion of existing concourses and loading bridges, taxiways, and acquisition of limited land surrounding the Airport. Management feels that the new development is critical to increasing passenger levels to pre-Katrina and beyond. While the majority of the proposed development would be supported by PFC and bond financings, if available, the continued support of AIP grants (26%) is critical as the cornerstone to the overall program.</p>
Project Cost Estimate:	\$220,000,000
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	<p>The project would increase substantially the ability of the Louis Armstrong International Airport to service larger and heavier aircraft and thus add to the versatility of the airport in a competitive environment.</p> <p>The Airport should also be considered for an expanded/new cargo operation as well. The Airport had only limited cargo traffic prior to the storm and has a small operation currently. If a cargo “hub” could be established to capture additional business from the aforementioned CAFTA that is being negotiated, new business relationships could be formed with Central and South America companies. A hub operation would not only create additional cargo revenues, but may also support headquarters, maintenance and other required ancillary services for third parties which could exponentially stimulate new financial opportunities.</p>

Project Description Sheet #24

Project Name:	Commercial Corridor Revitalization Program
Type of Project:	Recovery - Medium Value
Category:	Economic Development
Area of Project Impact:	Citywide
Project Location:	Corridors Citywide
Project Description:	<p>This project will promote the return of the business and mixed use corridors that are the backbones of neighborhoods. On a location specific basis, this project will examine, at a minimum, four separate components of a corridor's overall health and will implement improvements as necessary. These components are as follows:</p> <ul style="list-style-type: none">• Zoning and Land Use. Current zoning regulations often prescribe site plans that are fundamentally incompatible with the aesthetic character of a street. This project will examine regulatory incompatibilities, restrictive regulations, and the need for expanded design review on the part of the City Planning Commission or HDLC. It will recommend zoning changes as part of a revision to the Comprehensive Zoning Ordinance or interim measures such as zoning overlay districts. Where appropriate, more complex land use policies such as transfer of development rights programs will also be examined and recommended for implementation.• Publicly Owned Properties. Use publicly-owned properties to catalyze development in areas where the market response has been weak through adaptive reuse concepts• Improvements to the Streetscape. A streetscape beautification plan will be designed and implemented. These plans will consider street trees, above ground utilities, street furniture, lighting, and even changes to the overall street section.• Assistance to Property Owners. A targeted grant, revolving loan, and tax abatement program would be developed to assist small property owners with the rehabilitation of properties along key corridors.
Project Cost Estimate:	\$15,000,000. This includes aesthetic enhancements, sidewalk improvement and pedestrian amenities for approximately 75 miles of business corridors and commercial intersections at a cost of approximately \$200,000 per mile of each block face
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	One of the major benefits of this program would be the return to economic health of small businesses that would then be back on the city tax roles. Second, the return of mixed use corridors would act as a

catalyst to neighborhood recovery. Third, the return of small businesses to an area would provide employment opportunities to the residents of surrounding areas who may not have access to an automobile.

Project Description Sheet #25

Project Name:	Relocation of New Orleans Cold Storage (NOCS)
Recovery Value:	Recovery - High Value
Area of Project Impact:	Statewide
Category:	Economic Development
Project Location:	Planning District #: 2
Project Description:	<p>The purpose of this project is to retain an essential business enterprise of the State of Louisiana, a major client of the Port of New Orleans. NOCS is vital to the Port for their ability to store and export frozen poultry, a major commodity for shipment from the Port. A new facility at another site owned by the Port can be accomplished with adequate funding.</p> <p>NOCS has been curtailed significantly since the storm. A majority of the product had to be handled at facilities on the river due to draft restrictions, and the company is forced to truck cargo to the river at a cost of \$8-10 per ton incrementally. Due to the business challenges total losses reported by NOCS during the most recent seven month period, exceed \$500,000 and will reportedly jeopardize the firm's viability.</p> <p>Analysis of the industry and company needs support the development of a new cold storage facility on the river. Projected employment is estimated to exceed 235 jobs with a payroll of \$25 million and an additional 282 truck positions required. The projected economic value of just a new poultry facility would add \$153 million of direct and indirect activity with local and state tax generation of \$24 million. This move will preserve 1,159 current Louisiana jobs and potentially, over 3,000 Louisiana jobs.</p>
Project Cost Estimate:	<p>Capital costs = \$49,000,000</p> <p>Maintenance Costs = \$500,000 per year</p>
Estimates Prepared by:	Port of New Orleans
Anticipated Outcomes:	The objective of this project is to prevent a major tenant of the Port of New Orleans from relocating out of state. The Port lost critical deep-draft access to about 25% of its terminal operations and customers. Companies located in the Tidewater Area depended on the MRGO for deepwater access to the Gulf. Analysis of storm damage to facilities and closure of the MRGO has forced the Port to prioritize additional planning to

establish its operations and those of its customers to other venues, potentially along the Mississippi River.

Project Description Sheet #26

Project Name:	Small Business Incubator and Assistance Program
Type of Project:	Recovery - Medium Value
Category:	Economic Development
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	<p>Entrepreneurship is one of the most promising paths out of poverty and into the middle class. This program seeks to expand entrepreneurial opportunity among the City's poor and working class. Business incubators would be located in communities of need throughout the City, optimally in facilities whose primary function is already well defined (libraries, workforce training centers, community centers, etc.). This program would partner with local universities in rolling out the final program design and in connecting entrepreneurs with high level technical assistance.</p> <p>The physical facilities would include internet accessible computer workstations free of charge to registrants; low cost office space; printing and copying facilities and other basic office equipment; an on-going series of training and information sessions; a repository of available commercial buildings; information on registering for the City's Disadvantaged Business Enterprise (DBE) program; information and personal technical assistance on the variety of state and federal programs supporting small business; and extensive information on accessing and qualifying for private investment.</p> <p>As part of this project, the full suite of federal, state, and local small business assistance programs would be analyzed in the context of small business needs post-Katrina. At a minimum, incubators would provide extensive technical assistance in identifying relevant sources of governmental assistance and in assisting applicants in navigating application processes. At most, this program would include a supplemental, short term grant or loan program to fill the gap between existing programs and the unique, post-Katrina needs of the City's small businesses.</p>
Project Cost Estimate:	\$15,000,000
Estimates Prepared by:	Citywide

Anticipated Outcomes:

This project will provide small entrepreneurs with the physical infrastructure and information to develop successful small businesses.

Project Description Sheet #27

Project Name:	Develop Louisiana Cancer Research Center
Type of Project:	Recovery - Low Value
Category:	Economic Development
Area of Project Impact:	Statewide
Project Location:	Tulane Ave. and Claiborne Ave.
Project Description:	Completing the proposed 150,000 square foot facility for which ground was broken in December, 2003, will augment the size, viability, and capabilities of a revived Medical District in the downtown area. The Center was originally proposed as a joint venture of the Tulane and Louisiana State University Health Sciences Centers and the Louisiana Cancer Research Consortium. It will serve as a gateway to the Medical District.
Project Cost Estimate:	\$55 million
Estimates Prepared by:	Louisiana Cancer Research Consortium, Tulane, LSU
Anticipated Outcomes:	Successful implementation of this project will expand the revitalization of the medical district. The establishment of a specialized cancer center—akin to institutions like M.D. Anderson in Houston—will catalyze an influx of personnel and large-scale funds (both private and public). This project will help to define the entire focus of the redeveloping Medical District and serve as a place to nurture new fast growth which has the potential to create high-quality jobs and economic diversification.

Project Description Sheet #28

Project Name:	Neighborhood Workforce Training Program
Type of Project:	Recovery - Medium Value
Category:	Economic Development
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	<p>Prior to Hurricane Katrina, unemployment in many low income communities was intractable. Despite labor shortages, some evidence suggests that high unemployment rates have persisted in these communities since the storm. There are numerous, complex reasons for this problem. While not a panacea, a neighborhood based workforce training program could begin to bridge the gap between labor supply and demand.</p> <p>This program would not attempt to replicate the existing vocational programs offered through local community and technical colleges. It would be distinct from existing programs in several ways:</p> <ul style="list-style-type: none">• This program would be neighborhood based, using libraries, community centers, and other public facilities as the decentralized locations for workforce training centers.• On site, it would place a premium on basic job readiness skills and interviewing techniques rather than more advanced job skills• It would be a central repository for job openings, with skilled, capable staff members able to directly assist job seekers in finding promising job openings• It would provide interested individuals with information and recommendations on the breadth of more intensive job readiness programs currently available, from adult education to vocational training through technical and community colleges• It would maintain a registry of jobs available in the construction trades to connect job seekers with the most readily available source of jobs in the post-Katrina economy• It would provide information about the range of support services that some individuals may need to enter the job market, from child care to substance abuse counseling.
Project Cost Estimate:	\$10,000,000
Estimates Prepared by:	Citywide Planning Team

Anticipated Outcomes:

This project will connect the chronically unemployed and those seeking better career opportunities with more centralized, more intensive job training resources while also providing job seekers with basic skills and job opening information.

Project Description Sheet #29

Project Name:	Canal Street/Downtown Revitalization
Type of Project:	Recovery - High Value
Category:	Economic Development
Area of Project Impact:	Citywide
Project Location:	Planning District # 1
Project Description:	<p>Seek additional investment on and around Canal Street from a variety of sources. New Market Tax Credits and Historic Rehabilitation Tax Credits are currently available to developers of residential and commercial properties. Attract keystone retailers to the area and catalyze further commercial and residential development on Canal. In particular, many under-utilized upper floors will be converted to housing units. In addition to existing sources of funding, the project will require other strategic efforts and financing initiatives, including:</p> <ul style="list-style-type: none">• Direct financial assistance in the form of Tax Increment Financing and other subsidies, using projects like the revitalization of Times Square as a model of successful direct government support.• Intensive marketing funded by the Downtown Development District• Modifications to building codes to accommodate additional occupancy, using successful models like the New Jersey Rehabilitation Code and the Historic Rehabilitation Code in downtown Los Angeles.• A study of traffic and parking management to utilize the supply of parking garages and lots in the area and implement a validated parking program for residents and visitors• The attraction of theaters and other cultural establishments <p>While Canal Street is the focal node of this project, similar strategies will take place throughout downtown. Added investment along Canal will catalyze areas on both sides, and the effect will expand throughout downtown with respect to architectural and historical sensitivities throughout. Increased activity will be anticipated with a traffic and parking management study and the strategic adoption of its recommendations.</p>
Project Cost Estimate:	\$1,000,000
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	The result of the revitalization of Canal Street and downtown New Orleans will be a large area of increased investment activity, population,

aesthetic quality, employment, and economic and cultural viability. Focused and well-marketed efforts can restore Canal Street to its place as the signature street in New Orleans and the areas around it as a remarkable and attractive destination.

Project Description Sheet #30

Project Name:	Evaluation and Potential Adaptive Reuse of Publicly Owned Property
Type of Project:	Recovery - Medium Value
Category:	Economic Development
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	<p>Publicly owned property is a tremendous potential resource as New Orleans rebuilds from Hurricane Katrina. Many state or locally owned assets face looming financial challenges. This project recommends studies to evaluate those properties' long term viability in light of projected revenue sources and any efficiencies that could be gained through operational changes, capital improvements, or re-financing mechanisms.</p> <p>Other publicly owned properties are severely underutilized or in need of major capital renovations to restore some primary use. The principal advantages of capitalizing on the availability of these properties are 1) the fact that their reuse is less constrained by market forces, thereby allowing the government to explore creative development concepts such as mixed income housing and 2) the fact that they can have a catalytic effect on a surrounding area that is in need of an economic boost. For those properties that would remain in public control, this project would provide at least a portion of the resources to complete major renovations. For those properties that would be adaptively reused, this project would fund feasibility studies and a portion of the administrative costs associated with requests for proposals (RFPs) for their disposition and reuse.</p>
Project Cost Estimate:	\$1,000,000 (Feasibility Study)
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	This project will help to ensure a more stable financial footing for some of the public assets in New Orleans as well as a more efficient use of presently underutilized public properties so that pressing needs, such as affordable housing, may be addressed.

Project Description Sheet #31

Project Name: Algiers Drinking Water Plant-Emergency Fuel Storage & Filter Valve Control System

Type of Project: Recovery – High Value

Category: Public Utilities

Area of Project Impact: Citywide

Project Location: Planning District 12, 13

Project Description: Work at the Algiers Water Plant includes two separate projects. The first project involves the installation of additional diesel storage to increase on-site storage capacity to a 20 day supply. The work includes the associated piping and valves. The second project is for the replacement of the filter valve control system.

Project Cost Estimate:	Emergency Fuel Storage	\$ 45,000
	Filter Valve Control System	<u>\$3,800,000</u>
	Total	\$3,845,000

Estimates Prepared by: Sewerage and Water Board of New Orleans
December 2006 Black & Veatch Report

Anticipated Outcomes: Katrina raised awareness of the Board's dependence upon truck deliveries of diesel fuel and the limited storage capacity for fuel. The facility's diesel generator uses more than 2,000 gallons of fuel per day and there is only 10,000 gallon storage tank. A 20 day storage capacity is desired. Also, the filter valves are beginning to fail due to age.

Project Description Sheet #32

Project Name: **Carrollton Drinking Water Plant-Additional Flocculation and Sedimentation Capacity**

Type of Project: Recovery - High Value

Category: Public Utilities

Area of Project Impact: Citywide

Project Location: Planning District #: 3

Project Description: This is a two phase project. Phase 1 will provide for the construction of new sedimentation and flocculation basins. Once the new basins are constructed, Phase 2 provides for the rehabilitation of the existing basins.

Project Cost Estimate:

Phase 1 -	\$24,000,000
Phase 2 -	<u>\$2,000,000</u>
Total:	\$26,000,000

Estimates Prepared by: Sewerage and Water Board of New Orleans
December 2006 Black & Veatch Report

Anticipated Outcomes: Hurricane Katrina exacerbated the systemic problem of leaks in the City's water distribution system. These leaks require increased water production to satisfy demands for consumption and fire protection. The increased demand accelerated accumulation of sedimentation in the basins. Additional capacity is needed to satisfy this demand while allowing for required basin cleaning and maintenance. This work includes the construction of an alternate 100 MGD treatment train to provide for system redundancy.

Project Description Sheet #33

Project Name: **Carrollton Drinking Water Plant-Short Term Projects**

Type of Project: Recovery – High Value

Category: Public Utilities

Area of Project Impact: Citywide

Project Location: Planning District #: 3

Project Description: The Carrollton Drinking Water Plant short term improvements consist of eight separate projects to upgrade the plant. These projects include: 1) filter gallery improvements; 2) ferric sulfate storage capacity; 3) ammonia/chlorine conversion; 4) alternative corrosion control; 5) solids removal in water purification process; 6) Old River Intake pump station rehabilitation; 7) flow monitoring devices; and 8) communication system replacement.

Project Cost Estimate:	Filter Gallery Improvements	\$19,000,000
	Ferric Sulfate Storage	\$300,000
	Ammonia/Chlorine Conversion	\$3,180,000
	Alternative Corrosion Control	\$2,000,000
	Solids Removal in Water Purification	\$3,000,000
	Old River Intake Pump Station Rehab	\$40,000,000
	Flow Monitoring Devices	\$300,000
	Communication System Replacement	<u>\$5,830,000</u>
		\$73,610,000

Estimates Prepared by: Sewerage and Water Board of New Orleans
December 2006 Black & Veatch Report

Anticipated Outcomes: The Carrollton Water Treatment Plant suffered relatively minor damage, however, greater than normal water losses in the distribution system continue to require the plant to operate at capacity levels. Part of the plants mechanical and physical infrastructure has deteriorated due to age and is in need of replacement. These projects would also improve chemical storage capacity to prevent future shortages during a storm, convert the plant to a safer hypochlorite solution, provide redundancy for mechanical solids removal, rehabilitate outdated intake pumps, provide flow monitoring for efficient operation, and, replace the outdated communication system.

Project Description Sheet #34

Project Name: **Drainage Improvements – Short Term Projects**

Type of Project: Recovery – High Value

Category: Public Utilities

Area of Project Impact: Citywide

Project Location: Planning Districts 1-13

Project Description: The drainage improvements consist of four principal projects: 1) emergency cooling water systems; 2) emergency power supply at Drainage Station 13; 3) underpass drainage mitigation; and 4) safety room power supply. Project 1 provides redundancy in the cooling water for drainage stations by installing water wells at each station. Project 2 will provide emergency generators at Drainage Station 13. Project 3 adding pumping stations to key underpasses prone to flooding during storms. Project 4 provides each pumping station with a 45 KW generator for emergency personnel.

This project also includes an evaluation of the present condition and replacement need of minor drainage infrastructure (storm drains, etc.) beyond those improvements already planned or underway. It also entails a study of pump station capacity and durability in light of the damage to drainage infrastructure and the flooding that the pump stations experienced from Katrina. This study will produce a suggested list of improvements to drainage and pumping infrastructure beyond those already underway.

Project Cost Estimate:	Emergency Cooling Water System	\$6,000,000
	Emergency Power at Station 13	\$8,000,000
	Underpass Drainage Mitigation	\$6,500,000
	Safety Room Power Supply	<u>\$330,000</u>
		\$20,830,000

Estimates Prepared by: Sewerage and Water Board of New Orleans
December 2006 Black & Veatch Report

Anticipated Outcomes: Project 1 will mitigate the risk of using non-potable water for cooling in emergencies such as Hurricane Katrina. The non-potable water damages mechanical components of the drainage stations. Project 2 provides the only drainage station serving Algiers, which has a history of performance failure due in part to electrical service outages, with emergency generators to run the station at full capacity. Project 3 will keep

underpasses open during storms. Project 4 will provide each pumping station with a sustainable safe and comfortable environment for emergency personnel during a power outage.

Project Description Sheet #35

Project Name: **East Bank Wastewater Treatment Plant-Levee Improvement Mitigation and Wetlands Project**

Type of Project: Recovery – High Value

Category: Public Utilities

Area of Project Impact: Citywide

Project Location: Planning District #: 11

Project Description: Work at the Wastewater Treatment Plant consists of two projects. The first project upgrades the hurricane protection levee for the East Bank Wastewater Treatment Plant. The second project provides for wetlands assimilation of outfall effluent discharged by the East Bank Wastewater Treatment Plant.

Project Cost Estimate:	Levee Improvements	\$27,000,000
	Wetlands Project	<u>\$40,000,000</u>
	Total	\$67,000,000

Estimates Prepared by: Sewerage and Water Board of New Orleans
December 2006 Black & Veatch Report

Anticipated Outcomes: The plant was inundated during Hurricane Katrina and levees were severely damaged. The existing levees are 11 feet high while the storm surge was 17 feet high. The levee improvement project will increase the survivability of the plant in any future storm surge events.

EPA sets effluent limits on wastewater treatment plant discharges. The S&WB anticipates that future EPA limits may require the Board to make substantial investments in process enhancements to the existing mechanical plant. An alternative approach to achieve the discharge limits is to utilize wetlands assimilation as a final treatment regime. The East Bank Wastewater Treatment Plant is adjacent to wetlands that are in serious decline. The application of treated wastewater effluent into wetlands offers an opportunity to comply with more stringent effluent limits, while simultaneously supporting the restoration of adjacent wetlands.

Project Description Sheet #36

Project Name:	Power Plant
Type of Project:	Recovery - High Value
Category:	Public Utilities
Area of Project Impact:	Citywide
Project Location:	Planning District #: 3
Project Description:	<p>The 25-cycle power generator at Carrollton was shut down for five days after the storm but was mostly unharmed once services were restored. However, this plant has reached the end of its useful life. The S&WB must improve its backup power generation capability and this project would upgrade this existing facility.</p>
Project Cost Estimate:	\$125,000,000
Estimates Prepared by:	<p>Sewerage and Water Board of New Orleans December 2006 Black & Veatch Report</p>
Anticipated Outcomes:	<p>The 25-cycle power plant supplies energy for water treatment, water distribution, drainage pumping stations, sewer pump stations A and C, and the Algiers Water Treatment Plant. The existing power plant was crucial in draining New Orleans after Hurricane Katrina. Given the vulnerability and unreliability of the commercial power feeds this backup power plant has become the primary power source for some S&WB assets. The power plant needs significant modifications to prevent flooding and to ensure drainage, sewerage, and water purification services when commercial power is not available.</p>

Project Description Sheet #37

Project Name:	Sewerage & Water Board-Technical Staff
Type of Project:	Recovery - High Value
Category:	Public Utilities
Area of Project Impact:	Citywide
Project Location:	Planning Districts 1-13
Project Description:	<p>Develop a program that assists the Sewerage and Water Board in recruiting and retaining engineers and other technical staff. Possibly the single greatest need at the S&WB is highly skilled engineers and technical support staff to manage and oversee this massive recovery effort to rebuild its infrastructure. The S&WB will continue to rely on consultants to assist in this effort but it is in the S&WB's and City's best long term interest to have sufficient well qualified professionals on staff to help plan and oversee this process.</p>
Project Cost Estimate:	\$200,000 to study the need, determine funds required and provide an S&WB-approved framework to implement a long term recruitment and retention program for engineers and other technical support staff.
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	<p>The S&WB lost staff following the storm and have a number of key engineers approaching retirement. It is also faced with a tremendous increase in its workload as it deals with its failing infrastructure, FEMA, USACE and other agencies responsible for the City's infrastructure reconstruction.</p> <p>Due to the volume of reconstruction taking place in New Orleans, engineering and technical support salaries have risen and it is difficult for the S&WB to recruit and keep experienced highly qualified professionals. This project would assess the needs and funds required to raise existing salaries as well as provide competitive salaries to recruit experienced engineers. It is anticipated that the S&WB would not be able to fund the implementation and the funds identified in the study would also, in the short term, need to be provided in the form of a grant.</p> <p>The potential long term benefits to this program are the savings to the S&WB in consultant fees, well planned and managed projects resulting in less cost, more efficient interaction with FEMA and other agencies, and, long term employees with detailed knowledge of the re-built system.</p>

Project Description Sheet #38

Project Name: **Wastewater Collection System-Medium Term Improvements**

Type of Project: Recovery - Medium

Category: Public Utilities

Area of Project Impact: Citywide

Project Location: Planning Districts 1-13

Project Description: The wastewater collection system medium term improvements consist of rehabilitation of the gravity collection system in response to the EPA Consent Decree. The collection system improvements are divided into three phases (short term, medium term and long term). This project covers only the medium term improvements.

Project Cost Estimate: System Wide Sewer Repairs **\$333,000,000**

Estimates Prepared by: Sewerage and Water Board of New Orleans
December 2006 Black & Veatch Report

Anticipated Outcomes: Prior to hurricanes Katrina and Rita, a sanitary sewer evaluation study (SSES) with associated preliminary engineering to correct noted deficiencies had been completed as part of a Consent Decree with EPA. Hurricanes Katrina and Rita inundated over 80% of the East Bank collection system. Considering the resultant damage to the collection system, as identified by the preliminary system inspection following the storms, it is unlikely that the results of the previous SSES studies remain valid. To remain in compliance with the Consent Decree, it will be necessary to perform a new SSES to reassess the system condition. Until a full system assessment can be completed, the cost of this project cannot be finalized. However, based on previous Consent Decree work and the post-Katrina damage assessment, a preliminary cost estimate of repairs has been developed.

- Hurricane related repairs - \$35 million
- Consent Decree repairs- \$651 million

Project Description Sheet #39

Project Name: **Wastewater Collection System-Short Term Improvements**

Type of Project: Recovery - High Value

Category: Public Utilities

Area of Project Impact: Citywide

Project Location: Planning Districts 1-13

Project Description: The wastewater collection system short term improvements include rehabilitating the gravity collection system due to hurricanes Katrina and Rita and in response the EPA Consent Decree. It also includes the construction of above ground sewage pumping stations and the re-routing of the sewage flow from the existing stations to the new stations. The collection system improvements are divided into three phases (short term, medium term and long term). This project covers only the short term collection system improvements.

Project Cost Estimate:	System Wide Sewer Repairs	\$333,000,000
	Sewer Pump Station Mitigation	<u>\$ 28,000,000</u>
	Total:	\$361,000,000

Estimates Prepared by: Sewerage and Water Board of New Orleans
December 2006 Black & Veatch Report

Anticipated Outcomes: Prior to hurricanes Katrina and Rita, a sanitary sewer evaluation study (SSES) with associated preliminary engineering to correct noted deficiencies, had been completed as part of a Consent Decree with EPA. Hurricanes Katrina and Rita inundated over 80% of the East Bank collection system. Considering the resultant damage to the collection system, as identified by the preliminary system inspection following the storms, it is unlikely that the results of the previous SSES studies remain valid. To remain in compliance with the Consent Decree, it will be necessary to perform a new SSES to reassess the system condition. Until a full system assessment can be completed, the cost of this project cannot be finalized. However, based on previous Consent Decree work and the post-Katrina damage assessment, a preliminary cost estimate of repairs has been developed.

- Hurricane related repairs - \$35 million
- Consent Decree repairs- \$651 million

The pump station mitigation project includes construction of twenty nine above ground sewage pumping stations and re-routing sewage flow from

the existing stations to the new stations. The work also includes de-commissioning of the old stations.

Project Description Sheet #40

Project Name: **Water Distribution System-Medium Term System Replacement Program and High Lift Facility**

Type of Project: Recovery - Medium Value

Category: Public Utilities

Area of Project Impact: Citywide

Project Location: Districts 1-13

Project Description: This distribution system rehabilitation is the second of three phases to rehabilitate the East and West Bank water distribution system. The majority of the mains are near the end of their design life. Nearly one third of the system is close to 100 years old and less than one third of the system is under 40 years old. It is generally not possible to replace such large portions of the distribution system over a short time period and therefore costs are scheduled over 25 years and broken down into three phases (short, medium and long term).

The high lift facility would include a 10MW generator to provide backup power to the Carrollton Plant. Also, a steam-operated high lift pump station would be provide water pressure during power outages.

Project Cost Estimate:	High Lift Pump Station and Generator	\$ 25,000,000
	System Replacement Plan (Medium Term)	<u>\$930,000,000</u>
	Total:	\$955,000,000

Estimates Prepared by: Sewerage and Water Board of New Orleans
December 2006 Black & Veatch Report

Anticipated Outcomes: The mains, services, valves, vaults and hydrants of the potable water system were under corrosive, polluted salt water for an extensive amount of time. During this time there was a significant amount of damages. The S&WB is experiencing difficulties in operating valves and hydrants and a significant amount of the mains experienced trauma as a result of trees being uprooted and other impact damages caused by the high winds during the storm. In the short term, S&WB crews and contractors are repairing the water system. This work has proved only moderately effective and parts of the City continue to experience water outages and extended periods of low pressure.

The backup power and pressure is important to ensure proper disinfection and to provide sufficient water for potable and fire protection uses.

Project Description Sheet #41

Project Name: **Water Distribution System-Asset Management Plan and Short Term System Replacement Program**

Type of Project: Recovery - High

Category: Public Utilities

Area of Project Impact: Citywide

Project Location: Districts 1-13

Project Description: A water distribution system asset management plan is necessary to prove distribution system damages to FEMA in order to receive grant funding, update the MWH study performed in 2003, prioritize or organize rehabilitation efforts such that they are reimbursable by FEMA, provide operational optimization for whole system, and incorporate data gathering during current maintenance program.

This distribution system rehabilitation is the first of three phases to rehabilitate the East and West Bank water distribution system. The majority of the mains are near the end of their design life. Nearly one third of the system is close to 100 years old and less than one third of the system is under 40 years old. It is generally not possible to replace such large portions of the distribution system over a short time period and therefore costs are scheduled over 25 years and broken down into three phases (short, medium and long term).

Project Cost Estimate:	Asset Management Plan	\$7,000,000
	System Replacement Plan (Short Term)	<u>\$201,000,000</u>
	Total:	\$208,000,000

Estimates Prepared by: Sewerage and Water Board of New Orleans
December 2006 Black & Veatch Report

Anticipated Outcomes: The mains, services, valves, vaults and hydrants of the potable water system were under corrosive, polluted salt water for an extensive amount of time. During this time there was a significant amount of damage. The S&WB is experiencing difficulties in operating valves and hydrants and a significant number of the mains experienced trauma as a result of trees being uprooted and other impact damages caused by the high winds during the storm. In the short term, S&WB crews and contractors are repairing the water system. This work has proved only moderately effective and parts of the City continue to experience water outages and extended periods of low pressure.

Project Description Sheet #42

Project Name:	Citywide Wireless Network
Type of Project:	Community Interest
Category:	Infrastructure and Utilities
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	<p>Among the significant upgrades the city can make to its utility systems is the provision of a citywide wireless network. Many major metropolitan areas—Toronto, Philadelphia, Portland, Seattle, and New York among them—have established partial or blanketed wireless networks for their residents and businesses, and New Orleans has already instituted a partial network. This project calls for the maintenance, expansion, and improvement of the network to provide everyone within the city limits with free, easy, and secure access to a high-speed wireless connection.</p> <p>The New Orleans City Council approved in May 2006 an ordinance enabling EarthLink, an Internet service provider (ISP), to build a Wi-Fi broadband network in New Orleans. The wireless service will cover a 20 square mile area that includes the Garden District, Central Business District, French Quarter and Algiers. EarthLink will continue to build out the system if there is sufficient demand outside the original 20 square mile area.</p>
Project Cost Estimate:	<p>The cost to build a municipal mesh wireless network ranges from \$50,000 to \$100,000 per square mile. The cost to operate and maintain these networks is in the range of \$500,000 per year for a midsize city. Franchise agreements and advertising sponsorships by local companies or large corporations can dramatically offset these costs.</p> <p>Estimate to provide wireless network for remaining areas of the City = (181 Sq Miles – 20 Sq Miles) * \$75,000/Sq mile = \$12,075,000</p>
Estimates Prepared by:	Neel-Schaffer, Inc.
Anticipated Outcomes:	While citywide wireless is considered reasonably progressive now, it seems highly likely that within a short time it will be a standard utility provided by municipal authorities. Improving the existing citywide network will make New Orleans more attractive to residents and businesses and establish its place at the forefront of digital infrastructure and innovation.

Project Description Sheet #43

Project Name:	Repair/Restoration of High Priority Major Arterial Roads
Type of Project:	Recovery - High Value
Category:	Transportation
Area of Project Impact:	Citywide
Project Location:	Planning District #: 1, 3, 4, 5, 6, 7, 9, 12 Neighborhood: CBD, Uptown, Mid-City, Lakeview, Gentilly, Marigny, Hollygrove, Upper 9 th Ward, N.O. East, Algiers
Project Description:	<p>Roadway repair/restoration projects need to be coordinated with New Orleans Sewerage and Water Board utility repairs.</p> <p>Pontchartrain Blvd. – Robert E. Lee to Veterans Blvd. Canal Blvd. – Robert E. Lee to Harrison Ave. Leon C. Simon Dr. – London Canal to Elysian Fields Ave. Robert E. Lee Blvd. – St. Bernard Ave. to Paris Ave. Elysian Fields Ave. – Lakeshore Dr. to US 90 Franklin Ave. – I-610 to St. Claude Ave. Carrollton Ave. – I-10 to St. Charles Ave. St. Charles Ave. – Nashville Ave. to Carrollton Poydras Street – Carondelet St. to Camp St.; Loyola to LaSalle LaSalle Street – Poydras St. to Tulane Ave. Loyola Avenue – Canal Street to US 90 Downman Road – Hayne Blvd. to US 90 Veterans Blvd. – 17th Street Canal to Pontchartrain Blvd. General DeGaulle Dr. – Sandra to Behrman (Drainage) Earhart Blvd. – Hamilton to Fern Almonaster Road – Jourdan Road to Read Blvd. Alvar St. / Poland Ave. – St. Claude to Florida Ave.</p>
Project Cost Estimate:	\$83,763,458
Estimates Prepared by:	Regional Planning Commission; DPW, City of New Orleans
Anticipated Outcomes:	Improved safety by removal of potholes, damaged pavement and other obstructions – this will reduce avoidance maneuvers by motorists. Less cost for vehicle operators as wear and tear is reduced by smoother pavement surface. Intangible benefit of more pleasing aesthetics of a new roadway surface. Potential re-evaluation of traffic control needs as repair/restoration projects will undergo engineering design.

Project Description Sheet #44

Project Name:	Repair/Restoration of High Priority Minor Arterial Roads
Type of Project:	Recovery – High Value
Category:	Transportation
Area of Project Impact:	Citywide
Project Location:	Planning District #: 1, 2, 3, 4, 5, 6, 7, 9, 12 Neighborhood: CDB, Uptown, Mid-City, Lakeview, Gentilly, Central City, Bucktown, N.O. East, Algiers
Project Description:	<p>Roadway repair/restoration projects need to be coordinated with New Orleans Sewerage & Water Board utility repairs.</p> <p>Harrison Ave. – West End to Orleans Canal; Marconi to Wisner Marconi Dr. – Robert E. Lee to Norfolk Southern RR Crossing Filmore Ave. – St. Bernard Ave. to Elysian Fields Ave. St. Bernard Ave. – Robert E. Lee to I-610 Paris Ave. – Mirabeau to I-610 N. Miro Street – Elysian Fields Ave. to Orleans Ave. Orleans Ave. – N. Claiborne Ave. to City Park Ave. N. Galvez Street – Elysian Fields Ave. to Orleans Ave. Magazine Street – US 90B to Nashville Ave.; Canal St. to US 90 Louisiana Ave. – St. Charles Ave. to Magazine St. Nashville Ave. – US 90 to Tchoupitoulas St. Common Street – Loyola Ave. to N. Peters St. Camp Street – Canal Street to US 90 St. Charles Ave. – Canal Street to US 90 Old Hammond Highway – 17th St. Canal to Pontchartrain Blvd. Martin Luther King Blvd. – Claiborne Ave to S. Broad Street Crowder Road – Dwyer Road to US 90 Wisner Blvd. – Robert E. Lee Blvd. to Esplanade Ave. Washington Ave. – S. Broad St. to S. Carrollton Ave. Whitney Ave. – General DeGaulle to Patterson St.</p>
Project Cost Estimate:	\$82,946,261
Estimates Prepared by:	Regional Planning Commission; DPW, City of New Orleans
Anticipated Outcomes:	Improved safety by removal of potholes, damaged pavement and other obstructions – this will reduce avoidance maneuvers by motorists. Less cost for vehicle operators as wear and tear is reduced by smoother pavement surface. Intangible benefit of more pleasing aesthetics of a new

roadway surface. Potential re-evaluation of traffic control needs as repair/restoration projects will undergo engineering design.

Project Description Sheet #45

Project Name:	Repair/Restoration of High Priority Collector Roads
Type of Project:	Recovery – High Value
Category:	Transportation
Area of Project Impact:	Citywide
Project Location:	Planning District #: 1, 3, 4, 6, 12 Neighborhood: CBD, Uptown, Gentilly, Mid-City, Algiers
Project Description:	<p>Roadway repair/restoration projects need to be coordinated with New Orleans Sewerage and Water Board utility repairs.</p> <p>Mirabeau Ave – St. Bernard Ave. to Elysian Fields Ave Jefferson Ave. – US 90 to Tchoupitoulas Street Gravier Street – Loyola Ave. to S. Peters St. Girod Street – Loyola Ave. to S. Peters St. Carondelet Street – Canal Street to US 90 Press Street – Robert E. Lee to US 90 Berkeley Drive – Kabel Dr. to Woodland Dr. Poydras Street – Claiborne Ave. to Broad St.</p>
Project Cost Estimate:	\$24,277,859
Estimates Prepared by:	Regional Planning Commission; DPW, City of New Orleans
Anticipated Outcomes:	Improved safety by removal of potholes, damaged pavement and other obstructions – this will reduce avoidance maneuvers by motorists. Less cost for vehicle operators as wear and tear is reduced by smoother pavement surface. Intangible benefit of more pleasing aesthetics of a new roadway surface. Potential re-evaluation of traffic control needs as repair/restoration projects will undergo engineering design.

Project Description Sheet #46

Project Name:	Repair/Restoration of High Priority Local Roads
Type of Project:	Recovery - High Value
Category:	Transportation
Area of Project Impact:	Citywide
Project Location:	Planning District #: 2, 3, 5, 12 Neighborhood: Central City, Lakeview, Algiers
Project Description:	Roadway repair/restoration projects need to be coordinated with New Orleans Sewerage and Water Board utility repairs. Navarre Ave. – Canal Blvd to Marconi Dr. S. Galvez Street – Martin Luther King Blvd to Toledano St. Brooklyn Street – Newton Street to Opelousas Ave.
Project Cost Estimate:	\$3,844,270
Estimates Prepared by:	Regional Planning Commission: DPW, City of New Orleans
Anticipated Outcomes:	Improved safety by removal of potholes, damaged pavement and other obstructions – this will reduce avoidance maneuvers by motorists. Less cost for vehicle operators as wear and tear is reduced by smoother pavement surface. Intangible benefit of more pleasing aesthetics of a new roadway surface. Potential re-evaluation of traffic control needs as repair/restoration projects will undergo engineering design.

Project Description Sheet #47

Project Name: **Ongoing Replacement of all Major and Minor City Streets**

Type of Project: Recovery – High Value

Category: Transportation

Area of Project Impact: Citywide

Project Location: Citywide

Project Description: This project is an ongoing program to identify all damaged streets and to then adopt a comprehensive plan to repair or replace all major and minor city streets over a long-term cycle. This project may also include minor modifications or additions to the existing street grid as deemed appropriate by the ‘Transportation’ element of City of New Orleans Master Plan, as modified following the UNOP District Planning Process.

Without detailed pavement inventory information and for general planning purposes it was assumed that 80% of the major and minor streets throughout the City would be in need of milling and overlaying of the pavement surface (this would also include cleaning of pavement joints, spot patching, improvements to subbase material, APA compliant ramps, clearing catch basins, and other contingencies, while 20% of the major and minor streets would require complete reconstruction. Project costs include repair/restoration of approximately 251 miles of major streets throughout the City and repair/restoration of approximately 1,401 miles of minor streets throughout the City. This would include all local streets in the functional classification systems. This program would address these issues and time improvements appropriately with recovery efforts (i.e., heavy trucks), repopulation, and other underground utility improvements.

Project Cost Estimate: Major Streets: Estimates are based on unit costs per lane miles assuming an average pavement width of 64’ for four-lane roads and 80’ for six-lane roads. Road widths include travel lanes and shoulders. Rough cost estimate is \$2.1 Billion.

Minor Streets: Estimates are based on unit costs per lane miles assuming an average pavement width of 24’ for local roads without shoulders and 40’ for local roads with shoulders. Rough cost estimate is \$4.58 Billion.

Due to the severe impact on the City’s revenues, the City is seeking funding assistance for the first six years of its regular ongoing replacement program for major and minor streets, or about 4% of its assets per year. This would occur after the after the program of repairs

and improvements discussed in the previous sheets, in the years 5-10 of the recovery program.

Estimates Prepared by:

Citywide Planning Team

Anticipated Outcomes:

The main benefit to this program will be the greatly improved ease of entry and egress to neighborhoods where rebuilding of homes and businesses is taking place. It will be a catalyst to the city recovery and a necessary element of the recovery.

Project Description Sheet #48

Project Name:	Streetcar Travel Time Improvement Study
Type of Project:	Community Interest
Category:	Transportation
Area of Project Impact:	Citywide
Project Location:	Planning District #: 1, 2, 3 Neighborhood: Uptown, Mid-City, CBD
Project Description:	Assessment of existing streetcar travel times and overall operations compared to a system that would include potential improvements such as faster travel speeds, fewer stop locations, front and rear loading of the streetcars with “honor system” payment, and traffic signal pre-emption via a detection system for streetcars approaching a signalized intersection to provide green time and uninterrupted travel times.
Project Cost Estimate:	\$150,000 (study only)
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	Streetcars are often cited as being too slow a means of transportation for commuters and users of public transit. This condition is often attributed to slow travel speeds, frequent stop locations, inefficient passenger loading, and traffic signal delays. A streamlined, more-efficient operation could be implemented with modest changes to the existing systems that would enhance ridership and travel times.

Project Description Sheet #49

Project Name:	East-West Corridor / Downtown Loop
Type of Project:	Recovery – Medium Value
Category:	Transportation
Area of Project Impact:	Regional
Project Location:	Planning District #: UPT terminus in PD 1
Project Description:	<p>This project is still in the conceptual planning stage. There are multiple alternatives under consideration. Light-rail or bus rapid transit service from the Louis Armstrong New Orleans International Airport to the New Orleans UPT station is proposed with connecting bus or light-rail service via Loyola Avenue to Canal Street or via Rampart Street to Poydras Street. The bus alternatives from the airport to UPT include 8 to 13 potential interim station locations.</p>
Project Cost Estimate:	<p>There are multiple project alternatives with varying cost estimates that are not complete at this time. For planning purposes, general estimates for capital costs only (not including operating and maintenance costs) are \$600 million for rail rapid transit alternatives.</p>
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	<p>Provide reliable transportation between the Louis Armstrong Airport and downtown New Orleans. This project would provide transportation for tourist seeking access from the airport to downtown and for local commuters between Jefferson and Orleans Parishes. Benefits include reduction of passenger vehicles from the often congested roadway network plus an added evacuation alternative. Implementation of the LA Rail project would be the “foundation” and logical precedent upon which this project could be implemented.</p>

Project Description Sheet #50

Project Name:	Extension of Riverfront Streetcar Line
Type of Project:	Recovery – Low
Category:	Transportation
Area of Project Impact:	District-wide
Project Location:	Planning District #: 1, 2, 6, 7 Neighborhood: CBD, Uptown, Gentilly, Upper 9 th Ward
Project Description:	The project would entail an extension of the Riverfront Streetcar line upriver to Jackson Avenue and downriver to the Industrial Canal.
Project Cost Estimate:	\$42 million – Upriver Segment Only Price to be Determined – Downriver Segment
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	<p>The expansion of the streetcar network upriver has been the subject of a feasibility study by the Regional Planning Commission. This study, completed in August 2005, identified two operable segments for this Upriver Streetcar, running west from the current terminal at John Churchill Chase behind the Ernest N. Morial Convention Center. At the time of study, two neighborhood routes were identified that extended service to Jackson Avenue and back to the Convention Center through the St. Thomas/River Garden development. The study examined initial feasibility, given criteria for review established by the Federal Transit Administration (FTA) environmental review process. The cost, as shown, would include track, streetcar and limited on-street amenities. Conceptual stations have not been identified. Remaining coordination issues include incorporating more details on the various proposed developments in the area (Erato Cruise Terminal/Port of New Orleans, Convention Center Phase IV, Tulane University Riversphere, the National Trust for Public Land Riverfront Park and additional phases of River Garden development).</p> <p>The study of the downriver streetcar has been completed as part of the Desire Streetcar Draft Environmental Impact Study. This study would identify conceptual stations, design concepts, corridor locations, costs, projected areas of impact and coordination issues. The status of this Draft Environmental Impact Study is unknown.</p>

Project Description Sheet #51

Project Name:	Implementation of Citywide Bike Path System
Recovery Value:	Recovery – Medium Value
Category:	Transportation/Community Facilities: Parks and Recreation
Area of Project Impact:	Citywide
Project Location	Citywide
Project Description:	<p>New Orleans has the beginnings of a comprehensive bike path system which includes not only dedicated bike paths such as on Jefferson Davis Parkway but also stripped and signed lanes on existing streets. The region has an approved bike path system, which would be built in phases. The first phase was budgeted in 2005 at \$7,500,000. The system improvements include signage, stripping, and road overlay work. While it was partly funded in the city's recent bond issue, it now appears unlikely that the city can sell those bonds any time in the near future.</p>
Project Cost Estimate:	\$9,000,000 (Includes 20% increase for inflation and construction cost increases since estimates were originally made)
Estimates Prepared by:	Estimates prepared by the City Department of Public Works and the Regional Planning Commission.
Anticipated Outcomes:	Creation of the first phase of a comprehensive bike path system serving all sections of the city of New Orleans. Project would tie together the various parts of the city, which is a goal of the Unified Plan.

Project Description Sheet #52

Project Name:	Study Feasibility of Expanding Streetcar and Light Rail Routes
Type of Project:	Recovery – Medium Value
Category:	Transportation/Transit
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	<p>Although streetcar routes experienced a decline in the post-war decades, they have remained—in sentiment and popularity—integral parts of commuter life in New Orleans. Strategically expanding their geographic reach across the city and coordinating their routes with other forms of light rail transit is the aim of this project. Specific routes to be studied (in addition to the full restoration of the St. Charles Ave. and Canal St. routes) include:</p> <ul style="list-style-type: none">• <u>Streetcar:</u> Elysian Fields/Franklin, connection of Carrollton spurs, St. Claude/Desire• <u>Other Light Rail:</u> Algiers, Chef Menteur/New Orleans East, and Claiborne Avenue
Project Cost Estimate:	\$650,000 (study only)
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	Streetcars are intimately associated with the history and character of New Orleans and remain viable and popular modes of local and tourist transportation. The return of rail transit to selected corridors will enhance their pedestrian and commercial qualities, define them as clustered nodes of activity, and expand the network of available commuting means for residents. Additionally, the expansion of public transit would improve the capacity for large-scale emergency evacuation. This project should follow the Streetcar Travel Time Improvement Study.

Project Description Sheet #53

Project Name:	Evacuation and Disaster Response Plan
Type of Project:	Recovery – High Value
Category:	Transportation
Area of Project Impact:	State
Project Location:	Citywide
Project Description:	<p>In the event of a major hurricane or any other emergency, the efficient evacuation of residents is a priority on which lives depend. While evacuation plans currently exist, Hurricane Katrina demonstrated that they need to be reviewed and updated. This project calls for an independent planning effort to establish clear standards, protocols, and systems to ensure the safety of all residents in a time of crisis.</p> <p>The planning effort should focus in particular on the city's transit-dependent population, establishing a network of satellite pickup locations, a multi-modal evacuation system to safely transport residents out of harm's way, and a system of self-sustaining "last resort" shelters. It should also outline procedures relevant to the safe and orderly evacuation of the prison population and elderly and infirm residents.</p> <p>In addition to evacuation measures, the plan should include provisions for the city throughout the time in which its population is displaced. It should convey a clear strategy to protect the city from opportunistic property damage and looting, establish an explicit chain of command and communication system among local, state, and federal authorities, and plan for the provision of a robust communications system among all officials.</p> <p>Finally, upon completion of the plan, its leaders should publicize it to residents through all forms of local media. It should be incumbent upon planners, in coordination with state and local leaders, to ensure that the plan is articulated publicly and that all residents have ongoing access to transparent information about their respective emergency destinations.</p>
Project Cost Estimate:	\$750,000 (study only)
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	Once formulated, a successful plan that has the buy-in of local officials and residents should be well-publicized and oft-repeated. The outcome

will be a thorough and practical means of leading all of New Orleans' residents to safety in the event of an emergency.

Project Description Sheet #54

Project Name:	Study of the Removal of I-10 between Hwy. 90 and Elysian Fields Ave.
Type of Project:	Community Interest
Category:	Transportation/Transit
Area of Project Impact:	Citywide
Project Location:	Planning District #s 1 and 4
Project Description:	<p>The construction of Interstate 10 in the 1960s severely altered the physical and cultural form of Claiborne Ave., one of the city's main thoroughfares, between Canal Street and the Elysian Fields/Franklin Ave. area. The study would address transportation, housing, economic, and cultural impacts of removing this section of I-10 and the entrance and exit ramps. It would also propose a specific plan for the reconfiguring of traffic distribution to ensure adequate access to the downtown area and the capacity of I-610, grade-level roads, and existing or planned transit routes to accommodate additional traffic volume. Finally, it would outline plans for the revitalization of Claiborne Ave. and major intersecting roads near the areas affected by any proposed alteration to I-10.</p>
Project Cost Estimate:	\$500,000 (study only)
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	<p>The most significant outcome of this study would be the potential restitution of a major vibrant ground-level thoroughfare extending throughout many historic and heavily-populated neighborhoods. Such a development could lead to strategic redevelopment initiatives in the area, possibly furthering—or at least expediting—many of the aims of UNOP regarding community stabilization, transit expansion, and maximizing local infrastructure.</p>

Project Description Sheet #55

Project Name:	Study Installation of Soundwalls along I-10 and I-610
Type of Project:	Community Interest
Category:	Transportation
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	<p>The presence of sound abatement walls along stretches of Interstates 10 and 610 has improved quality of life for residents and businesses in the roads' vicinities. Expansion of the network of sound walls will have the same effect throughout a larger portion of Orleans Parish. The erection of the barriers will take place only on grade-level stretches of the interstates on which it is determined feasible and safe; and their installment should follow a diligent study of any right-of-way clearance, floodwater redistribution, environmental impact, and the like, and should be carried out with the consultation and approval of the residents most directly impacted by their presence.</p>
Project Cost Estimate:	\$850,000 (study only)
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	<p>If constructed in a high-quality, context-sensitive manner, sound walls can mitigate the visual and auditory impact of high-traffic expressways in the areas surrounding them. They can also enhance the attractiveness of the roadways for vehicular passengers by providing a more defined and better-maintained streetscape. With the proper foresight and implementation, completion of this project will have those desired effects.</p>

Project Description Sheet #56

Project Name:	Traffic and Parking Management Studies
Type of Project:	Recovery - Low Value
Category:	Transportation/Transit
Area of Project Impact:	Regional
Project Location:	Citywide
Project Description:	<p>Formal studies will be conducted to examine the following aspects of New Orleans' vehicular patterns:</p> <ul style="list-style-type: none">• Ways to promote more compatibility between vehicular traffic and residential areas with sensitive architecture and infrastructure. This study would specifically examine ways to reduce or mitigate the number of trucks and other large vehicles passing through predominately residential areas.• Resolution of multi-modal traffic conflicts, especially areas where existing or potential transit routes, vehicular roads, and railroad tracks cross each other.• Parking capacity, particularly ways in which the parking can be more easily facilitated in targeted areas, strategies to accommodate additional residential parking, and areas in need of additional publicly funded parking facilities.
Project Cost Estimate:	\$450,000 (study only)
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	A compatible, efficient, and safe pattern of vehicular traffic is essential to maintaining a high quality of life in an urban environment. Particularly given the unique challenges of New Orleans's architectural stock and busy pedestrian life, these studies will help improve the balance between vehicular circulation and quality of life.

Project Description Sheet #57

Project Name:	Redevelopment of Neighborhood Based Health Centers/Clinics
Type of Project:	Recovery - Medium Value
Category:	Community Facilities: Health Care Services
Area of Project Impact:	Citywide
Project Location:	Planning District #s 2 (Milan neighborhood); 3 (Hollygrove, Dixon, and Palm Aire neighborhoods); 4 (Gert Town); 8 (Lower 9 th Ward)
Project Description:	This project addresses damage to primary health care services in Orleans Parish and seeks to restore primary care services through the recovery of pre-Katrina neighborhood level clinics and health care centers or the establishment of new ones. This project coincides with the more comprehensive project (Restore Neighborhood Comprehensive Primary Care) submitted by the Partnership for Access to Healthcare, Louisiana Public Health Institute.
Project Cost Estimate:	\$16,150,000
Estimates Prepared by:	Byron J. Stewart & Associates; Billes Architecture; C. James & Associates; and Stull & Lee Architects
Anticipated Outcomes:	This project will provide primary and preventative health services for the local community via neighborhood-based clinics and health centers. Taking primary and preventive care out of hospitals and into neighborhoods facilitates greater continuity of care, which is essential for at-risk populations, and equality of health care services for the uninsured.

Project Description Sheet #58

Project Name:	Restore Comprehensive Medical Services to New Orleans East
Type of Project:	Recovery – High Value
Category:	Healthcare
Area of Project Impact:	Regional
Project Location:	Neighborhoods: New Orleans East & St. Bernard
Project Description:	<p>The project would include the acquisition and revitalization of the existing Methodist Hospital site in the New Orleans East area. The current owner does not intend to reopen the facility and has indicated a willingness to sell for a negotiated price. Reportedly, the first floor of the facility, which housed records, admissions and radiology, was damaged by three feet of water and will have to be totally refurbished. The second and third floors, which housed the OR, ICU and delivery rooms were untouched and weather proofed to prevent further storm degradation. The first floor will require nominal repair to building and infrastructure, with FF &E replacement for the medical records and reception areas. Most of the equipment for the radiology area will also have to be replaced. The majority of the rest of the building will have minimal repair and can be cleaned and reopened in place.</p>
Project Cost Estimate:	<p>\$20,000,000. The acquisition cost of the existing PP&E, as is, has been verbally estimated to be \$15-20 million, but could be further negotiated. Additional clean-up and repairs, along with FF&E for the first floor will approximate \$1 million. The equipment costs needed for radiology and medical records has been verbally committed to by Siemens and Intel. The majority of existing equipment on the second and third floors can be cleaned and reused in place. The annual operating and maintenance costs for the facility are currently being analyzed by Deloitte, which has been retained to perform a feasibility analysis on the proposed project.</p>
Estimates and Outcomes:	<p>Dr. Kevin Stephens, Director of Health, has conducted preliminary conversations with the current owners and potential public/private partners to establish preliminary estimates. Also, the Methodist Foundation has verbally indicated a willingness to participate in Quasi-equity funding of the acquisition. The balance of funding, construction and permanent financing (up to 90%) can be obtained through the HUD 242 program, on a 25-year term. Siemens is considering donation of all equipment to provide a state-of-the-art hospital facility that can showcase its latest technology. Intel has committed to providing equipment and</p>

ongoing technical support for the electronic records and IT component of the facility. The US Department of HHS has also allocated grant availability of \$15 million to New Orleans for recruitment and retention of health care providers, which could be further utilized. Ultimately, the City will negotiate a third party operating agreement with a qualified firm to operate the facility on a long term basis, subject to a Needs Certification and positive feasibility assessment.

Project Description Sheet #59

Project Name:	Neighborhood Community Centers
Type of Project:	Recovery – Medium Value
Category:	Education
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	<p>Given the level of damage and uncertainty facing the City of New Orleans creative solutions are required to meet community needs and to catalyze community redevelopment. In particular, reconfiguring schools as centers of community that provide effective spaces for teaching and learning, as well as a range of community services to meet local needs. Whether housed in an existing facility or new construction in those areas hardest hit, the neighborhood-based community center concept may include one of the following: early childhood education; K-8; high school learning centers; or adult/technical education centers. Recreation and open space are also a component of neighborhood community centers.</p>
Project Cost Estimate:	<p>The total project cost is estimated to be \$57 million using the median cost and assuming 4 small community centers and 2 neighborhood-based facilities. The cost of providing such a facility would be dependent upon specific sites and cooperation with multiple agencies involved. We have developed a several prototypes for new construction of a neighborhood community facility ranging from \$2.5 to \$5 million for small conversions and community clusters to \$17 to \$25 million for large neighborhood-based facility campuses.</p>
Estimates Prepared by:	Keith Marrero, AMI Architects
Anticipated Outcomes:	<p>Schools that serve as community centers are noted for making improvements in four areas: student learning; school effectiveness; community engagement; and community vitality. This project will help provide education and community services to those areas of the city currently doing without. In particular, the clustering of facilities will allow a more efficient delivery of services and coordination of services and transit. Given the potential for certain areas of the city to languish without focused investment, the location of these clusters has the potential to guide development and restore services to serve as civic anchors.</p>

Project Description Sheet #60

Project Name: **Repair and Renovate Existing School Facilities or Construct New Facilities**

Type of Project: Recovery - High

Category: Education / Community Facilities

Area of Project Impact: Citywide

Project Location: Citywide

Project Description: Current FEMA estimates for repairing all of the existing school facilities to pre-Katrina condition is approximately \$55 million. However, this number does not account for the real cost of repair due to deferred maintenance issues. As per estimates provided by Alvarez & Marsal, the real cost of repairing all existing school facilities may be higher than \$800 million. In many instances, it may be more cost-effective to construct new school facilities than to repair existing schools.

Currently the RSD is repairing and upgrading the least damaged schools to provide seats for every student, but this is not necessarily concurrent with where the students are living. A facilities assessment is scheduled to begin in mid-2007 to gain a greater understanding of what the actual repair and/or rehabilitation costs for schools will be, and to assess the facility standards existing and upgrades necessary to achieve 21st Century teaching/learning standards. Final decisions on facility investment will be determined by the outcome of this facilities assessment and ultimate master plan. However, UNOP District plans have determined specific properties identified as high priorities by the community. These locations are as follows: Hynes Elementary and Middle Schools, Colton Junior High School, Nicholls High School, Carver High School, Edwards Elementary, Moton Elementary, Lockett Elementary, and Frantz Elementary.

Project Cost Estimate: The estimated cost to retrofit and upgrade the less damaged schools citywide is: **\$79,061,565** while total restoration and upgrade of all schools is estimated to cost approximately **\$831,000,000**. Actual costs TBD.

Estimates Prepared by: Bobbie Hill, Concordia, LLC; Alvarez & Marsal, LLC
Anticipated Outcomes: There are currently 56 of 126 public school facilities open. There are currently 26,000 students enrolled and 28,578 seats available, but some grades are already meeting availability limits. Many of these 56 open schools still require investment to address deferred maintenance and code issues. Further, 16 of the 126 schools had >50% damage, requiring demolition as per FEMA regulations. The goal for the 2008 school year

is 40,000 seats, with additional seats and needs to be determined in the forthcoming facilities master plan.

Project Description Sheet #61

Project Name:	Temporary Modular School Facilities
Type of Project:	Recovery – High Value
Category:	Education
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	<p>Although the City's total student population is down post-Katrina, there is not an even distribution of schools available, and those schools which have reopened are at full capacity. In particular, those areas of the city hardest hit by the hurricanes have few facilities open and are busing students to available space. Construction of modular/portable facilities will provide much needed space for students closer to their homes and time for the State and the RSD to complete their assessment of existing facilities by the end of 2007. Currently the RSD has begun or is planning construction of modular facilities in the following areas: Planning District 4 (two facilities); Planning District 5 (one facility); Planning District 6 (two facilities); Planning District 8 (two facilities); and Planning District 9 (three facilities).</p>
Project Cost Estimate:	<p><u>Years 0-2:</u> 11-12 modular facilities providing space for students throughout City @ approximately \$5-7 million each. Total = \$55,000,000 to \$84,000,000 based on Alvarez & Marsal estimates and site specific requirements. These facilities will be paid for with CAT B Emergency Measures funds and will not come from the monies the RSD/OPSB receives for CATS C-G Permanent Work.</p> <p><u>Years 2-5:</u> Cost dependent upon outcome of detailed facilities assessment and need for demolition/rehabilitation/construction of new facilities and subsequent need or realignment of modular facilities. Assuming 6 modular facilities would be provided for years 2-5 at a cost of \$1.8 million each per year, the estimated cost would be \$32,400,000.</p> <p>Total Costs = \$116,400,000.</p>
Estimates Prepared by:	Keith Marrero, AMI Architects; Alvarez & Marsal, LLC
Anticipated Outcomes:	<p>Based on current repopulation patterns in the City, there is a need for schools more evenly distributed across the East Bank of Orleans Parish to serve students in or near their neighborhoods. The construction of temporary modular facilities will allow residents to continue to return, and act as a catalyst for redevelopment in those areas with few services.</p>

Further, these facilities can be realigned and/or redistributed across the City as existing facilities are rehabilitated and the anticipated facilities master plan outlines long-term goals and facility standards.

Project Description Sheet #62

Project Name:	Study: Restore Vo-Tech Campuses and Evaluate Need for New Facilities
Type of Project:	Recovery – Low Value
Category:	Education
Area of Project Impact:	Regional
Project Location:	Sidney N. Collier Technical College (Planning District #: 7)
Project Description:	<p>One of the key elements of the workforce training infrastructure in New Orleans prior to Katrina was the Sidney N. Collier campus of the Louisiana Technical College system. The facility sustained major damage from Katrina’s floodwaters and should either be repaired in place or rebuilt at a new, equally accessible location. As with all other key public facilities, the new facility should be “hardened” against the possibility of future flooding.</p> <p>In the aftermath of Katrina, the fishing communities of New Orleans East have called for a new curriculum and accompanying facilities to train individuals in the marine and fisheries industry. Such a program would best be accommodated through the existing technical and community college infrastructure (i.e., Delgado, Louisiana Technical College) rather than establishing a new, discrete institution. This project would provide funding to evaluate the need and cost for instructors, new equipment, and new facilities in close proximity to a marina.</p>
Project Cost Estimate:	\$100,000 (feasibility study only)
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	These improvements may restore a key component of workforce training and will evaluate the need for new programs to train individuals in the fisheries industry.

Project Description Sheet #63

Project Name:	Develop a Citywide Network of State-of-the-Art Police Substations and Repair/Improve the Citywide Network of Fire Stations
Type of Project:	Recovery - High
Category:	Community Services: Public Safety
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	<p>Crime reduction and public safety are a concern to the entire City. Several neighborhoods articulated the need for increased police presence; many of these neighborhoods have the highest rates of poverty and correspondingly high rates of crime. This project proposes eight substations, each fully equipped with the latest in crime fighting technology.</p> <p>Additionally, the network of fire stations, much of which was heavily damaged by Katrina, must be restored and improved to provide added security for residents throughout the City. Targeted stations to be renovated and returned to service are in Districts 5, 7, 8, 9, 10, 11, and 12.</p>
Project Cost Estimate:	<p>\$6,400,000: New Substations @ \$800,000 each for construction costs</p> <p>\$3,250,000: Estimated costs for equipment and crime technology for all the new substations</p> <p>Total Cost: \$9,650,000</p>
Estimates Prepared by:	Lambert Group for 1 substation; equipment and technology cost estimated by UNO
Anticipated Outcomes:	Residents in all neighborhoods would benefit from an expanded network of emergency personnel. The primary goal and expected outcome is reduced crime resulting from increased police patrols and shorter response times from emergency responders in all districts. Additionally, it would also be an opportunity for better relationships to be forged between residents and police officers with a local presence and more community involvement.

Project Description Sheet #64

Project Name:	Develop and Integrate Crime Lab and Central Evidence and Property Storage Function
Type of Project:	Recovery - High
Category:	Community Services: Public Safety
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	<p>NOPD effectiveness is severely hampered due to the total loss of the crime lab, including building and equipment along with capacity for storing evidence and property. There is currently a backlog of 1,800 narcotics cases because of the lack of a crime lab. To be able to deal effectively with criminal investigations, the NOPD must have a state of the art Crime Lab. Because of the need for climate controlled evidence and property storage and the need to coordinate these with criminal investigations the NOPD would like these operations to be centralized into one location. Evidence collected in cases involving a capital offense must be stored forever. NOPD estimates a need for a minimum of 50,000 square feet to house these centralized activities.</p>
Project Cost Estimate:	\$7,000,000
Estimates Prepared by:	City of New Orleans/NOPD
Anticipated Outcomes:	<p>Centralized crime lab, evidence and property storage. This is essential in allowing the NOPD to fulfill its role as the chief criminal investigative agency for the City. When complete the NOPD will be able to perform highly technical criminal investigations, efficiently and effectively store evidence and property.</p>

Project Description Sheet #65

Project Name:	Provide a Citywide Criminal Surveillance System
Type of Project:	Recovery - High
Category:	Community Services: Public Safety
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	NOPD effectiveness is severely hampered due to the loss of officers and the prospects of continued attrition. The NOPD needs force multipliers. A state of the art surveillance system will allow officers to monitor crime hot spots and efficiently dispatch officers to areas of critical need. This project will place 50 cameras in each of the eight NOPD districts
Project Cost Estimate:	\$700,000/district x 8 districts = \$5,600,000
Estimates Prepared by:	Rough estimate provided by NOPD
Anticipated Outcomes:	Centralized crime surveillance system throughout the City. This will act as a force multiplier for the NOPD and facilitate faster response times and arrests as well as provide a platform for observing crime in real time.

Project Description Sheet #66

Project Name:	Replace or Repair all NOPD Equipment
Type of Project:	Recovery - High
Category:	Community Services: Public Safety
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	Complete replacement and/or repair of all non structural physical damage to New Orleans Police Department equipment including but not limited to: vehicles; computers; radio/electronic equipment; office equipment etc.
Project Cost Estimate:	Capital costs to replace lost equipment: \$30,000,000 Annual maintenance costs: \$2,500,000
Estimates Prepared by:	UNO, based on information on a list of equipment damage provided by the New Orleans Police Department.
Anticipated Outcomes:	The capacity of the NOPD to undertake law enforcement activities is severely limited without adequate support equipment such as working vehicles and equipment, computers, and fully equipped offices. Once support capacity is restored officers and civilian employees will be able to handle the increased work load as the population returns. There will also be improvement in the command and control function.

Project Description Sheet #67

Project Name:	Renovate NOPD Headquarters at 715 N. Broad
Type of Project:	Recovery - High
Category:	Community Services: Public Safety
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	Renovation of the New Orleans Police Department's headquarters building at 715 N. Broad. Centralized police administrative operations are currently headquartered in a trailer complex along the Lafitte St. Corridor between Jeff Davis Pkwy. and N. Broad St. This project would restore the headquarters building for the NOPD.
Project Cost Estimate:	Capital costs to refurbish: \$10,262,000
Estimates Prepared by:	City of New Orleans
Anticipated Outcomes:	Return to a centralized operational base along with a significant improvement in the command and control capabilities across the city for the NOPD.

Project Description Sheet #68

Project Name:	Renovation of NOPD Special Operations Unit
Type of Project:	Recovery - High
Category:	Community Services: Public Safety
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	This project covers the renovation of the NOPD Special Operations Unit located at 1300 Moss St.
Project Cost Estimate:	\$4,400,000
Estimates Prepared by:	City of New Orleans/NOPD
Anticipated Outcomes:	Increased NOPD effectiveness in organizing and implementing a varied range of special operations activities.

Project Description Sheet #69

Project Name:	Renovate and/or Repair Seven District Headquarters Buildings
Type of Project:	Recovery - High
Category:	Community Services: Public Safety
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	Renovation and repair of the 7 damaged New Orleans Police Department's District headquarters throughout the City. Currently most district operations are located in trailers on or around the damaged headquarters sites in the most heavily damaged districts.
Project Cost Estimate:	Capital costs to refurbish: \$6,500,000
Estimates Prepared by:	City of New Orleans/NOPD
Anticipated Outcomes:	Repair and renovate all seven of the damaged district headquarters building throughout the City. This will help NOPD re-establish district level command and control as well as administrative functions. This should increase the capacity of each district to respond to calls. During the first five years of the recovery priority should be given to repairing and reopening stations in NOPD Districts 3, 4, 5, 6, and 7 since they received the most damage.

Project Description Sheet #70

Project Name:	Emergency Communications Center
Type of Project:	Recovery – High Value
Category:	Community Services: Public Safety
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	<p>Post-Katrina, due to severe damage sustained at the Public Safety Answering Points (PSAPs) located at NOFD Communications (Rosedale) and NOPD Communications (Police Headquarters on Broad Street), the Orleans Parish Communications District (OPCD), working in coordination with the City of New Orleans, built an Interim PSAP facility (\$8M). This 7500 square foot one-story building with a 1250 square foot mezzanine (designed and built to withstand 150 mph winds) and an adjacent existing structure accommodates all Police, Fire, and EMS communication personnel and equipment. The center is equipped with Positron Power911 telephony equipment linked to a Motorola/Printrak Premier CAD System. All systems are backed up with power supplies, industrial batteries, generators and sufficient fuel to operate in a self-supporting manner for 7 days off-grid. The interim facility was funded using OPCD funds originally designated as part of a \$19M permanent facility, partially supported by a \$10M dedicated bond issue. FEMA reimbursement of Katrina-related damages has not been finalized. Once all outstanding issues are resolved, additional funding sources will be required.</p>
Project Cost Estimate:	\$32,000,000
Estimates Prepared by:	Orleans Parish Communications District
Anticipated Outcomes:	<p>9-1-1 assistance to both citizens of and visitors to New Orleans remains a critical public service. As all areas of the city are subject to incidents requiring Public Safety (Police, Fire, EMS) response a permanent facility housing the personnel and equipment required to deliver this assistance is a functional necessity. At issue presently is the nature and duration of the recently constructed interim facility. Its “dry” site affords adequate space for a permanent replacement structure. However, questions remain regarding the specific design program for the building and an implementation timetable. If the previous pre-Katrina design was constructed, its post-Katrina cost would increase substantially as would its capacity to accommodate additional equipment and personnel. Based</p>

on current call volumes, the new permanent facility should be operational within 3 to 5 years based upon repopulation activity.

Project Description Sheet #71

Project Name: **Sustainable Environmental Strategies**

Type of Project: Recovery - Medium Value

Category: Community Services: Environmental

Area of Project Impact: Citywide

Project Description: The project is comprised of multiple sector initiatives that incorporate basic guidelines and goals for increasing the resource and energy efficiency of reconstruction strategies as well residential buildings' resistance to hurricane winds and the loss of utilities in the aftermath of a storm. With respect to energy consumption, the goal is to identify incremental cost effective strategies that involve up to a 10% increase in cost but provide, at a minimum, a 15% reduction in the NPV of energy or resource use. The reconstruction of New Orleans should occur in a way to create at least a 1.5 to 1 return on the public dollars in increased long term economic benefits. Other sustainable building practices that will be encouraged through this project include on-site power generation, rain gardens, and cisterns to manage rainfall. In combination with more wind resistant building techniques, new and substantially renovated structures will be much better suited to withstand conditions during and in the immediate aftermath of hurricanes.

The approach should be designed to avoid 'quick fix' solutions to rebuilding that provide a significant reduction in both standard of living and environmental quality. Encouraging the implementation of these practices will require information and education about what improvements can be carried out as well as expanded resources from the Federal, State and private sources to provide the incentives for voluntary investments in more sustainable practices. Resource plans should also include a 'green recovery bonuses for incremental investments in a targeted list of high priority and high return measures in each sector and in each recovery initiative. These 'green recovery bonuses' should be positive incentives rather than punitive requirements in order to create a more positive environment for these investments to be both made and maintained.

Generally, UNOP does not propose a few isolated 'pilot projects' but rather wide scale adoption of basic measures that all reconstruction plans can easily incorporate. These practices should be available to all residents and businesses and implemented by the local work force. However, due to the unique risks and the present condition of Planning District 8, a pilot program incorporating these practices on a large scale should be examined.

Project Cost Estimate: Capital costs = **\$100,000,000**
Annual operating costs = **\$8,000,000**

Annual maintenance costs = **\$5,000,000**

Estimates Prepared by: Henry Consulting and Conservation Services Group (CSG)

Anticipated Outcomes: Reduction in annual energy usage in excess of \$20M

Project Description Sheet #72

Project Name:	Hurricane Recovery Soil Assessment and Remediation Program
Type of Project:	Recovery - High Value
Category:	Community Services: Environmental Services
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	Develop a comprehensive system to collect, study, monitor and remediate environmental risk in New Orleans neighborhoods. Project components would include review of existing data collected, identification of areas for additional data collection and monitoring, as well as use of approved mitigation techniques in areas identified as contaminated. Continuous monitoring is recommended in areas of high concern mitigation techniques. Project cost estimates and remediation figures were based on accepted sampling/contamination rate assumptions.
Project Cost Estimate:	\$30,000,000
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	Mitigate the potential for negative impacts of exposure to chemical stressors that may be residual in the environment

Project Description Sheet #73

Project Name:	Reinstitute Recycling Services and Construct Recycling Center
Type of Project:	Recovery - High Value
Category:	Community Services: Environmental
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	This program would fund the restoration of curbside household recycling services to residents and create a facility for small haulers (individual homeowners) to bring their recyclable construction and demolition debris. Cost estimates for restored recycling services were based on assumed current household figures of approximately 80,000 at \$3/household/month.
Project Cost Estimate:	\$3,168,000 per year for recycling program \$1,250,000 for construction of Collection Center
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	The purpose of this program is to restore pre-Katrina curb-side recycling services and to provide a suitable location for the short term holding of recyclable materials resulting from construction and debris removal throughout the City.

Project Description Sheet #74

Project Name: **Renovate and Expand Main Library – Phases 1 and 2**

Type of Project: Recovery – High Value

Category: Community Facilities: Libraries

Area of Project Impact: Citywide

Project Location: Planning District #: 1
Neighborhood: Downtown

Project Description: While the Main Library did not suffer any major structural or contents damage from the storm, it came very close to flooding. This put at great risk the irreplaceable resource of the historic public archives of the city which are located in the basement level. The Phase I proposed project at a minimum would reinforce the 3rd floor structure of Main Library to hold the weight of a compact shelving system to house a large portion of the archives. It would also provide an interior enclosure to secure the archives and control light as well as provide a fire suppression system for the space. A more ambitious version of the Phase 1 project would also include upgrading the wiring for the 150,000 sq. ft. Main Library building to accommodate improved computer networking as well as improving the entrance area for the building and meeting and educational spaces. Phase 2 of the project would involve construction of a 3-story annex to the Main Library structure on the site of the adjacent library parking lot, to include space for all remaining archival materials, ground floor parking and one level of administrative offices or community meeting space in the annex. The new annex would allow for a better configuration of public spaces, first floor meeting rooms and more computers.

Project Cost Estimate: **Phase 1:** Minimal building improvements to safeguard a substantial portion of the public archives are estimated to cost **\$1,500,000 - \$3,000,000**.

The more ambitious version of improvements with upgraded wiring and 1st and 2nd floor improvements may cost \$5,000,000 - \$10,000,000.
Phase 2: \$33,000,000

Estimates Prepared by: City of New Orleans and NOPL sources

Anticipated Outcomes: This project is of great importance to safeguard a major public asset of the city – its historic archival records. These records are heavily used by businesses, governmental agencies and the judiciary in researching land

ownership and business/legal records. Citizens have utilized these historic documents to a great extent in property ownership research post-Katrina as well as in genealogical research. Expansion and upgrading of the Main Library would provide a major resource for downtown residents, businesses and visitors.

Project Description Sheet #75

Project Name:	Repair, Renovate or Construct New Regional Libraries
Type of Project:	Recovery – High Value
Category:	Community Facilities: Libraries
Area of Project Impact:	Citywide
Project Location:	Planning Districts # 9 and 12 Neighborhood: West Lake Forest, Algiers
Project Description:	Both facilities sustained extensive damage either by flooding, wind or both. Both should include community facility meeting space and meet contemporary national library standards, and should be easily expandable from the proposed sizes (25,000 sq. ft. for New Orleans East, 40,000 sq. ft. for Algiers). A temporary modular building will operate at the Algiers site with funding from the Gulf Coast Library Recovery Project. Temporary library services for New Orleans East will be located in the former school library of Einstein School with three years of funding from the Gulf Coast Library Recovery Project.
Project Cost Estimate:	Algiers: \$11,600,000 , includes site work plus collection/ contents costs. New Orleans East: \$8,250,000 , includes site work plus collection/ content costs.
Estimates Prepared by:	City of New Orleans and NOPL sources
Anticipated Outcomes:	Because as much as one-third of the Orleans Parish population is currently living in Algiers, it is important that they be served by adequate library facilities. The current Algiers Point Library is too small to provide district-wide library services, and it is also in need of significant structural repairs. A new facility would ensure that the population residing on the West Bank has necessary library and community facility space available. As the New Orleans East community rebuilds it is important that high quality library services and community meeting space be provided for residents. A rebuilt regional library that is safeguarded from future flooding by an elevated structural design or relocation to higher ground would provide a focal point for community recovery.

Project Description Sheet #76

Project Name: **Repair, Renovate, or Construct New District/Neighborhood Libraries**

Type of Project: Recovery – Medium Value

Category: Community Facilities: Libraries

Area of Project Impact: Citywide

Project Location: Planning District #: 3, 4, 5, 6
Neighborhoods: Broadmoor, Lakeview, Dillard, Mid-City

Project Description: Reconstruction of the libraries is a high priority of the neighborhoods. In Broadmoor, the proposed project would rebuild a 10,000 sq. ft. structure at a higher elevation incorporating the façade of the signature historic structure. In Lakeview, there are several alternatives, either to reconstruct the same size library on the present site at a higher elevation, to construct a larger 25,000 sq. ft. facility (with the purchase of adjacent land) or to relocate the library within the district and share space and costs with a community center. One identified site is the structure formerly housing Beth Israel Synagogue on Canal Boulevard. For Gentilly, the project would replace damaged existing library structures with a new 25,000 sq. ft. library and Recovery Resource Center for community rebuilding, with spaces for meetings and training in conjunction at a location close to the Gentilly Boulevard/Elysian Fields intersection. For Mid-city, this project would involve construction of a new public library as a showpiece for area recovery on a Canal Street site still to be determined. Sites to be considered could include near the intersection of Canal and Carrollton Avenues for maximum visibility or near an existing public high school such as Warren Easton to create an economy of scale. The new library would also incorporate much-needed community meeting space and be equipped with state of the art computer technology, collections, and collection management applications.

Project Cost Estimate:

- Broadmoor facility - **\$3,000,000** includes site work plus collections/contents
- Lakeview facility - **\$8,250,000** includes community center, site work, plus collections/contents
- Dillard facility - **\$8,250,000** includes community center, site work, plus collections/contents
- Mid-City facility - **\$15,500,000** includes site acquisition, site work plus collections/contents

Estimates Prepared by: City of New Orleans and NOPL sources

Anticipated Outcomes: These library projects reestablish the essential services that community libraries provide and the role they fulfill as centers of social and cultural life for the community.



Project Description Sheet #77

Project Name:	Implementation of Master Plan for City Park
Recovery Value:	Recovery – High Value
Category:	Community Facilities Parks and Recreation
Area of Project Impact:	Regional
Project Location:	Planning District #: 5
Project Description:	<p>City Park is not only the home to many of the region's recreation and cultural assets but also was primarily constructed by the WPA and contains many examples of that period's architecture and art including a variety of historic buildings. City Park suffered catastrophic damage during the Hurricane just as the park was poised to implement its award winning new Master Plan. The opportunity exists not only to repair damage (90% of which should be paid for by FEMA) but in implementing the Master Plan, to make the park one of the greatest in the nation and a beacon of hope for all the region's citizens. The Master Plan includes a \$115 million dollar investment in infrastructure, recreation facilities (includes renovations to golf courses, stadiums, tennis courts, sports fields, etc), entertainment venues including the amusement park, new spray park, performance venues including a new amphitheatre, site preparation for new cultural facilities and wide ranging improvements to shelters, picnic facilities, jogging and bike paths, as well as investments in horticulture and environmental education.</p>
Project Cost Estimate:	<p>The capital costs of the plan are estimated at \$115,000,000. The plan was adopted in March of 2005. The plan also contains recommendations for raising additional operating revenue from public and self generated sources. The plan envisions an operating budget of \$16,000,000 annually, up from \$10,800,000 pre-Katrina.</p>
Estimates Prepared by:	Consultants for New Orleans City Park including Wallace, Roberts & Todd and Cashio Cochran, LLC.
Anticipated Outcomes:	<p>City Park lies in the center of the city and the center of the devastated area. Complete renovation of the park would not only provide first rate, cultural, recreational and leisure facilities for the city and the region, but would act as a catalyst encouraging other agencies and citizens to repair their properties. City Park accounted for over \$400 million dollars in property value before the storm and has a powerful impact on creating value in recovering neighborhoods.</p>

Project Description Sheet #78

Project Name:	Repair, Renovate, or Construct New Regional Parks
Type of Project:	Recovery - Low
Category:	Community facilities: Parks and Recreation
Area of Project Impact:	Regional
Project Location:	Planning District #:1, 4, 5, 6, 9, 10, 11 and 12
Project Description:	<p>There are several major regional parks that were damaged by Katrina and have not been renovated. Specifically, Joe Brown Park in New Orleans East which also contains the Louisiana Nature Center, Brechtel Park in Algiers, the portion of Armstrong Park not maintained by the National Park Service, Pontchartrain Park, and the network of parks and parkways formerly maintained by the Orleans Levee District are the focus of much community activity and are in need of major capital improvements. This project would fund major repairs to these recreational facilities. Recreational facilities, landscape features, lagoons, outdoor picnic furniture, shelters, fencing, lighting, drainage infrastructure, and roads would all be included in this initiative. In the case of the linear park along the Lakefront, restoration of the seawall would be included as well. Where appropriate, revisions to the overall plan and design of the park to improve the overall appearance and functionality of a given park may be initiated as part of this project as well.</p> <p>Other park projects of a regional nature may be included in this project.</p>
Project Cost Estimate:	\$24 million
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	The most favorable outcome of regional park renovations is that the parks would resume their central role in the life of the citizens living nearby. Many smaller neighborhood parks were seriously damaged and will not be renovated in the near future meaning that greater use of regional parks may be anticipated even with a lower total population.

Project Description Sheet #79

Project Name: **Repair, Renovate, or Construct New District/Neighborhood Parks**

Type of Project: Community Interest

Category: Community facilities: Parks and Recreation

Area of Project Impact: Citywide

Project Location: Citywide

Project Description: In the 13 planning districts, only two (11 and 13) did not identify the renovation of District/Neighborhood parks as something that would greatly benefit their community and help recovery. There is a need to do an overall study of what park damage has been done at what level, what reimbursement (if any) has been received to repair the facility, and what plans exist to determine the future use and operation of the park.

Project Cost Estimate: \$500,000 per park site. Total = **\$5,000,000**

Estimates Prepared by: Citywide Planning Team, New Orleans Recreation Department.

Anticipated Outcomes: Many of these small district and neighborhood parks were not well known but to the using community, they represented an extension of the home. From sports to senior citizen activities, many parks, with limited city funding, managed to play a vibrant role in the lives of citizens. One outcome of a renovation program done in conjunction with people returning to live near a park facility would be a feeling of confidence that the neighborhood was coming back to life. A secondary benefit might be that a park could be made larger with the application of mitigation monies which would allow parts of it to serve as a retention pond in times of heavy rain.

Project Description Sheet #80

Project Name:	Renovate Public Marinas
Type of Project:	Recovery – Medium Value
Category:	Community Facilities: Parks and Recreation
Area of Project Impact:	Citywide
Project Location:	Planning District #: 5, 9
Project Description:	<p>New Orleans had three public marinas: the Municipal Yacht Harbor at West End; one operated by the (now defunct) Orleans Levee Board in Eastern New Orleans; and Southshore Harbor. All three, especially the Municipal Yacht Harbor, were heavily damaged by Katrina and have not been restored or re-opened. This project would determine the repairs needed to bring any or all of the marinas back into operation.</p> <p>There are also a number of smaller marinas in Planning District 11 that serve the fisheries community and that were damaged by Hurricane Katrina. This project would determine the needed repairs to these facilities and the need for and appropriate involvement of direct public assistance.</p>
Project Cost Estimate:	\$150,000,000 , or \$50,000,000 for each site. This includes removal of subsurface wreckage/debris and dredging, new pier facilities, new bulkheads, replacement of infrastructure for water and electric service, new storage and repair equipment.
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	Ownership of sailing and motor vessels in the pre-Katrina city was a major source of recreation. The sailing and boating industry were responsible for many jobs in and around the city. Those jobs cannot likely be restored absent a renovation of the two marinas. The fisheries industry has also traditionally been a major employer in the region and is indispensable to the cuisine and culture of the region. Restoring the marinas in District 11 is essential to the recovery of this industry.

Project Description Sheet #81

Project Name:	Create New Parks and Greenbelts as Needed
Type of Project:	Community Interest
Category:	Community Facilities: Parks and Recreation
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	<p>This project envisions working in tandem with the UNOP “clustering” approach to building a safer and more sustainable city. As populations return, clustering is implemented and infrastructure is rebuilt to support the new pattern, there will be demands for new parks and greenbelts. Greenbelts along major streets complement bike paths and hiking trails. New parks may be part of a citywide mitigation effort providing temporary rain holding facilities to avoid overburdening drainage systems during heavy downpours. Parks can be designed to complement neighborhood settlement patterns and to function as adjuncts to the community centers advocated by many Planning Districts.</p>
Project Cost Estimate:	<p>\$20,000,000. The cost of parks and greenbelts is highly variable depending on whether land is donated or purchased. Cost also varies depending on the degree of renovation needed and extent of programs anticipated.</p>
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	<p>Much like the renovation of the existing parks there would be recreational benefits. Another benefit is that new parks and greenbelts could be planned to be put in place to support the “cluster” strategy of UNOP designed to lead to a safer and more sustainable city clustered around centers of community activity including parks. Some of the new parks, if done correctly, could serve as sort of a “town square.”</p>

Project Description Sheet #82

Project Name:	Expansion of Existing Arts District
Type of Project:	Community Improvement
Category:	Cultural and Municipal Resources
Area of Project Impact:	Citywide
Project Location:	South Rampart Street from Poydras to Felicity (Planning District # 2)
Project Description:	<p>The existing Arts District originally emerged in the Warehouse District as a result of the 1984 World's Fair. It has now grown into a successful entity. Pre-Katrina, six or more arts and arts related institutions along Oretha Castle Haley Blvd in the Central City area emerged, connecting to the existing Arts District via S. Rampart, Baronne, and Carondelet Streets. Formal expansion of the Arts District boundaries to encompass these recently created institutions would expand the cultural scope of the Arts District and more effectively link the African American cultural community to the established Arts District in the Warehouse District. This is a recommendation of the BNOB Cultural Committee.</p>
Project Cost Estimate:	\$500,000 (installation of signage in newly-added portion of district; publicity/marketing campaign on expansion)
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	<p>The Arts District would expand and allow more African American and Afro Caribbean exposure as part of the New Orleans cultural heritage. More visitors would find their way to the newer outlets in Central City. The Central City cultural community would be more effectively linked to existing arts community institutions and services.</p>

Project Description Sheet #83

Project Name: **Create a Downtown Theater District**

Type of Project: Community Improvement

Category: Community facilities

Area of Project Impact: Regional

Project Location: Planning District #: 1
Neighborhood: CBD

Project Description: This project will develop, possibly by use of tax incentives and public funds, a “Broadway South” theater district along Canal Street in the Central Business District. The area of Canal Street between Claiborne Avenue and the River has long been New Orleans’s ‘grande boulevard’. There are several theatres on the street that were in operation prior to Katrina and several others that were vacant or underutilized. This project proposes that public leverage and public resources be devoted to maximizing the use of historic theaters and possibly building new theaters to accommodate plays and other performing arts functions. The concept of a live entertainment state tax credit, akin to the film production tax credits passed by the Louisiana State Legislature, has already been proposed. This project supports the adoption of such an incentive and would also evaluate the need for and appropriateness of direct public assistance for facility renovation. This project envisions working in conjunction with the Downtown Development District on physical improvements such as signage, and proposing tax incentives to help the development of the theater district vicinity. In coordination with the Canal Street/Downtown Redevelopment Project, restaurants and nightlife that would support the vitality of a theater district would be recruited to the Rampart/Canal area.

Also included in this project would be a study to determine the structural and acoustic potential of these facilities to accommodate the performing arts that have not typically had a home on Canal Street, such as opera, ballet, and chamber music. The study would also examine the ability of these facilities to accommodate other signature cultural attractions that have been proposed in recent years such as a Louisiana Music Hall of Fame and a Jazz Museum.

It is envisioned that the Downtown Development District would play a major role in finalizing the details of this project and in managing its implementation.

Project Cost Estimate: **\$500,000**

Estimates Prepared by: Citywide Planning Team

Anticipated Outcomes: The physical foundation for a vibrant theater district already exists; the likely outcome of the project would be a new influx of visitors and locals to Canal Street depended on the out of town tourist/conventioneer who patronized them. Since the storm, the number of visitors is down. Adding new attractions to weekend, thereby expediting the City will bring more visitors and encourage them to spend an extra day in renaissance of New Orleans. The basis for a theatre district already exists, and its expansion will bring locals and tourists to this area of the City in greater numbers during evening and weekend hours.

Project Description Sheet #84

Project Name: Investment in Cultural Recovery Programs

Type of Project: Community Improvement

Category: Community facilities

Area of Project Impact: Regional

Project Location: Citywide

Project Description: To assist artists and cultural institutions suffering from the effects of Katrina, the cultural community of New Orleans has developed two programs to spur the recovery of this sector. ***NOLA Culture REstored***, is a program that returns cultural groups to their pre-Katrina strength through four projects: Culture Invests; Culture Works; Culture Returns; and Culture Transforms. These projects contribute to the funding of operations and programmatic costs for cultural organizations and community-based cultural groups, subsidize artists' salaries in the rebuilding of New Orleans, create cultural employment opportunities, assist with displaced artist travel costs and/or housing, and pair culture with education in school-based and life-long learning programs.

NOLA Culture REbuilt, is a housing and facility-based program with three project components: Culture Lives; Culture Reinvents; and Culture Insures. These projects, overseen by a Cultural Community Development Corporation, focus on documenting housing and workspace needs and coordinating their fulfillment, acquiring and repurposing space for cultural activities, and administering a fund to support uninsured damage to cultural facilities

Project Cost Estimate:	City/State Support	\$266,800,000
	Leveraged Investment/Income	<u>638,400,000</u>
	Total	\$905,200,000

Estimates Prepared by: The NOLA Cultural Roundtable

Anticipated Outcomes: These projects address the recovery needs of the cultural community and achieve some of the goals identified by the Bring New Orleans Back (BNOB) Cultural plan. For more information on these projects, please see <http://www.npnweb.org>.

Project Description Sheet #85

Project Name:	Katrina Memorial
Type of Project:	Recovery – High Value
Category:	Urban Design/Economic Development
Project Location:	To be determined
Project Description:	<p>The purpose of this project is to create a permanent memorial to the events surrounding the disaster of Katrina, including the deaths of over 1,000 New Orleanians, but more importantly, to the rebuilding of the City. The scale of the project is Homeric, on the order of the Arch of Triumph on the Champs Elysee in Paris. This project will transform a section of town into a new destination for tourists and locals alike. The location of the monument and the design should be open to international competition, should be funded mainly by the private sector, and should be completed for the City's tri-centennial in 2018.</p>
Project Cost Estimate:	<p>Capital costs: \$2,000,000 for site work; \$1,500,000 for memorial</p> <p>Maintenance and operations: \$70,000 per year</p>
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcomes:	<p>The objective of this project is to create a permanent monument to the spirit of a City that found the strength to rebuild after such a devastating disaster. The scale of the project will transform the selected section of the town and will reinforce the notion of New Orleans as the most European of American cities and as the leading city of the Caribbean.</p>

Project Description Sheet #86

Project Name: **Historic Preservation Technical and Financial Assistance Program**

Type of Project: Recovery – Moderate Value

Category: Historic Preservation and Urban Design

Area of Project Impact: Citywide

Project Location: Orleans Parish Historic Districts

Project Description: There are two principal components of this project. The first will create and fund a program providing technical and other relevant preservation information to homeowners rebuilding in local and National Register historic districts. Utilizing students from the Tulane School of Architecture and UNO's Department of Planning and Urban Studies along with volunteers, technical assistance staff will provide informational assistance to property owners. Assistance will include providing guidance for design in historic neighborhoods, utilizing existing historic preservation resources such as the HDLC and/or the PRC, and connecting property owners to myriad existing federal and state grant programs (e.g., federal termite program, SHPO grants) for historic preservation. The technical staff will also be responsible for reviewing pending legislation and advocating, through the local delegation, for expanded state and federal resources to support building preservation.

The second component of this project is a blended grant and revolving loan program to assist homeowners in restoring flood damaged homes to HDLC standards. There is a gap—occasionally significant—between the cost of renovating a home to building code standards and the cost of a historically sensitive renovation. This assistance program will bridge at least a portion of that gap. It will be available to property owners in both local and National Register historic districts. Review and approval of the grant applications will be the purview of the HDLC. The blend of loan versus grant assistance and the amount of that assistance will be determined on the basis of level of damage, compensation to date (from Road Home, insurance, etc.), and the financial means of the applicant. Owner occupied, renter occupied, and commercial buildings will all be eligible.

Project Cost Estimate: **\$300,000**

Anticipated Outcomes: Homeowners and/or contractors will have increased awareness of the issues facing historic districts and the importance of maintaining the architectural integrity of neighborhoods. Resources to assist in preservation will be made available, maintaining the long lasting historic, cultural, and economic value of local architecture.

Project Description Sheet #87

Project Name: **Develop Urban Design Plans and Pattern Books of New Orleans Architecture**

Type of Project: Recovery – High Value

Category: Historic Preservation and Urban Design

Area of Project Impact: Citywide

Project Location: Citywide, but especially Planning District #s 1 through 6

Project Description: Prior to Hurricane Katrina, many areas of New Orleans could have benefited from a clearer long-term urban design vision and clearer guidance to developers. With the destruction caused by Katrina, the need for much of the City's housing stock to be rehabilitated and the potential for newly formed development in presently underutilized areas, there is an even greater need for an overarching urban design vision and the specific guidelines to make that vision a reality. Of particular concern is the aesthetic impact of raising homes. In the absence of guidelines that encourage aesthetically pleasing forms of home elevations, a mishmash of utilitarian adaptations may ensue, compromising the City's precious architectural history.

In recognition of the varied architectural periods represented in the City's building stock, this project would eschew a one-size-fits-all approach and instead would recommend different guidelines for different neighborhoods and key corridors. It would also challenge architects to respect the pedestrian character and vernacular traditions of the City while at the same time avoiding inauthentic imitations of historical styles.

The final outcome of this project would be a New Orleans-specific "pattern book" to serve as an aesthetic guide for new development. It would be developed in close coordination with the City Planning Commission and HDLC and would be the basis for the design reviews that the agencies conduct. This project would also recommend, where applicable, expanded design review in certain areas, to be codified in the Comprehensive Zoning Ordinance.

Project Cost Estimate: Development of pattern book: **\$100,000** (excludes purchasing patterns or detailed architectural drawings)

Estimates Prepared by: Citywide Planning Team

Anticipated Outcomes:

New Orleans will be redeveloped so as to maintain and improve upon the sense of place that defined the City before the storm. A secondary benefit would be to help homeowners, especially in historic areas, understand the value of the homes they own and the value to them of keeping their visual integrity with the surrounding neighborhoods.

Project Description Sheet #88

Project Name: Sidewalk, Streetscape and Neutral Ground Improvements

Type of Project: Recovery – Low Value

Category: Preservation/Urban Design

Area of Project Impact: Citywide

Project Location: Citywide

Project Description: This project consists of several initiatives. They are as follows: 1) where lacking, to provide sidewalks, curbs and gutters as streets are repaved and rebuilt in order to improve the pedestrian experience and to better accommodate the disabled; 2) to place above-ground power lines underground when doing so is feasible and in accordance with hazard mitigation practices; 3) to plant street trees both in areas whose tree canopy was lost due to Katrina and in areas that were lacking trees prior to Katrina; 4) to replace or improve street lighting; 5) to provide signage in neutral grounds to identify neighborhoods when in accordance with community wishes; 6) to provide additional sidewalk and neutral ground amenities in selected locations, such as small monuments, statues and way-finding signage similar to the Freedom Trail in Boston; and 7) where appropriate to install pervious surfaces and “rain gardens” to allow for the natural filtration of rain water into the soil. While predominantly geared toward sidewalks, this project also includes other key pedestrian features such as pedestrian bridges and pedestrian walkways off of vehicular roads.

Project Cost Estimate:

- Sidewalks, curbs and gutters at \$500,000/mile (on approx. 20% of local streets): **\$175,000,000**
- Tree Master Plan, replacement of 50,000 trees at \$500/tree (includes required 1 year maintenance) on streets, neutral ground, public spaces and parks, and addition of 2,000 new street/neutral ground trees: **\$26,150,000**
- Replacement or improvement of street lighting at \$110,000/per mile for installation, operations and maintenance for 20 years (on approximately 20% of local streets): **\$38,000,000**
- Neighborhood monuments, way-finding signage, street furniture and other amenities and pervious alternative landscape: **\$1,250,000**

Estimates Prepared by: Citywide Planning Team

Anticipated Outcomes:

This project will substantially improve pedestrian accessibility, particularly for the disabled; and improve the appearance of many neighborhoods, thereby spurring investment activity.

Project Description Sheet #89

Project Name:	Repair and Preserve Historic Forts
Type of Project:	Recovery – Low Value
Category:	Historic Preservation/Urban Design
Area of Project Impact:	National
Project Location:	Fort Pike and Fort Macomb (Planning District #: 11) Fort St. John (Planning District #: 5)
Project Description:	<p>The three historic forts in New Orleans are some of the City’s most underappreciated historic resources. Fort Macomb and Fort Pike sustained major damage from Hurricane Katrina. Fort St. John escaped major damage but has long been in need of stabilization and enhancement as a cultural destination.</p> <p>This project would repair the significant damage at Fort Pike and restore the fort to its pre-Katrina condition as a State Historic Site. The project would also make emergency stabilization repairs to Fort Macomb to mitigate further deterioration of the fort—a facility that had been closed and inaccessible to the public even prior to Katrina. It would study the feasibility of a full restoration of Fort Macomb as a historic site that would be accessible to the general public. Improvements to Fort St. John would include immediate repairs and stabilization and the provision of more information and interpretive elements (additional signage, displays of historic photographs, etc.) on site. In recognition of its location within a residential neighborhood, enhancements to Fort St. John as a cultural resource should not seek to draw increased traffic and noise to the area; rather, they should simply provide the casual visitor with more information about the fort’s historical significance and the evolution of the site.</p>
Project Cost Estimate:	\$8 million
Estimates Prepared by:	Citywide Planning Team, District Teams
Anticipated Outcomes:	These improvements will restore and improve some of the oldest, most historically significant structures in New Orleans.

Project Description Sheet #90

Project Name:	Regulatory Amendments: Comprehensive Zoning Ordinance and Other Updates
Type of Project:	Recovery – High Value
Category:	Implementation – Regulatory Amendments
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	<p>This project includes a total update of Comprehensive Zoning Ordinance (CZO), update of the Subdivision Regulations, and integration of the City's CZO and Subdivision regulations into newly formatted Unified Development Code (UDC). This project also includes updates to all other ordinances and regulatory controls to ensure consistency with the CZO, subdivision regulations, and UDC. This includes but is not limited to: Update of all ordinances regulating sexually oriented businesses, including criminal code provisions, zoning, separation requirements from sensitive uses, and possible consideration of licensing ordinance; and the update of all ordinances regulating billboards and advertising signs throughout the City.</p> <p>Tasks include a review and integration of all Citywide and District Plan recommendations; a review of all relevant background and supporting City planning and zoning documents; procedures including a legal review of State enabling legislation; development of a communication plan for public involvement and feedback throughout the update process using news and web announcements; conduct of interviews with key stakeholders to solicit input on needed revisions; drafting of new revised documents in a series of modules and delivery to the City Planning staff for review and comment; solicitation of public input on the proposed draft revisions at workshops and open houses; presentation of the proposed revisions to the City Planning Commission and City Council; and preparation of final version of the documents upon adoption.</p>
Project Cost Estimate:	\$1.94 million
Estimates Prepared by:	Steve Villavaso, Villavaso & Associates; James Duncan and Eric Damian Kelly, Duncan Associates
Anticipated Outcome:	Adoption of new regulations will ensure consistency with the Citywide Recovery Plan and provide the local regulatory toolkit necessary to expedite resettlement and rebuilding.

Project Name:	Recovery Implementation - Staffing
Type of Project:	Recovery – Very High
Category:	Implementation – Staffing
Area of Project Impact:	Citywide
Project Location:	Citywide
Project Description:	Agencies charged with key recovery activities will need to recruit and retain some senior staff with specific expertise needed for recovery. But to the extent feasible, the Citywide Plan recommends that temporary/contract personnel be used across agencies in recovery implementation teams, coordinated through the Parishwide Recovery Council and Office of Recovery Management. Recommendations are also made for supplemental staffing specifically for the Office of Recovery Management and City Planning Commission. The staffing requirements follow the phases used in the Recovery Implementation Timeline.
Project Cost Estimate:	\$396,335,000
Estimates Prepared by:	Citywide Planning Team
Anticipated Outcome:	While New Orleans recovery and rebuilding effort is massive, it is still a temporary process. The personnel needed to implement the recovery will vary over time and human resources need to be coordinated and scaled appropriately to meet the needs.

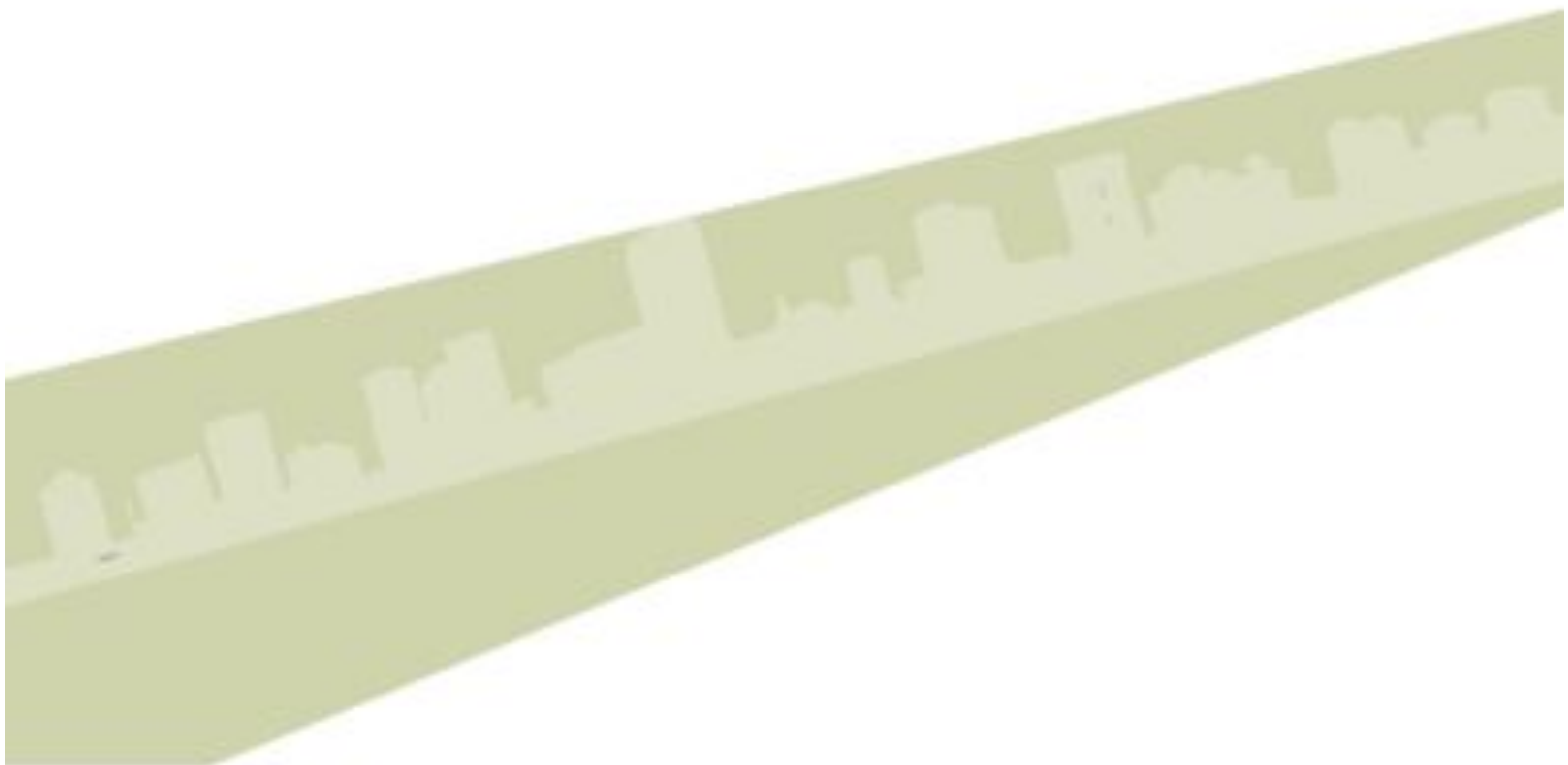


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CITYWIDE STRATEGIC RECOVERY
AND REBUILDING PLAN

The Unified
New Orleans Plan

Appendix B DISTRICT PROJECT LIST



Appendix B-1: District Projects and Corresponding Citywide Projects

Planning District	Project Title/Description	Sector	Corresponding Citywide Team Project (Primary)	Corresponding Citywide Team Project (Secondary)	Corresponding Citywide Team Project (Tertiary)
1	Determine the critical mix of downtown amenities necessary to promote downtown as a highly competitive center for tourism; identify any gap financing required.	Cultural Facilities	Canal Street/Downtown Revitalization		
1	"Broadway South" proposal	Cultural Facilities	Downtown Theater and Cultural District		
1	Develop the New Orleans Music Hall of Fame, new jazz museum and cultural center and explore ways they may be integrated	Cultural Facilities	Downtown Theater and Cultural District		
1	Rehabilitate existing theater buildings	Cultural Facilities	Downtown Theater and Cultural District		
1	Fund the gaps in finance required to construct BioInnovation Center, Cancer Center, and other key Medical District initiatives	Economic Development	Bio-Innovation Center	Cancer Research Center	
1	Provide financial support to meet tourism industry's need for hotel rooms	Economic Development	Canal Street/Downtown Revitalization		
1	Promote redevelopment of downtown's single riverfront site for strategic uses that will support the larger downtown economy	Economic Development	Corridor Revitalization		
1	Increase financial support for cultural economy including an entertainment tax credit (comparable to the film tax credit) to promote Broadway South and performing arts elsewhere downtown	Economic Development	Downtown Theater and Cultural District		
1	Perform a study to determine alternate ways to stabilize the funding source for the Superdome	Economic Development	Evaluation and Potential Reuse of Publicly Owned Property		
1	Develop a business retention and development strategy	Economic Development	Implementation: Economic Development Department (Section 4 of Plan)		
1	Create a Medical District Development Corporation in order to formalize the status of the Medical District	Economic Development	Implementation: Special Taxing Districts (Section 4 of Plan)		
1	Support and promote new LSU/VA hospital	Education and Health Care	LSU/VA/University Hospital		
1	Explore need for neighborhood health center for growing population in Warehouse District and Rampart Street Corridor and Lafayette Square	Education and Health Care	Redevelop Neighborhood-Based Health Centers/Clinics		
1	Create new elementary school combined with refurbished or new library	Education and Health Care	Repair and Renovate Existing School Facilities/Construct New School Facilities		
1	Raise residential and sensitive buildings to sea level or above	Flood Control and Mitigation	"Elevate the City" Incentive Program		
1	"Harden" civic and other buildings	Flood Control and Mitigation	Floodproof essential public equipment		
1	Improved coastal restoration and protection	Flood Control and Mitigation	Advocacy: Flood Protection & Coastal Restoration (Section 4 of Plan)		
1	Transfer development rights from historic landmarks along the South Rampart corridor	Historic Preservation	Corridor Revitalization		
1	Expand State Historic Preservation Office's restoration grant program and increase funding for other state and federal programs that support historic preservation—for example, the federal termite program	Historic Preservation	Historic Preservation Technical and Financial Assistance		
1	Expand Warehouse District and Lafayette Square historic district boundaries	Historic Preservation	Implementation: Local/National Historic Districts (Section 4 of Plan)		
1	Increase enforcement of historic district guidelines and regulations including enhanced planning and design review of pipeline and future projects	Historic Preservation	Implementation: Local/National Historic Districts (Section 4 of Plan)		
1	Conduct a detailed assessment of gaps for historic streetscape restoration in all historic districts	Historic Preservation	Improve Sidewalks, Streetscapes, and Neutral Grounds		
1	Implement adapted version of the New Jersey Rehabilitation Subcode	Historic Preservation	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)		
1	Facilitate conversion of upper-level vacant premises to residential, especially along Canal Street	Housing and Neighborhoods	Canal Street/Downtown Revitalization	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)	
1	Resolve parking and other issues necessary to incentivize more loft renovation and mixed-use development	Housing and Neighborhoods	Traffic and Parking Management Plan	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)	
1	Fund the gap necessary to promote significant additional workforce ownership and rental housing.	Housing and Neighborhoods	All Housing Strategies		
1	Conduct study to determine steps to redevelop large surface parking lot in French Quarter along N. Peters Street in a manner compatible with the Quarter's regulations and character	Housing and Neighborhoods	Corridor Revitalization		
1	Encourage mixed-use development/mixed-income housing along the North and South Rampart Street Corridor	Housing and Neighborhoods	Corridor Revitalization		
1	Resolve financial feasibility and other issues necessary to convert Charity Hospital building to mixed income housing	Housing and Neighborhoods	Evaluation and Potential Reuse of Publicly Owned Property		
1	Take a new look at housing homeless in downtown in conjunction with S. Rampart development where thousands of new units of mixed income housing will be created	Human and Social Services	Implement Permanent Housing Development Strategy for All Displaced Residents		
1	Introduce a comprehensive workforce readiness and entrepreneurship program	Human and Social Services	Workforce Training Program		
1	Undertake comprehensive repair/upgrade of drainage infrastructure	Infrastructure and Public Works	Drainage Improvements - Short Term Projects		
1	Improve services including garbage collection and power supply	Infrastructure and Public Works	Advocacy: Basic Utility Infrastructure Repair (Section 3 of Plan) Advocacy		
1	Undertake comprehensive repair/upgrade of all streets, including signals, signs, lighting, gutters, drains, sidewalks, and curbs	Infrastructure and Public Works	Repair/Restoration of Streets		
1	Undertake improvement to water supply and raising water pressure and encourage adequate street drainage	Infrastructure and Public Works	Water Distribution System—Medium Term	Drainage Improvements—Short Term Projects	
1	Extend design review throughout downtown and create design guidelines for areas outside of the Historic Districts	Other	Develop Urban Design Plans and Pattern Books of New Orleans Architecture	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)	
1	Create a detailed urban design plan for the Medical District and S. Rampart Street Corridor	Other	Develop Urban Design Plans and Pattern Books of New Orleans Architecture		
1	Establish a Livability Court to assist with determination of citizen complaints	Other	Implementation: Changes to Court System (Section 4 of Plan)		
1	Explore mechanisms currently being established in Boston and other cities that promote green buildings in the private sector	Other	Sustainable Environmental Strategies		
1	Reopen and rehabilitate Armstrong Park (see District 4 plan)	Public Realm and Parks	Repair, renovate, or construct new regional parks		
1	Create new downtown neighborhood parks within the S. Rampart Corridor and on a site bordering both Warehouse and Lafayette Square Districts; enhance existing parks including additional playgrounds	Public Realm and Parks	Create new parks and greenbelts, as needed		
1	Enhance key pedestrian connector streets to promote a framework of inviting pedestrian connections	Public Realm and Parks	Improve Sidewalks, Streetscapes, and Neutral Grounds		
1	Enhance public realm around Superdome and improve the pedestrian connections to the Superdome	Public Realm and Parks	Improve Sidewalks, Streetscapes, and Neutral Grounds		
1	Promote establishment of mass evacuation plan with law enforcement hierarchy (federal/state/local) for every district and determine role that light rail and commuter rail could play	Public Safety	Evacuation/Disaster Response Plan		
1	Explore creation of a self-taxing district to provide additional district-wide security	Public Safety	Implementation: Special Taxing Districts (Section 4 of Plan)		
1	Increase police presence and enforcement downtown	Public Safety	Recovery Implementation: Staffing (Section 4 of Plan)		

Appendix B-1: District Projects and Corresponding Citywide Projects

Planning District	Project Title/Description	Sector	Corresponding Citywide Team Project (Primary)	Corresponding Citywide Team Project (Secondary)	Corresponding Citywide Team Project (Tertiary)
1	Encourage developers to include a full service grocery store downtown through a combination of financial incentives, support, recruitment, site assembly and the creation of a parking strategy	Retail and Community Services	Canal Street/Downtown Revitalization		
1	Along key connector streets, encourage new development and, where possible, existing buildings to provide street-fronting retail and other uses that engage pedestrians	Retail and Community Services	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)		
1	Light rail transit to airport	Transportation and Transit	East-West Corridor/Downtown Loop		
1	Expand streetcar service and routes	Transportation and Transit	Streetcar/Light Rail Routes Expansion Study		
1	Create bike-friendly corridors	Transportation and Transit	Implement Citywide Bike Path System		
1	Improve pedestrian/bike connections to river	Transportation and Transit	Implement Citywide Bike Path System		
1	Support commuter rail link to Baton Rouge	Transportation and Transit	Advocacy: Louisiana Commuter Rail (Section 3 of Plan)		
1	Extend Howard Avenue to improve Superdome access and operations	Transportation and Transit	Ongoing Replacement Program for Major and Minor Streets		
1	Restore bus service to pre-Katrina levels and introduce new shelters on key transit routes	Transportation and Transit	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
1	Restore St. Charles streetcar service	Transportation and Transit	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
1	Introduce a parking management strategy for downtown that includes shared parking facilities and addresses the needs of residents, employees, visitors, and others	Transportation and Transit	Traffic and Parking Management Plan		
1	Prepare a downtown traffic transportation plan that addresses traffic congestion and conflicts throughout downtown and the French Quarter	Transportation and Transit	Traffic and Parking Management Plan		
2	Study locations for neighborhood libraries	Community Services - Libraries	Repair, Renovate, or Construct New District/Neighborhood Libraries		
2	Complete district park system study	Community Services - Recreation	Repair and Renovate District/Neighborhood Parks		
2	Rehabilitate Edgar B. Stern Tennis Center	Community Services - Recreation	Repair and Renovate District/Neighborhood Parks		
2	Restore existing parks, pocket parks, play spots, and recreational centers	Community Services - Recreation	Repair and Renovate District/Neighborhood Parks		
2	Develop and implement a "Green Streets" program	Community Services - Recreation	Improve Sidewalks, Streetscapes, and Neutral Grounds		
2	Study the feasibility of police security sub-stations and programs in the district	Community Services Recovery	Develop a citywide network of state-of-the-art police and fire substations		
2	Complete comprehensive study of schools	Community Services Recovery	Repair and Renovate Existing School Facilities/Construct New School Facilities		
2	Renovate or provide new Lafon Elementary School	Community Services Recovery	Repair and Renovate Existing School Facilities/Construct New School Facilities		
2	Relocate Port of New Orleans terminal to uptown complex at Napoleon Avenue	Economic Recovery	Relocate New Orleans Cold Storage	Replace Container Handling Capacity at Port	
2	Conduct Tchoupitoulas mixed use corridor study	Economic Recovery	Corridor Revitalization		
2	Develop and implement neighborhood commercial building program	Economic Recovery	Corridor Revitalization		
2	Revitalize Oretha Castle Haley Blvd. as a mixed use arts and cultural corridor	Economic Recovery	Corridor Revitalization		
2	Revitalize South Claiborne Avenue as a transit oriented mixed use corridor	Economic Recovery	Corridor Revitalization		
2	Develop a civil rights museum on Oretha Castle Haley Boulevard	Economic Recovery	Evaluation and Potential Reuse of Publicly Owned Property		
2	Remediate Saratoga incinerator site and determine redevelopment options	Economic Recovery	Hurricane Recovery Soil Assessment and Remediation Program		
2	Organize and fund an arts and cultural district council	Economic Recovery	Implementation: CDC and Other Formal Partnerships (Section 4 of Plan)		
2	Incentivize continued recovery and expansion of health care industry	Economic Recovery	Redevelop Neighborhood-Based Health Centers/Clinics		
2	Facilitate mixed use development in Lower Garden District	Economic Recovery	Small Area Adaptive Re-use Studies		
2	Develop a business incubator in Central City	Economic Recovery	Small Business Incubator and Assistance Program and Assistance Program		
2	Establish and implement a small business recovery loan program for business retention	Economic Recovery	Small Business Incubator and Assistance Program and Assistance Program		
2	Create a district-wide business plan	Economic Recovery	Small Business Incubator and Assistance Program		
2	Develop and implement a comprehensive workforce program	Economic Recovery	Workforce Training Program		
2	Create neighborhood urban designs for the district	Historic Preservation	Develop Urban Design Plans and Pattern Books of New Orleans Architecture		
2	Study the expansion and delineation of historic districts	Historic Preservation	Implementation: Local/National Historic Districts (Section 4 of Plan)		
2	Develop a renter assistance program	Housing Recovery	All Housing Strategies		
2	Develop and implement moderate and affordable housing incentive program	Housing Recovery	All Housing Strategies		
2	Create residential and commercial neighborhood architecture pattern book for district	Housing Recovery	Develop Urban Design Plans and Pattern Books of New Orleans Architecture		
2	Develop and incentivize senior citizen housing	Housing Recovery	Implement Permanent Housing Development Strategy for All Displaced Residents		
2	Construct housing at W.J. Guste	Housing Recovery	Rehabilitate and Rebuild Low-Income Housing		
2	Construct new housing at C.J. Peete	Housing Recovery	Rehabilitate and Rebuild Low-Income Housing		
2	Construct new housing at HANO scattered sites	Housing Recovery	Rehabilitate and Rebuild Low-Income Housing		
2	Renovate existing C.J. Peete housing	Housing Recovery	Rehabilitate and Rebuild Low-Income Housing		
2	Develop and implement an amended lot next door consolidation program	Housing Recovery	Study: Streamline Process for Purchase of blighted housing and lot next door program		
2	Develop and implement a voluntary incentive based energy efficiency and sustainable materials program	Housing Recovery	Sustainable Environmental Strategies		
2	Hardening of utility service and street infrastructure program	Hurricane/Flood Protection	Improve Sidewalks, Streetscapes, and Neutral Grounds	Floodproof essential public equipment	
2	Develop and implement a voluntary incentive-based rain garden program	Hurricane/Flood Protection	Sustainable Environmental Strategies	Improve Sidewalks, Streetscapes, and Neutral Grounds	
2	Develop and implement a voluntary incentive-based "premium plus" home flood mitigation relocating program	Hurricane/Flood Protection	Neighborhood Stabilization Program (Clustering)		

Appendix B-1: District Projects and Corresponding Citywide Projects

Planning District	Project Title/Description	Sector	Corresponding Citywide Team Project (Primary)	Corresponding Citywide Team Project (Secondary)	Corresponding Citywide Team Project (Tertiary)
2	Develop and Implement a safe havens, passive survivability, and evacuation plan	Hurricane/Flood Protection	Evacuation/Disaster Response Plan		
2	Provide Category 5 hurricane and flood protection	Hurricane/Flood Protection	Advocacy: Flood Protection & Coastal Restoration (Section 4 of Plan) Advocacy		
2	Develop and implement a voluntary incentive-based home "FEMA Plus" flood mitigation elevation program	Hurricane/Flood Protection	"Elevate the City" Incentive Program		
2	Complete an independent third party study of flood risk	Hurricane/Flood Protection	Study: Orleans/Jefferson Flood Protection		
2	Develop and implement a voluntary incentive based hurricane and flood building program	Hurricane/Flood Protection	Sustainable Environmental Strategies		
2	Reinstate and repair District-wide basic infrastructure and public works services	Public/Private Infrastructure and Utilities	Advocacy: Basic Utility Infrastructure Repair (Section 3 of Plan) Advocacy		
2	Create new citywide light rail, streetcar system with multi-modal nodes	Transportation Recovery	Streetcar/Light Rail Routes Expansion Study		
2	Re-open fully functional St. Charles Streetcar Line	Transportation Recovery	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
2	Develop appropriate transit schedule and vehicle types for RTA bus lines	Transportation Recovery	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
2	Reinstate Jackson ferry service	Transportation Recovery	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
3	Program and develop community/recovery resource centers	Housing	Neighborhood Recovery Resource Centers		
3	New open space connections within network (including bike paths)	Community Facilities	Create new parks and greenbelts, as needed	Implement Citywide Bike Path System	
3	Leake Ave. and levee park comprehensive planning study	Community Facilities	Create new parks and greenbelts, as needed		
3	Program and develop interim use strategies for public facilities/schools	Community Facilities	Evaluation and Potential Reuse of Publicly Owned Property		
3	Broadmoor cultural and commercial corridor	Economic Development	Corridor Revitalization	Repair, Renovate, or Construct New District/Neighborhood Libraries	Repair and Renovate Existing School Facilities
3	Redevelop Carrollton Shopping Center	Economic Development	Corridor Revitalization		
3	Redevelop intersection of S. Carrollton and S. Claiborne Ave.	Economic Development	Corridor Revitalization		
3	Revitalize Freret St. Commercial Corridor	Economic Development	Corridor Revitalization		
3	Revitalize Oak St. commercial corridor	Economic Development	Corridor Revitalization		
3	Revitalize S. Claiborne Ave. commercial corridor	Economic Development	Corridor Revitalization		
3	Tchoupitoulas St. corridor zoning overlay/limit commercial activity	Economic Development	Corridor Revitalization	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)	
3	Washington and Broad Street corridor improvements	Economic Development	Corridor Revitalization		
3	Investigate and, if required, remediate Syncor Facility	Economic Development	Hurricane Recovery Soil Assessment and Remediation Program		
3	Analyze transit loops and vehicle size/evaluate additional routes	Economic Development	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
3	Pumping station upgrades and associated flood protection projects	Environmental Protection	Drainage Improvements - Short Term Projects	Floodproof essential public equipment	
3	Equalize levee protection on both sides of Monticello Canal/study decking	Environmental Protection	Study: Orleans/Jefferson Flood Protection		
3	Affordable and rental neighborhood housing renovation program (CDC)	Housing	All Housing Strategies	Implementation: CDC and Other Formal Partnerships (Section 4 of Plan)	
3	Develop neighborhood-specific design guidelines for rebuilding and flood protection	Housing	Develop Urban Design Plans and Pattern Books of New Orleans Architecture		
3	Home elevation program for high and medium risk areas	Housing	"Elevate the City" Incentive Program		
3	Neighborhood green block and housing moving program	Housing	Neighborhood Stabilization Program (Clustering)		
3	District-wide street/infrastructure repair and replacement program	Transportation Development	Repair/Restoration of Streets	Improve Sidewalks, Streetscapes, and Neutral Grounds	
4	New open space connections within network (including bike paths)	Community Facilities	Create new parks and greenbelts, as needed	Implement Citywide Bike Path System	
4	Create new connections between Zion City/ Booker T. Washington/ B.W. Cooper	Community Facilities	Rehabilitate and Rebuild Low-Income Housing	Improve Sidewalks, Streetscapes, and Neutral Grounds	
4	Bayou Road/Governor Nicholls cultural corridor	Community Facilities	Corridor Revitalization		
4	Program and develop community centers in underutilized public buildings	Community Facilities	Neighborhood Community Centers		
4	Program and develop interim use strategies for public facilities/schools	Community Facilities	Evaluation and Potential Reuse of Publicly Owned Property		
4	Improve Louis Armstrong Park and surrounding areas	Economic Development	Repair, renovate, or construct new regional parks		
4	North Claiborne Ave. corridor study	Economic Development	Corridor Revitalization		
4	Redevelop Blue Plate node (Earhart/ Washington Street/ Jeff Davis intersection)	Economic Development	Corridor Revitalization		
4	Revitalization of the St. Bernard Ave. commercial corridor	Economic Development	Corridor Revitalization		
4	Revitalization of the Tulane Ave. commercial corridor with emphasis on biosciences district	Economic Development	Corridor Revitalization		
4	Revitalize Broad Street commercial corridor with Main Street Program	Economic Development	Corridor Revitalization		
4	Revitalize Canal Street commercial corridor	Economic Development	Corridor Revitalization		
4	Revitalize Earhart Boulevard commercial/industrial corridor	Economic Development	Corridor Revitalization		
4	Revitalize Galvez St. commercial corridor	Economic Development	Corridor Revitalization		
4	Redevelop the Lafitte corridor as an urban/mixed-use district with central greenway	Economic Development	Corridor Revitalization	Create new parks and greenbelts, as needed	
4	Revitalize Gert Town: new town center and community facilities	Economic Development	Small Area Adaptive Re-use Studies		
4	Develop LSU/VA Regional Medical Center	Economic Development/Health	LSU/VA/University Hospital		
4	Pumping stations upgrades and associated flood protection projects	Environmental Protection	Drainage Improvements - Short Term Projects	Floodproof essential public equipment	
4	Neighborhood-specific design guidelines for rebuilding and flood protection	Environmental Protection	Develop Urban Design Plans and Pattern Books of New Orleans Architecture		
4	Affordable and rental neighborhood housing renovation program (CDC)	Housing	All Housing Strategies	Implementation: CDC and Other Formal Partnerships (Section 4 of Plan)	
4	Home elevation program for high and medium risk areas	Housing	"Elevate the City" Incentive Program		
4	Neighborhood green block and house moving program	Housing	Neighborhood Stabilization Program (Clustering)		
4	Redevelop and improve Iberville Housing and adjacent areas	Housing	Rehabilitate and Rebuild Low-Income Housing		
4	Redevelop and improve Lafitte Housing and adjacent areas	Housing	Rehabilitate and Rebuild Low-Income Housing		
4	Redevelop and improve St. Bernard Housing and adjacent areas	Housing	Rehabilitate and Rebuild Low-Income Housing		
4	District-wide street/infrastructure repair and replacement program	Transportation Development	Repair/Restoration of Streets	Improve Sidewalks, Streetscapes, and Neutral Grounds	

Appendix B-1: District Projects and Corresponding Citywide Projects

Planning District	Project Title/Description	Sector	Corresponding Citywide Team Project (Primary)	Corresponding Citywide Team Project (Secondary)	Corresponding Citywide Team Project (Tertiary)
4	Fund study of I-10 removal	Transportation Development	Study the removal of I-10 between Highway 90 and Elysian Fields Ave.		
5	West End bomb shelter removal – potential community open space combined with New Basin Park	Community Facilities	Create new parks and greenbelts, as needed		
5	Sewer & Water Board pump station landscape buffer improvements	Community Facilities	Drainage Improvements - Short Term Projects		
5	Conduct a feasibility study to assess Beth Israel Congregation for potential re-development of site as community center	Community Facilities	Neighborhood Community Centers		
5	Restoration of Harrison Community Center including restoration of the Gernon Brown Gymnasium in City Park	Community Facilities	Neighborhood Community Centers		
5	Rebuild neighborhood parks – including the proposed Levee Park/Katrina Memorial within West End Park	Community Facilities	Repair and Renovate District/ Neighborhood Parks		
5	Design and implement landscape improvements for open space formerly maintained by Orleans Levee District	Community Facilities	Repair, renovate, or construct new regional parks		
5	Repair or reconstruct neutral grounds on West End, Canal, Argonne, Milne, Fleur de Lis, Orleans Avenue, Robert E. Lee Blvd.	Community Facilities	Improve Sidewalks, Streetscapes, and Neutral Grounds		
5	Restore and upgrade Veterans Boulevard landscape buffer	Community Facilities	Improve Sidewalks, Streetscapes, and Neutral Grounds		
5	Facilitate West End Marina District mixed-use redevelopment project including addressing zoning and infrastructure requirements	Economic Development	Corridor Revitalization	Repair, renovate, or construct new regional parks	
5	Address existing/ potential infrastructure/incentives requirements to facilitate Harrison Avenue redevelopment	Economic Development	Corridor Revitalization		
5	Address existing/potential infrastructure/incentives to facilitate Robert E. Lee Boulevard/West End redevelopment	Economic Development	Corridor Revitalization		
5	Implement City Park Master Plan redevelopment and reconstruction	Economic Development	Implement Master Plan for City Park		
5	Repair/reopen and harden Hynes Charter School	Education and Health Care	Repair and Renovate Existing School Facilities/Construct New School Facilities	Floodproof essential public equipment	
5	Provide incentives/infrastructure to facilitate development of 1-2 new community medical clinics	Education and Health Care	Redevelop Neighborhood-Based Health Centers/Clinics		
5	Provide incentives/infrastructure to repair/reopen Lindy Boggs Medical Center	Education and Health Care	Redevelop Neighborhood-Based Health Centers/Clinics		
5	Repair/reopen/upgrade the Robert E. Smith Public Library	Education and Health Care	Repair, Renovate, or Construct New Regional Libraries		
5	Conduct historic district boundaries study	Historic Preservation	Implementation: Local/National Historic Districts (Section 4 of Plan)		
5	Facilitate placement of City Park on the National Register of Historic Places	Historic Preservation	Implementation: Local/National Historic Districts (Section 4 of Plan)		
5	New Basin Light House	Historic Preservation	Repair, renovate, or construct new regional parks		
5	Implement Fort St. John stabilization / restoration	Historic Preservation	Repair and restore forts as critical historic resources		
5	Implement restoration of Magnolia Gardens Bridge	Historic Preservation	Improve Sidewalks, Streetscapes, and Neutral Grounds		
5	Address existing/potential infrastructure and financial incentives and address zoning needs to develop mid-rise condominiums adjacent to the West End Marina.	Housing	Corridor Revitalization	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)	
5	Prepare District 5 "Pattern Book" to address residential standards	Housing	Develop Urban Design Plans and Pattern Books of New Orleans Architecture		
5	Develop and administer incentive-based program to elevate homes in areas of lowest topography	Housing	"Elevate the City" Incentive Program		
5	Prepare/remediate, redevelop JFK School site for new high school or low or mid-rise housing	Housing	Evaluation and Potential Reuse of Publicly Owned Property		
5	Provide incentives/infrastructure for elderly housing development at potential sites such as West End, Beth Israel and/or Lakeview School	Housing	Implement Permanent Housing Development Strategy for All Displaced Residents		
5	Create a District-based Community Development Corporation that interfaces with NORA and consistently represents district and neighborhood interests at a grass-roots level	Housing	Implementation: CDC and Other Formal Partnerships (Section 4 of Plan)		
5	Develop and administer incentive-based voluntary buyout program for home sites at lowest elevations	Housing	Neighborhood Stabilization Program (Clustering)		
5	Adopt proposed Lake Area Zoning Districts that have been submitted to the City Planning Office	Housing	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)		
5	Implement Lake Pontchartrain Seawall repairs	Hurricane/Flood Protection	Repair, renovate, or construct new regional parks		
5	Conduct a detailed flood protection/mitigation study	Hurricane/Flood Protection	Study: Orleans/Jefferson Flood Protection		
5	Conduct a secondary internal levee flood protection study for District 5	Hurricane/Flood Protection	Study: Orleans/Jefferson Flood Protection		
5	Repair/improve storm drainage structures within District 5	Infrastructure and Public Works	Drainage Improvements - Short Term Projects		
5	Implement sewer & water services rehabilitation	Infrastructure and Public Works	Wastewater collection system - Short Term Improvements	Water Distribution System - Short Term	
5	Rehabilitation of Lakeview Sewer & Water Board Pump stations in district	Infrastructure and Public Works	Drainage Improvements - Short Term Projects		
5	Rehabilitate (3) and harden existing fire stations in District 5	Public Safety	Develop a citywide network of state-of-the-art police and fire substations	Floodproof essential public equipment	
5	Rehabilitate and harden police station on Canal Blvd.	Public Safety	Develop a citywide network of state-of-the-art police and fire substations	Floodproof essential public equipment	
5	Facilitate LSP Troop B site options – Reuse/reopen existing Transportation Management Center site and create an Emergency Management Services Center on this site	Transportation/Transit	Evaluation and Potential Reuse of Publicly Owned Property		
5	Improve pedestrian & bicycle access to City Park, New Basin Canal and Lakeshore Drive.	Transportation/Transit	Implement Citywide Bike Path System		
5	Design and implement City Park Avenue traffic-calming measures	Transportation/Transit	Repair/Restoration of Streets		
5	Repair/rehabilitate primary collector streets – paving, curbs, lighting, signals, signage: Canal Blvd., Pontchartrain/West End, Fleur de Lis, Harrison Avenue, Robert E. Lee Blvd.	Transportation/Transit	Repair/Restoration of Streets		
5	Repair/rehabilitate secondary collector streets – paving, curbs, lighting, signals, signage: Lakeshore Drive, Fillmore Drive, Bellaire Drive & Marconi Drive as well as tertiary/local streets – paving, curbs, lighting, signals, signage	Transportation/Transit	Repair/Restoration of Streets		
5	Improve the existing transportation center at the foot of Canal Boulevard to better link the City Park Avenue bus shelter and the Canal Street streetcar shelter.	Transportation/Transit	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
5	RTA System – bus stop renovation for all district bus stops	Transportation/Transit	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
6	Explore reuse of Milne Boys Home as music/arts-oriented school and neighborhood facility	Community and Cultural Facilities	Evaluation and Potential Reuse of Publicly Owned Property		
6	Renovate and re-open Pontchartrain Park Senior Community Center	Community and Cultural Facilities	Neighborhood Community Centers		
6	Renovate, expand, and re-open Norman Mayer regional branch library or establish a new library within the area with resource center, planning center, and usable community meeting space	Community and Cultural Facilities	Repair, Renovate, or Construct New Regional Libraries		

Appendix B-1: District Projects and Corresponding Citywide Projects

Planning District	Project Title/Description	Sector	Corresponding Citywide Team Project (Primary)	Corresponding Citywide Team Project (Secondary)	Corresponding Citywide Team Project (Tertiary)
6	Create Town Center/community nexus at Gentilly Blvd. and Elysian Fields. Undertake a study to quantify public costs and identify funding sources.	Economic Development	Corridor Revitalization		
6	Rehabilitate neighborhood commercial areas.	Economic Development	Corridor Revitalization		
6	Support Dillard/CDC/neighborhood revitalization initiative. Provide public/foundation financial resources to partially support its operations.	Economic Development	Implementation: CDC and Other Formal Partnerships (Section 4 of Plan)		
6	Continue community support for relocation of Holy Cross School as catalyst for neighborhood renewal	Education and Health Care Services	Implementation: CDC and Other Formal Partnerships (Section 4 of Plan)		
6	Work with University of New Orleans to determine permanent location for Early College High School	Education and Health Care Services	Implementation: CDC and Other Formal Partnerships (Section 4 of Plan)		
6	Support location of neighborhood health clinic in or near the planned Town Center/community nexus	Education and Health Care Services	Redevelop Neighborhood-Based Health Centers/Clinics		
6	Secure funding for reopening/replacement of district public schools	Education and Health Care Services	Repair and Renovate Existing School Facilities/Construct New School Facilities		
6	Establish grant, loan, and regulatory program to support elevation of homes in low-lying areas to above mean sea level	Flood Protection	"Elevate the City" Incentive Program		
6	Improve protection and London Avenue and Industrial Canals: Install flood gates on London Ave. and Industrial Canals (France Road and Old Seabrook Bridge) at Lake Pontchartrain; Advance relocation of London Ave. Canal pump station to Lake Pontchartrain	Flood Protection	Advocacy: Flood Protection & Coastal Restoration (Section 4 of Plan) Advocacy		
6	Advance historic preservation initiatives: Edgewood Park neighborhood and Pontchartrain Park designations as national historic districts; Gentilly Terrace grant applications to National Park Service Historic Building Recovery Program	Historic Preservation	Historic Preservation Technical and Financial Assistance	Implementation: Historic Preservation	
6	Secure funding to facilitate elevating homes in vulnerable locations and supporting voluntary buyout program	Housing	"Elevate the City" Incentive Program		
6	Explore opportunities for new affordable/rental/senior housing via public/private partnerships. Undertake a study to assess needs and determine financing/development strategies.	Housing	Implement Permanent Housing Development Strategy for All Displaced Residents		
6	Support Citizens Road Home Program Action (CHAT) principles covering disposition of and payment for properties either acquired or to be mitigated through the Road Home Program	Housing	Implementation: Changes to Road Home Program (Section 4 of Plan)		
6	Improve city's process for dealing with abandoned properties; establish strategy and timeline.	Housing	Study: Streamline Process for Purchase of blighted housing and lot next door program		
6	Return to biweekly trash pick-up and implement effective recycling system	Infrastructure and Public Works	Recovery Implementation: Staffing (Section 4 of Plan)	Re-institute a Citywide Recycling Program	
6	Prioritize repairs on major water and waste-water system lines; provide schedule for completion and monthly status reports	Infrastructure and Public Works	Wastewater collection system - Short Term Improvements	Water Distribution System - Short Term	
6	Repair all damaged electric/gas facilities including essential redundancy mechanisms	Infrastructure and Public Works	Advocacy: Basic Utility Infrastructure Repair (Section 3 of Plan) Advocacy		
6	Establish implementation strategy for renewal of streets and sidewalks: Institute pavement management system to prioritize street improvements; Repair/rebuild all damaged streets, including sub-base; Reassess functional classification of streets to secure federal funding; Prepare inventory of existing street lights; Rebuild all sidewalks to be ADA-compliant, including curb cuts, truncated domes	Infrastructure and Public Works	Repair/Restoration of Streets	Improve Sidewalks, Streetscapes, and Neutral Grounds	
6	Restore all telephone line damage; implement system to withstand hurricane winds and flooding; investigate underground line placement.	Infrastructure and Public Works	Improve Sidewalks, Streetscapes, and Neutral Grounds		
6	Establish city-wide free wireless network	Long Term Initiatives	Citywide wireless network		
6	Link the district, major institutions, and the lakefront to the rest of the city with Elysian Fields streetcar	Long Term Initiatives	Streetcar/Light Rail Routes Expansion Study		
6	Restore coastal wetlands consistent with Coast 2050 objectives	Long Term Initiatives	Advocacy: Flood Protection & Coastal Restoration (Section 4 of Plan) Advocacy		
6	Install electric lines underground to protect them from winds/flooding	Long Term Initiatives	Improve Sidewalks, Streetscapes, and Neutral Grounds		
6	Create a long-term framework for transformation of the Industrial Canal into a major mixed-use waterfront amenity	Long Term Initiatives	Small Area Adaptive Re-use Studies		
6	Foster development of a great campus and public destination on the lake anchored by UNO and associated development	Long Term Initiatives	Small Area Adaptive Re-use Studies		
6	Demolish Avery Alexander School and retain site for open space; no private development on site	Medium Term Initiatives	Create new parks and greenbelts, as needed		
6	Enclose Dwyer Drainage Canal; develop linear park	Medium Term Initiatives	Create new parks and greenbelts, as needed		
6	Work with ACOE to "green" the London Avenue Canal	Medium Term Initiatives	Create new parks and greenbelts, as needed		
6	Extend existing St. Anthony walking path to lakefront and Agriculture Street	Medium Term Initiatives	Improve Sidewalks, Streetscapes, and Neutral Grounds		
6	Implement CPC and RPC-adopted pedestrian improvements for Elysian Fields/Gentilly Blvd. and Elysian Fields/I-610 intersections	Medium Term Initiatives	Improve Sidewalks, Streetscapes, and Neutral Grounds		
6	Install landscaped sound wall/barriers along I-10 and I-610	Medium Term Initiatives	Study installation of sound walls along I-10 and I-610		
6	Develop "trails to trails" walking/cycling path along People's Avenue corridor	Parks and Open Space	Implement Citywide Bike Path System		
6	Begin restoration of additional district green spaces: Eddie Gatto Playground, Filmore Gardens/Dauterive Playspot; Donnelly Playground, Wesley Barrow Stadium, Harris Playground, Union Playspot, Perry Roehm Park and Baseball Stadium, Duck pond at Dillard University, National Square/Rome Park/Boe Playspot, St. James/Milne/Mitenberger Playground	Parks and Open Space	Repair and Renovate District/ Neighborhood Parks		
6	Restore Pontchartrain Park and golf course as district's signature public space	Parks and Open Space	Repair, renovate, or construct new regional parks		
6	Create gateway signage for neighborhoods/subdivisions along Congress, Press, Elysian Fields, St. Roch, Franklin, Lee, and Leon C. Simon	Parks and Open Space	Improve Sidewalks, Streetscapes, and Neutral Grounds		
6	Replace/repair street trees, street lights, and landscaping	Parks and Open Space	Improve Sidewalks, Streetscapes, and Neutral Grounds		
6	Create sub-area master plans and study gap funding requirements/ways to encourage commercial recovery in key commercial nodes: Elysian Fields/Gentilly Boulevard, Gentilly Woods, Leon C. Simon/Franklin Ave.	Planning Actions/Initiatives	Corridor Revitalization		
6	Constitute a District 6 planning advisory committee	Planning Actions/Initiatives	Implementation: CDC and Other Formal Partnerships (Section 4 of Plan)		
6	Explore establishment of a district-based CDC	Planning Actions/Initiatives	Implementation: CDC and Other Formal Partnerships (Section 4 of Plan)		
6	Explore opportunities for potential recovery partnerships among educational institutional/educational compact. Prepare a study to evaluate potential costs and benefits	Planning Actions/Initiatives	Implementation: CDC and Other Formal Partnerships (Section 4 of Plan)		
6	Launch a neighborhood information center/community hub. Undertake a study to assess long-term funding needs.	Planning Actions/Initiatives	Neighborhood Recovery Resource Centers		
6	Prepare neutral grounds landscape master plan, tree inventory, and tree-planting policy to rehabilitate them as the district's green spines	Planning Actions/Initiatives	Improve Sidewalks, Streetscapes, and Neutral Grounds		
6	Create revised zoning and urban design guidelines where needed to advance community rebuilding priorities: Implement urban design overlay ordinance for Elysian Fields and Gentilly Boulevard commercial areas; Maintain existing residential zoning in Pontilly, Dillard, Milneburg, and Gentilly Terrace	Planning Actions/Initiatives	Develop Urban Design Plans and Pattern Books of New Orleans Architecture		

Appendix B-1: District Projects and Corresponding Citywide Projects

Planning District	Project Title/Description	Sector	Corresponding Citywide Team Project (Primary)	Corresponding Citywide Team Project (Secondary)	Corresponding Citywide Team Project (Tertiary)
6	Implement efforts to exterminate rodents and insects	Public Safety and Services	Recovery Implementation: Staffing (Section 4 of Plan)		
6	Restore mail service to pre-storm levels	Public Safety and Services	Advocacy: Basic Utility Infrastructure Repair (Section 3 of Plan) Advocacy		
6	Restore services to pre-Katrina levels including police/security and fire protection	Public Safety and Services	Advocacy: Basic Utility Infrastructure Repair (Section 3 of Plan) Advocacy		
6	Prepare environmental impact statement for streetcar or light rail line on Elysian Fields.	Transportation/Transit	Streetcar/Light Rail Routes Expansion Study		
6	Improve bus transit service: Replace bus shelters, benches, and surrounding landscaping; Restore transit service to pre-Katrina levels and routes	Transportation/Transit	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
7 (Bywater/ Marigny)	Establish and improve community and recreation centers (including Stallings Recreation Center, Mandeville Center, and activity nodes at Colton Middle and Douglass High Schools)	Community/Cultural Facilities	Neighborhood Community Centers		
7 (Bywater/ Marigny)	Extend Main Street Program to support redevelopment of St. Claude Ave. as a "main street"	Economic Development/Business Activity	Corridor Revitalization		
7 (Bywater/ Marigny)	Rehabilitate and reopen St. Roch market for active public uses that may include sale of fresh produce, artisan crafts, etc.	Economic Development/Business Activity	Evaluation and Potential Reuse of Publicly Owned Property		
7 (Bywater/ Marigny)	Select a Riverfront Project Liaison	Economic Development/Business Activity	Recovery Implementation: Staffing (Section 4 of Plan)		
7 (Bywater/ Marigny)	Riverfront Flood/Development Controls	Economic Development/Business Activity	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)		
7 (Bywater/ Marigny)	Provide schools within the community	Education and Health Care	Repair and Renovate Existing School Facilities/Construct New School Facilities		
7 (Bywater/ Marigny)	Raise homes to sea level or above	Flood Control and Mitigation	"Elevate the City" Incentive Program		
7 (Bywater/ Marigny)	Harden civic and other buildings	Flood Control and Mitigation	Floodproof essential public equipment		
7 (Bywater/ Marigny)	Study closure of MRGO/ the Industrial Canal	Flood Control and Mitigation	Advocacy: Flood Protection & Coastal Restoration (Section 4 of Plan) Advocacy		
7 (Bywater/ Marigny)	Strengthen regulations that support historic preservation	Historic Preservation	Implementation: Local/National Historic Districts (Section 4 of Plan)		
7 (Bywater/ Marigny)	Preserve long-term economic and social diversity by encouraging infill development of appropriately scaled and designed mixed-income housing	Housing	All Housing Strategies		
7 (Bywater/ Marigny)	Establish an infill housing rehabilitation program for blighted/adjudicated	Housing	Study: Streamline Process for Purchase of blighted housing and lot next door program		
7 (Bywater/ Marigny)	Establish a commercial overlay in Bywater for mixed uses	Housing	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)		
7 (Bywater/ Marigny)	Launch neighborhood information/housing resource centers	Housing	Neighborhood Recovery Resource Centers		
7 (Bywater/ Marigny)	Introduce a job-training program	Human and Social Services	Workforce Training Program		
7 (Bywater/ Marigny)	Increase city staffing to improve reliability of trash and recyclables collection	Infrastructure and Public Works	Recovery Implementation: Staffing (Section 4 of Plan)	Re-institute a Citywide Recycling Program	
7 (Bywater/ Marigny)	Establish an ongoing upgrade/maintenance program for utilities	Infrastructure and Public Works	Advocacy: Basic Utility Infrastructure Repair (Section 3 of Plan) Advocacy		
7 (Bywater/ Marigny)	Assess needs and costs related to remediation of contaminated soils and other flood-related environmental issues through the oversight of EPA	Other	Hurricane Recovery Soil Assessment and Remediation Program		
7 (Bywater/ Marigny)	Enhance and create parks--Press St., Plessy, Markey, and Chartres)	Public Realm and Parks	Create new parks and greenbelts, as needed		
7 (Bywater/ Marigny)	Retain riverfront wharfs as park facilities	Public Realm and Parks	Create new parks and greenbelts, as needed		
7 (Bywater/ Marigny)	Increase the presence of street trees throughout the community	Public Realm and Parks	Improve Sidewalks, Streetscapes, and Neutral Grounds		
7 (Bywater/ Marigny)	Establish a police precinct at Stallings Recreation Center	Public Safety	Develop a citywide network of state-of-the-art police and fire substations		
7 (Bywater/ Marigny)	Establish a community policing program	Public Safety	Recovery Implementation: Staffing (Section 4 of Plan)		
7 (Bywater/ Marigny)	Undertake comprehensive repair/upgrade of all streets, including signals, signs, lighting, gutters, drains, sidewalks, and curbs	Transportation/Transit	Improve Sidewalks, Streetscapes, and Neutral Grounds	Drainage Improvements--Short Term Projects	
7 (Bywater/ Marigny)	Reestablish Desire Streetcar/St. Claude Streetcar	Transportation/Transit	Streetcar/Light Rail Routes Expansion Study		
7 (Bywater/ Marigny)	Establish bike lanes on strategic streets--Chartres, St. Claude, and along the riverfront	Transportation/Transit	Implement Citywide Bike Path System		
7 (Bywater/ Marigny)	Devise RR crossing management plan for Norfolk Southern tracks	Transportation/Transit	Traffic and Parking Management Plan		
7 (Bywater/ Marigny)	Mitigate/reduce truck routes through neighborhoods	Transportation/Transit	Traffic and Parking Management Plan		
7 (Florida/ Desire)	Restore, enhance, and create new parks and open spaces	Community Facilities and Parks	Create new parks and greenbelts, as needed		
7 (Florida/ Desire)	Co-locate community centers, libraries, and other facilities/services with schools	Community Facilities and Parks	Neighborhood Community Centers		
7 (Florida/ Desire)	Reopen Edwards Elementary School as a community resource center	Community Facilities and Parks	Neighborhood Recovery Resource Centers		
7 (Florida/ Desire)	Rehabilitate parks, including McGruder Park and Gym, Sampson Park, Odell Park, and Jackson Memorial Park	Community Facilities and Parks	Repair and Renovate District/ Neighborhood Parks		

Appendix B-1: District Projects and Corresponding Citywide Projects

Planning District	Project Title/Description	Sector	Corresponding Citywide Team Project (Primary)	Corresponding Citywide Team Project (Secondary)	Corresponding Citywide Team Project (Tertiary)
7 (Florida/ Desire)	Create landscaped buffers between incompatible uses	Community Facilities and Parks	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)		
7 (Florida/ Desire)	Revitalize Louisa St. from Higgins to Almonaster as mixed-use corridor	Economic Development	Corridor Revitalization		
7 (Florida/ Desire)	Study opportunities to enhance and promote development along Chef Menteur Highway	Economic Development	Corridor Revitalization		
7 (Florida/ Desire)	Provide incentives for restoration of historic architecture	Economic Development	Historic Preservation Technical and Financial Assistance		
7 (Florida/ Desire)	Provide interim financing and capital for small businesses	Economic Development	Small Business Incubator and Assistance Program		
7 (Florida/ Desire)	Designate "no alcohol sales" districts	Economic Development	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)		
7 (Florida/ Desire)	Reopen Sidney Collier Technical School and establish a community enhancement team/job training program	Education and Health Care	Rehabilitate Louisiana Technical College and Evaluate Need for Additional Facilities	Workforce Training Program	
7 (Florida/ Desire)	Staff and fund tutoring programs such as PAB PEAM	Education and Health Care	Recovery Implementation: Staffing (Section 4 of Plan)		
7 (Florida/ Desire)	Restore health care services (e.g. multipurpose health/community services building, Desire Mental Health Clinic, clinic at Louisa and Higgins)	Education and Health Care	Redevelop Neighborhood-Based Health Centers/Clinics		
7 (Florida/ Desire)	Provide schools within the community (public preferences for initial reopenings are Moton Elementary and Carver Middle and High Schools)	Education and Health Care	Repair and Renovate Existing School Facilities/Construct New School Facilities		
7 (Florida/ Desire)	Raise homes to sea level or above - Property owners will require funding assistance to raise structures which should include ADA accessible amenities	Flood Control and Mitigation	"Elevate the City" Incentive Program		
7 (Florida/ Desire)	Harden civic and other buildings	Flood Control and Mitigation	Floodproof essential public equipment		
7 (Florida/ Desire)	Study closure of MRGO/ the Industrial Canal	Flood Control and Mitigation	Advocacy: Flood Protection & Coastal Restoration (Section 4 of Plan) Advocacy		
7 (Florida/ Desire)	Implement a voluntary residential buyout program	Housing	Neighborhood Stabilization Program (Clustering)		
7 (Florida/ Desire)	Redevelop public housing sites together with vacant and underutilized land to transform Desire-Florida into a model mixed-income community that welcomes back all residents that seek to return as well as newcomers	Housing	Rehabilitate and Rebuild Low-Income Housing		
7 (Florida/ Desire)	Cover the Florida Avenue canal; study removal of railroad tracks	Infrastructure and Public Works	Create new parks and greenbelts, as needed		
7 (Florida/ Desire)	Undertake comprehensive repair/upgrade of drainage infrastructure	Infrastructure and Public Works	Drainage Improvements - Short Term Projects		
7 (Florida/ Desire)	Consider burying utility lines	Infrastructure and Public Works	Improve Sidewalks, Streetscapes, and Neutral Grounds		
7 (Florida/ Desire)	Assess need and costs related to remediation of contaminated soils and other flood-related environmental issues through the oversight of EPA	Miscellaneous	Hurricane Recovery Soil Assessment and Remediation Program		
7 (Florida/ Desire)	Undertake streetscape improvements (targeting Almonaster, Alvar, Higgins, Louisa, Desire, and Florida)	Public Realm and Parks	Improve Sidewalks, Streetscapes, and Neutral Grounds		
7 (Florida/ Desire)	Enhance police and fire protection by reopening, rebuilding and adding appropriately staffed stations	Public Safety	Develop a citywide network of state- of-the-art police and fire substations		
7 (Florida/ Desire)	Introduce a comprehensive workforce readiness and entrepreneurship program	Social and Human Needs	Workforce Training Program		
7 (Florida/ Desire)	Undertake comprehensive repair/upgrade of all streets, including signals, signs, lighting, gutters, drains, sidewalks, and curbs	Transportation and Transit	Repair/Restoration of Streets	Improve Sidewalks, Streetscapes, and Neutral Grounds	
7 (Florida/ Desire)	Establish streetcar line along Louisa St.	Transportation and Transit	Streetcar/Light Rail Routes Expansion Study		
7 (Florida/ Desire)	Install overpasses at appropriate locations that could include N. Miro, Florida, Almonaster, or Alva to avoid blockages at railroad crossings; enhance overpass at N. Galvez	Transportation and Transit	Ongoing Replacement Program for Major and Minor Streets		
7 (Florida/ Desire)	Mitigate/reduce truck routes through neighborhoods	Transportation and Transit	Traffic and Parking Management Plan		
7 (Florida/ Desire)	Launch neighborhood information/housing resource centers		Neighborhood Recovery Resource Centers		
7 (St. Claude/ St. Roch)	Create community, cultural, and recreation centers	Community/Cultural Facilities	Neighborhood Community Centers		
7 (St. Claude/ St. Roch)	Establish St. Claude Ave. beautification project	Economic Development/Business Activity	Corridor Revitalization		
7 (St. Claude/ St. Roch)	Redevelopment of St. Claude as "Main Street"	Economic Development/Business Activity	Corridor Revitalization		
7 (St. Claude/ St. Roch)	Support redevelopment of Franklin, Desire Streets as secondary commercial corridors	Economic Development/Business Activity	Corridor Revitalization		
7 (St. Claude/ St. Roch)	Rehabilitate and reopen St. Roch market as it functioned historically (farmers' market)	Economic Development/Business Activity	Evaluation and Potential Reuse of Publicly Owned Property		
7 (St. Claude/ St. Roch)	Create incentives to attract desired uses: supermarket, bank, movie theater, family restaurants, service station, art galleries	Economic Development/Business Activity	Small Business Incubator and Assistance Program		
7 (St. Claude/ St. Roch)	Establish no alcohol sales zones	Economic Development/Business Activity	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)		
7 (St. Claude/ St. Roch)	Provide a family health center	Education and Health Care	Redevelop Neighborhood-Based Health Centers/Clinics		
7 (St. Claude/ St. Roch)	Provide schools within the community (public preference is to locate at least one elementary and middle school within the community, and at least one high school within the district)	Education and Health Care	Repair and Renovate Existing School Facilities/Construct New School Facilities		

Appendix B-1: District Projects and Corresponding Citywide Projects

Planning District	Project Title/Description	Sector	Corresponding Citywide Team Project (Primary)	Corresponding Citywide Team Project (Secondary)	Corresponding Citywide Team Project (Tertiary)
7 (St. Claude/ St. Roch)	Raise homes to sea-level or above; property owners will require funding assistance to raise structures, which should include ADA accessibility features	Flood Control and Mitigation	"Elevate the City" Incentive Program		
7 (St. Claude/ St. Roch)	Harden civic and other buildings	Flood Control and Mitigation	Floodproof essential public equipment		
7 (St. Claude/ St. Roch)	Study closure of MRGO; study impacts on Industrial Canal	Flood Control and Mitigation	Advocacy: Flood Protection & Coastal Restoration (Section 4 of Plan) Advocacy		
7 (St. Claude/ St. Roch)	Create design guidelines and offer technical assistance to encourage rehabilitation/new development consistent with historic character	Historic Preservation	Develop Urban Design Plans and Pattern Books of New Orleans Architecture		
7 (St. Claude/ St. Roch)	Create financial incentives for rehabilitation of historic structures	Historic Preservation	Historic Preservation Technical and Financial Assistance		
7 (St. Claude/ St. Roch)	Create live-work space for artists	Housing	All Housing Strategies		
7 (St. Claude/ St. Roch)	Establish program to increase home ownership	Housing	All Housing Strategies		
7 (St. Claude/ St. Roch)	Expand Musicians' Village	Housing	All Housing Strategies		
7 (St. Claude/ St. Roch)	Rehabilitate existing housing stock (including blighted and adjudicated properties)	Housing	All Housing Strategies		
7 (St. Claude/ St. Roch)	Assess needs and possible locations for elderly housing; develop elderly housing	Housing	Implement Permanent Housing Development Strategy for All Displaced Residents		
7 (St. Claude/ St. Roch)	Introduce comprehensive workforce readiness and job training programs	Human and Social Services	Workforce Training Program		
7 (St. Claude/ St. Roch)	Undertake comprehensive repair/upgrade of drainage infrastructure	Infrastructure and Public Works	Drainage Improvements - Short Term Projects		
7 (St. Claude/ St. Roch)	Install neighborhood identification signs	Infrastructure and Public Works	Improve Sidewalks, Streetscapes, and Neutral Grounds		
7 (St. Claude/ St. Roch)	Study undergrounding of utility lines	Infrastructure and Public Works	Improve Sidewalks, Streetscapes, and Neutral Grounds		
7 (St. Claude/ St. Roch)	Assess needs and costs related to remediation of contaminated soils and other flood-related environmental issues through the oversight of EPA	Other	Hurricane Recovery Soil Assessment and Remediation Program		
7 (St. Claude/ St. Roch)	Construct a fence and landscaping at Treasure to screen S&WB	Public Realm and Parks	Drainage Improvements - Short Term Projects		
7 (St. Claude/ St. Roch)	Restore, enhance, and create new parks and open spaces	Public Realm and Parks	Create new parks and greenbelts, as needed		
7 (St. Claude/ St. Roch)	Create monuments or other elements to honor neighborhood heroes	Public Realm and Parks	Improve Sidewalks, Streetscapes, and Neutral Grounds		
7 (St. Claude/ St. Roch)	Install neighborhood identification signs	Public Realm and Parks	Improve Sidewalks, Streetscapes, and Neutral Grounds		
7 (St. Claude/ St. Roch)	Undertake streetscape enhancements; focus on trees	Public Realm and Parks	Improve Sidewalks, Streetscapes, and Neutral Grounds		
7 (St. Claude/ St. Roch)	Create a program to closely monitor establishments selling alcoholic beverages	Public Safety	Recovery Implementation: Staffing (Section 4 of Plan)		
7 (St. Claude/ St. Roch)	Install security cameras at certain intersections	Public Safety	Provide a citywide criminal surveillance system		
7 (St. Claude/ St. Roch)	Install street lights in underlit areas	Public Safety	Improve Sidewalks, Streetscapes, and Neutral Grounds		
7 (St. Claude/ St. Roch)	Re-establish streetcar service	Transportation/Transit	Streetcar/Light Rail Routes Expansion Study		
7 (St. Claude/ St. Roch)	Develop pedestrian/bike path along St. Roch to connect to the FL. Ave. Greenway	Transportation/Transit	Implement Citywide Bike Path System		
7 (St. Claude/ St. Roch)	Extend Treasure Street between Florida and Desire	Transportation/Transit	Ongoing Replacement Program for Major and Minor Streets		
7 (St. Claude/ St. Roch)	Provide additional above-grade RR crossings	Transportation/Transit	Ongoing Replacement Program for Major and Minor Streets		
7 (St. Claude/ St. Roch)	Undertake comprehensive repair/upgrade of all streets, including signals, signs, lighting, gutters, drains, sidewalks, and curbs	Transportation/Transit	Improve Sidewalks, Streetscapes, and Neutral Grounds		
7 (St. Claude/ St. Roch)	Restore bus service along Desire/Galvez	Transportation/Transit	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
7 (St. Claude/ St. Roch)	Devise RR crossing management plan	Transportation/Transit	Traffic and Parking Management Plan		
7 (St. Claude/ St. Roch)	Reduce truck traffic on North Robertson/Claiborne	Transportation/Transit	Traffic and Parking Management Plan		
7 (St. Claude/ St. Roch)	Launch neighborhood information/housing resource centers		Neighborhood Recovery Resource Centers		
8	Develop and Implement a safe havens, passive survivability, and evacuation plan	Community Services Recovery	Floodproof essential public equipment	Evacuation/Disaster Response Plan	
8	Study Reuse Options for Holy Cross School Site	Community Services Recovery	Corridor Revitalization		
8	Study the Feasibility of Manned Police/Fire/Security Sub-Station and Programs in District	Community Services Recovery	Develop a citywide network of state-of-the-art police and fire substations		
8	Develop and Implement a "District Community-Based Youth at Risk" recovery program	Community Services Recovery	Neighborhood Community Centers		
8	Establish new Nature Interpretive Education and Outreach Center	Community Services Recovery	Neighborhood Community Centers		
8	Renovate and expand Sanchez Center	Community Services Recovery	Neighborhood Community Centers		
8	Complete district park system study	Community Services Recovery	Repair and Renovate District/Neighborhood Parks		
8	Restore existing parks, playgrounds and play spots in district	Community Services Recovery	Repair and Renovate District/Neighborhood Parks		
8	Complete comprehensive study of school recommendations and re-openings	Community Services Recovery	Repair and Renovate Existing School Facilities/Construct New School Facilities		

Appendix B-1: District Projects and Corresponding Citywide Projects

Planning District	Project Title/Description	Sector	Corresponding Citywide Team Project (Primary)	Corresponding Citywide Team Project (Secondary)	Corresponding Citywide Team Project (Tertiary)
8	Develop a comprehensive green streets program	Community Services Recovery	Improve Sidewalks, Streetscapes, and Neutral Grounds		
8	Develop a comprehensive tree loss and damage study/tree canopy restoration program	Community Services Recovery	Improve Sidewalks, Streetscapes, and Neutral Grounds		
8	Create transit-oriented mixed-use redevelopment area along North Claiborne and St. Claude Avenues	Economic Recovery	Corridor Revitalization		
8	Study Mississippi riverfront site for mixed-use redevelopment	Economic Recovery	Corridor Revitalization		
8	Study Industrial Canal site for redevelopment as employment center	Economic Recovery	Small Area Adaptive Re-use Studies		
8	Develop a business incubator and assistance program	Economic Recovery	Small Business Incubator and Assistance Program		
8	Establish small business recovery loan program	Economic Recovery	Small Business Incubator and Assistance Program		
8	Implement a comprehensive training and workforce plan	Economic Recovery	Workforce Training Program		
8	Create a neighborhood urban design plans for the district	Historic Preservation/Urban Design	Develop Urban Design Plans and Pattern Books of New Orleans Architecture		
8	Study the expansion of the historic district	Historic Preservation/Urban Design	Implementation: Local/National Historic Districts (Section 4 of Plan)		
8	Develop and institute housing incentive program	Housing Recovery	All Housing Strategies		
8	Develop a renter assistance program	Housing Recovery	All Housing Strategies		
8	Develop and implement an amended lot next door consolidation program	Housing Recovery	Study: Streamline Process for Purchase of blighted housing and lot next door program		
8	Develop energy-efficiency sustainable materials program	Housing Recovery	Sustainable Environmental Strategies		
8	Develop a sustainable building program and incentivize sustainable materials	Housing Recovery	Sustainable Environmental Strategies		
8	Develop and institute a rain garden program	Hurricane/Flood Protection	Sustainable Environmental Strategies	Improve Sidewalks, Streetscapes, and Neutral Grounds	
8	Develop and institute storm/flood water retention and mitigation program	Hurricane/Flood Protection	Sustainable Environmental Strategies	Improve Sidewalks, Streetscapes, and Neutral Grounds	
8	Restore Bayou Bienvenue and wetland assimilation program with the sewerage treatment plant system	Hurricane/Flood Protection	Eastbank Wastewater Treatment Plant - Levee Improvement Mitigation and Wetlands Project		
8	Develop and institute voluntary "FEMA Plus" home mitigation and elevation program	Hurricane/Flood Protection	"Elevate the City" Incentive Program		
8	Require category 5 hurricane and flood protection	Hurricane/Flood Protection	Advocacy: Flood Protection & Coastal Restoration (Section 4 of Plan) Advocacy		
8	Develop and Institute Home Flood Mitigation Relocation Program	Hurricane/Flood Protection	Neighborhood Stabilization Program (Clustering)		
8	Complete an independent third party study of flood risk in district	Hurricane/Flood Protection	Study: Orleans/Jefferson Flood Protection		
8	Develop and institute voluntary hurricane and flood building program	Hurricane/Flood Protection	Sustainable Environmental Strategies		
8	Repair and upgrade to hardened underground utilities corridor and street infrastructure program	Public and Private Infrastructure and Utilities Recovery	Improve Sidewalks, Streetscapes, and Neutral Grounds	Floodproof essential public equipment	
8	Reinstate and repair district-wide basic infrastructure and public works services	Public and Private Infrastructure and Utilities Recovery	Advocacy: Basic Utility Infrastructure Repair (Section 3 of Plan) Advocacy		
8	Develop and implement alternative energy sources	Public and Private Infrastructure and Utilities Recovery	Sustainable Environmental Strategies		
8	Create new citywide rail and streetcar system with multi-modal nodes	Transportation Recovery	Streetcar/Light Rail Routes Expansion Study		
8	Reinstate and develop appropriate transit schedule and vehicle types for RTA bus lines	Transportation Recovery	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
9	Construct NORD playgrounds on sites of open schools and new schools within the district	Community Facilities	Create new parks and greenbelts, as needed		
9	Restore/rebuild community center at Abrams Elementary School	Community Facilities	Neighborhood Community Centers		
9	Renovate/reopen neighborhood park facilities	Community Facilities	Repair and Renovate District/Neighborhood Parks		
9	Restore/rebuild Joe Brown Park and facilities including hardened gymnasium	Community Facilities	Repair, renovate, or construct new regional parks		
9	Relocate/rebuild Read Branch Library	Community Facilities	Repair, Renovate, or Construct New Regional Libraries		
9	Construct neighborhood identification signs	Community Facilities	Improve Sidewalks, Streetscapes, and Neutral Grounds		
9	Improve/landscape neutral grounds	Community Facilities	Improve Sidewalks, Streetscapes, and Neutral Grounds		
9	Restore/improve function and appearance of Chef Menteur as "Main Street" with improved access management, roadway improvements, sidewalks, street lights, landscaping, and signage	Economic Development	Corridor Revitalization		
9	Provide infrastructure/incentives to restore Methodist Hospital; rebuild as protected structure with only service uses on first floor	Economic Development	Restore Comprehensive Medical Services to New Orleans East		
9	Improve infrastructure to reopen/recover employment areas along Industrial Canal in D9	Economic Development	Small Area Adaptive Re-use Studies		
9	Provide infrastructure/incentives to redevelop a clustered mixed-use center at Crowder Blvd. and Lake Forest Dr.	Economic Development	Small Area Adaptive Re-use Studies		
9	Provide infrastructure/incentives to redevelop clustered mixed-use Neighborhood Centers at Morrison Road and Bundy Road, Bullard Ave. and Hayne, and Morrison Road and Martin Dr. (Kenilworth Shopping Center)	Economic Development	Small Area Adaptive Re-use Studies		
9	Provide infrastructure/incentives to redevelop commercial/mixed-use center at Read Blvd. and I-10; address mitigation and hardening of structures; develop, adopt, and enforce design and development standards to ensure high-quality redevelopment	Economic Development	Small Area Adaptive Re-use Studies		
9	Conduct an economic development study for alternative location of regional airport and entertainment study for Lakefront airport	Economic Development	Small Area Adaptive Re-use Studies		
9	Provide infrastructure/incentives to redevelop high ground bounded by Industrial Canal, Chef Menteur, I-510, and Almonaster Blvd.	Economic Development	Small Area Adaptive Re-use Studies		
9	Construct new school at Ray Abrams Elementary as hardened facility	Education and Health Care	Repair and Renovate Existing School Facilities/Construct New School Facilities	Floodproof essential public equipment	
9	Rebuild schools at higher elevation	Education and Health Care	Repair and Renovate Existing School Facilities/Construct New School Facilities	Floodproof essential public equipment	
9	Develop health centers with community centers at multiple locations (e.g. Chef/Michoud, Downman/Dwyer)	Education and Health Care	Redevelop Neighborhood-Based Health Centers/Clinics	Neighborhood Community Centers	
9	Install high-quality modular units as soon as possible; rebuild and reopen damaged schools; mitigate damage to existing school building (gutting, mold remediation) as needed to accommodate repopulated areas	Education and Health Care	Repair and Renovate Existing School Facilities/Construct New School Facilities	Temporary Modular School Facilities	
9	Rehabilitate Lakeland Hospital	Education and Health Care	Restore Comprehensive Medical Services to New Orleans East		
9	Restoration of Lake Pontchartrain fishing camps as small "hardened" buildings, constructed to withstand wind and water	Historic Preservation	"Elevate the City" Incentive Program	Sustainable Environmental Strategies	
9	Study an opportunity to restore Lincoln Beach swimming and amusement facilities	Historic Preservation	Create new parks and greenbelts, as needed		
9	Provide infrastructure and financial incentives to replace existing damaged multi-family housing with medium-density, high-quality "hardened" housing along I-10 corridor; typically build units above one floor of parking.	Housing	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)	All Housing Strategies	

Appendix B-1: District Projects and Corresponding Citywide Projects

Planning District	Project Title/Description	Sector	Corresponding Citywide Team Project (Primary)	Corresponding Citywide Team Project (Secondary)	Corresponding Citywide Team Project (Tertiary)
9	Adopt and enforce community design standards for lower-density multi-family development; address hardening and flood protection construction standards; address limitations on expansion of multi-family housing density not to exceed 16 units/acre	Housing	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)	Develop Urban Design Plans and Pattern Books of New Orleans Architecture	
9	Provide incentives to elevate or replace priority at-risk homes (priority is homes in lowest areas of elevation) based on pre-Katrina values, while not creating any hardships or financial penalties for homeowners	Housing	"Elevate the City" Incentive Program		
9	Adopt policies and create incentives for housing relocation/redevelopment at higher locations within district	Housing	Neighborhood Stabilization Program (Clustering)		
9	Provide infrastructure and incentives to construct high-quality mixed income housing in the lowest-risk areas of New Orleans East	Housing	Small Area Adaptive Re-use Studies		
9	Reinforce existing pumping capacity to Category 3 status--raise and rehabilitate pumping stations; construct new pumping station at Dwyer and Wilson	Hurricane/Flood Protection	Drainage Improvements - Short Term Projects		
9	Conduct a secondary internal levee flood protection study	Hurricane/Flood Protection	Study: Internal Flood Protection Study for Selected New Orleans East Neighborhoods		
9	Conduct a detailed flood mitigation study	Hurricane/Flood Protection	Study: Internal Flood Protection Study for Selected New Orleans East Neighborhoods		
9	Improve electric services and power reliability along Chef Menteur Highway	Infrastructure and Public Works	Advocacy: Basic Utility Infrastructure Repair (Section 3 of Plan) Advocacy		
9	Implement sewer, water, gas, electric, data, and telephone restoration as needed in district--underground utilities	Infrastructure and Public Works	Advocacy: Basic Utility Infrastructure Repair (Section 3 of Plan) Advocacy		
9	Construct drainage improvements in impacted areas such as Morrison and Dwyer Rds--cover canals to provide more amenity value; add sidewalks and bike paths	Infrastructure and Public Works	Create new parks and greenbelts, as needed		
9	Repair drainage structures, piping, and catch basins as needed; clean canals as needed	Infrastructure and Public Works	Drainage Improvements - Short Term Projects		
9	Implement a comprehensive recycling program and conduct environmental mediation for existing landfills	Infrastructure and Public Works	Re-institute a Citywide Recycling Program		
9	Rehabilitate/restore existing fire stations (3) as hardened structures	Public Safety	Develop a citywide network of state-of-the-art police and fire substations	Floodproof essential public equipment	
9	Rehabilitate/restore existing police station as hardened structure	Public Safety	Develop a citywide network of state-of-the-art police and fire substations	Floodproof essential public equipment	
9	Construct two police substations as hardened structures	Public Safety	Develop a citywide network of state-of-the-art police and fire substations	Floodproof essential public equipment	
9	Construct street extensions for drainage improvement: Longfellow to Dwyer, Marques to Dwyer, Perocelli to Dwyer, Lurline to Dwyer, Sandlewood to Dwyer, and Redwood to Dwyer; Dwyer between I-510 and Toulon	Transportation and Transit	Ongoing Replacement Program for Major and Minor Streets	Drainage Improvements--Short Term Projects	
9	Construct pedestrian walks and bike paths along primary streets such as Morrison, Hayne, and Dwyer Roads	Transportation and Transit	Implement Citywide Bike Path System		
9	Consider/study extension of light rail into NO East within the Chef Menteur Highway development corridor to provide transit service to the community	Transportation and Transit	Streetcar/Light Rail Routes Expansion Study		
9	Facilitate RTA system improvements --Renovate transit stops with amenities necessary to restore transit usage and user safety (e.g. benches, shelters, lighting)	Transportation and Transit	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
9	Add bus lanes to Chef Menteur Hwy and Dwyer Rd.	Transportation and Transit	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
9	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on primary streets (Chef Menteur, Alcee Fortier, Michoud Blvd., Dwyer Road)	Transportation and Transit	Improve Sidewalks, Streetscapes, and Neutral Grounds	Repair/Restoration of Streets	
9	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on secondary streets	Transportation and Transit	Improve Sidewalks, Streetscapes, and Neutral Grounds	Repair/Restoration of Streets	
9	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on tertiary streets	Transportation and Transit	Improve Sidewalks, Streetscapes, and Neutral Grounds	Repair/Restoration of Streets	
9	Design and Install sound barriers along I-10 and I-509	Transportation and Transit	Study installation of sound walls along I-10 and I-610		
9	Create a district-based CDC that interfaces with NORA and consistently represents district and neighborhood interests at grass-roots level		Implementation: CDC and Other Formal Partnerships (Section 4 of Plan)		
10	Construct NORD playgrounds on sites of open schools and new schools within the district	Community Facilities	Create new parks and greenbelts, as needed		
10	Renovate/reopen neighborhood park facilities	Community Facilities	Repair and Renovate District/Neighborhood Parks		
10	Construct neighborhood identification signs	Community Facilities	Improve Sidewalks, Streetscapes, and Neutral Grounds		
10	Improve/landscape neutral grounds	Community Facilities	Improve Sidewalks, Streetscapes, and Neutral Grounds		
10	Plan, design, and implement an ethnic tourist destination near Chef/Michoud and Alcee Fortier	Economic Development	Corridor Revitalization		
10	Restore/improve function and appearance of Chef Menteur as "Main Street" with improved access management, roadway improvements, sidewalks, street lights, landscaping, and signage	Economic Development	Corridor Revitalization		
10	Rebuild schools at higher elevation	Education and Health Care	Repair and Renovate Existing School Facilities/Construct New School Facilities	Floodproof essential public equipment	
10	Develop health centers with community centers at multiple locations (e.g. Chef/Michoud, Downman/Dwyer)	Education and Health Care	Redevelop Neighborhood-Based Health Centers/Clinics	Neighborhood Community Centers	
10	Install high-quality modular units as soon as possible; rebuild and reopen damaged schools; mitigate damage to existing school building (gutting, mold remediation) as needed to accommodate repopulated areas	Education and Health Care	Repair and Renovate Existing School Facilities/Construct New School Facilities	Temporary Modular School Facilities	
10	Fully renovate Sarah T. Reed High School via fast-tracking	Education and Health Care	Repair and Renovate Existing School Facilities/Construct New School Facilities		
10	Provide incentives to elevate or replace priority at-risk homes (priority is homes in lowest areas of elevation) based on pre-Katrina values, while not creating any hardships or financial penalties for homeowners	Housing	"Elevate the City" Incentive Program		
10	Provide infrastructure and incentives to construct high-quality, senior (55 and older) housing facilities along Dwyer Road	Housing	Implement Permanent Housing Development Strategy for All Displaced Residents		
10	Improve electric services and power reliability along Chef Menteur Highway	Infrastructure and Public Works	Advocacy: Basic Utility Infrastructure Repair (Section 3 of Plan) Advocacy		
10	Create a district-based CDC that interfaces with NORA and consistently represents district and neighborhood interests at grass-roots level	Housing	Implementation: CDC and Other Formal Partnerships (Section 4 of Plan)		
10	Adopt policies and create incentives for housing relocation/redevelopment at higher locations within district	Housing	Neighborhood Stabilization Program (Clustering)		
10	Provide infrastructure and incentives to construct high-quality mixed income housing in the lowest-risk areas of New Orleans East	Housing	Small Area Adaptive Re-use Studies		
10	Conduct a Secondary Internal Levee Flood Protection Study	Hurricane/Flood Protection	Study: Internal Flood Protection Study for Selected New Orleans East Neighborhoods		

Appendix B-1: District Projects and Corresponding Citywide Projects

Planning District	Project Title/Description	Sector	Corresponding Citywide Team Project (Primary)	Corresponding Citywide Team Project (Secondary)	Corresponding Citywide Team Project (Tertiary)
10	Conduct a detailed flood mitigation study	Hurricane/Flood Protection	Study: Internal Flood Protection Study for Selected New Orleans East Neighborhoods		
10	Implement sewer, water, gas, electric, data, and telephone restoration as needed in District--underground utilities	Infrastructure and Public Works	Advocacy: Basic Utility Infrastructure Repair (Section 3 of Plan) Advocacy		
10	Construct drainage improvements in impacted areas such as Dwyer Rd.--cover canals to provide more amenity value; add sidewalks and bike paths	Infrastructure and Public Works	Create new parks and greenbelts, as needed		
10	Repair drainage structures, piping, and catch basins as needed; clean canals as needed	Infrastructure and Public Works	Drainage Improvements - Short Term Projects		
10	Implement a comprehensive recycling program and conduct environmental mediation for existing landfills	Infrastructure and Public Works	Re-institute a Citywide Recycling Program		
10	Rehabilitate/restore existing fire stations (3) as hardened structures	Public Safety	Develop a citywide network of state-of-the-art police and fire substations	Floodproof essential public equipment	
10	Rehabilitate/restore existing police station as hardened structure	Public Safety	Develop a citywide network of state-of-the-art police and fire substations	Floodproof essential public equipment	
10	Construct two police substations as hardened structures	Public Safety	Develop a citywide network of state-of-the-art police and fire substations	Floodproof essential public equipment	
10	Construct pedestrian walks and bike paths along primary streets such as Chef Menteur and Michoud Blvds.	Transportation and Transit	Implement Citywide Bike Path System		
10	Consider/study extension of light rail into NO East within the Chef Menteur Highway development corridor to provide transit service to the community	Transportation and Transit	Streetcar/Light Rail Routes Expansion Study		
10	Facilitate RTA system improvements --Renovate transit stops with amenities necessary to restore transit usage and user safety (e.g. benches, shelters, lighting)	Transportation and Transit	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
10	Add bus lanes to Chef Menteur Hwy and Dwyer Rd.	Transportation and Transit	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
10	Implement expansion of bus network further east to serve District 10 residents and connect new nodes of development	Transportation and Transit	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
10	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on primary streets (Chef Menteur, Hayne, and Morrison)	Transportation and Transit	Improve Sidewalks, Streetscapes, and Neutral Grounds		
10	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on secondary streets	Transportation and Transit	Improve Sidewalks, Streetscapes, and Neutral Grounds		
10	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on tertiary streets	Transportation and Transit	Improve Sidewalks, Streetscapes, and Neutral Grounds		
10	Design and install sound barriers along I-10 and I-510	Transportation and Transit	Study installation of sound walls along I-10 and I-610		
11	Build or provide incentives for a 5,000 sq. ft. community center to be located between Ft. Macomb and Fort Pike. This community center could offer a myriad of activities for the community as part of the region's recovery and support economic development found in fishing, wetlands, and eco-tourism	Community Facilities	Neighborhood Community Centers		
11	Initiate Fort Pike Restoration--this facility needs substantial repairs and improvements after the eye of Hurricane Katrina passed directly over it.	Community Facilities	Repair and Preserve Historic Forts		
11	Create a "safe harbor" in District 11	Economic Development	Evacuation/Disaster Response Plan		
11	Clean debris and sunken vessels from Venetian Isle, Bayou Delassaires and Bayou Sauvage Canals	Economic Development	Renovate Public Marinas		
11	Provide infrastructure incentives for Irish Bayou Marina development	Economic Development	Renovate Public Marinas		
11	Provide infrastructure/incentives for Fort Macomb Marina restoration to serve commercial and recreational fisheries	Economic Development	Renovate Public Marinas		
11	Provide infrastructure/incentives for Fort Pike Marina redevelopment including full-service marina, icehouse and fuel docking area to serve commercial and recreational fisheries	Economic Development	Renovate Public Marinas		
11	Provide infrastructure/incentives for Phase II of Fort Macomb Marina Village Redevelopment, including seafood market, shops, parking, restrooms, food services, and tourist-related facilities	Economic Development	Renovate Public Marinas		
11	Provide infrastructure/incentives to redevelop Lake Catherine Marina	Economic Development	Renovate Public Marinas		
11	Provide infrastructure/incentives to redevelop Sauvage Ridge marine/industrial and fisheries infrastructure area	Economic Development	Renovate Public Marinas		
11	Provide infrastructure/incentives for a community clinic on Highway 90	Education and Health Care	Redevelop Neighborhood-Based Health Centers/Clinics		
11	Provide infrastructure/incentives for marine and fisheries vocational/technical school	Education and Health Care	Rehabilitate Louisiana Technical College and Evaluate Need for Additional Facilities		
11	Document and promote redevelopment of Versailles Gardens and Market	Historic Preservation	Small Business Incubator and Assistance Program		
11	Develop and land use plan and adopt new zoning that is appropriate to the District's needs	Housing	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)		
11	Provide public gas utility restoration (Chef Bridge to Rigolets Bridge)	Infrastructure and Public Works	Advocacy: Basic Utility Infrastructure Repair (Section 3 of Plan) Advocacy		
11	Repair/improve storm drainage in Venetian Isles	Infrastructure and Public Works	Drainage Improvements - Short Term Projects		
11	Implement floodgates at the Rigolets, Chef Menteur Pass, Intracoastal Waterway, and create 90' protection levee south and parallel to the CSX roadbed/levee	Infrastructure and Public Works	Advocacy: Flood Protection & Coastal Restoration (Section 4 of Plan) Advocacy		
11	Reinforce shoreline and restore wetlands on the southeast shore of Lake Pontchartrain west of Hospital Wall	Infrastructure and Public Works	Advocacy: Flood Protection & Coastal Restoration (Section 4 of Plan) Advocacy		
11	Reinforce the western shoreline of the Rigolets	Infrastructure and Public Works	Advocacy: Flood Protection & Coastal Restoration (Section 4 of Plan) Advocacy		
11	Restore channel bulkheading along Bayou Sauvage industrial corridor	Infrastructure and Public Works	Advocacy: Flood Protection & Coastal Restoration (Section 4 of Plan) Advocacy		
11	Restore protective wetlands on south side of the Fort Pike Canal	Infrastructure and Public Works	Advocacy: Flood Protection & Coastal Restoration (Section 4 of Plan) Advocacy		
11	Raise Highway 11 in Irish Bayou 90 to provide continuous access during heavy rain event	Infrastructure and Public Works	Ongoing Replacement Program for Major and Minor Streets		
11	Bulkhead the shorelines of Highway 90 to provide protection along Chef Menteur Pass, Lake Catherine, and Lake Pontchartrain Shorelines	Infrastructure and Public Works	Repair/restoration of streets		
11	Place all District 11 utilities underground	Infrastructure and Public Works	Improve Sidewalks, Streetscapes, and Neutral Grounds		
11	Install community water and fire hydrants between the Chef Pass and the Rigolets and in Irish Bayou	Infrastructure and Public Works	Water Distribution System--Medium Term		
11	Construct fire stations for Ft. Pike and Irish Bayou community volunteer fire department including a manned police substation	Public Safety	Develop a citywide network of state-of-the-art police and fire substations		
11	Construct manned police substation in Venetian Isles	Public Safety	Develop a citywide network of state-of-the-art police and fire substations		

Appendix B-1: District Projects and Corresponding Citywide Projects

Planning District	Project Title/Description	Sector	Corresponding Citywide Team Project (Primary)	Corresponding Citywide Team Project (Secondary)	Corresponding Citywide Team Project (Tertiary)
11	Rebuild fire facilities in Venetian Isles and add a manned police substation	Public Safety	Develop a citywide network of state-of-the-art police and fire substations		
11	Install Highway 90 lighting between Chef Menteur Bridge and Rigolets Bridge	Public Safety	Improve Sidewalks, Streetscapes, and Neutral Grounds		
12	Restore and repair District Brake Tag Station	Community Facilities	Evaluation and Potential Reuse of Publicly Owned Property		
12	Construct bike path and walking path along the length of the Mississippi River levee	Community Facilities	Implement Citywide Bike Path System		
12	Restore River Park Playground after trailers are removed	Community Facilities	Repair and Renovate District/Neighborhood Parks		
12	Brechtel Park Renovation – Repair pavilions and clean lagoons and remove Hurricane Katrina debris from grounds and construct hiking trails; repair/upgrade existing golf course	Community Facilities	Repair, renovate, or construct new regional parks		
12	Rehabilitate Behrman Memorial Park Community Center, pool, baseball fields and supporting structures.	Community Facilities	Repair, renovate, or construct new regional parks		
12	Upgrade/restore Hubbell Library in Algiers Pointe	Community Facilities	Repair, Renovate, or Construct New District/Neighborhood Libraries		
12	Replace existing facility with a new, larger Algiers Regional Library ; an alternate selection may also be considered	Community Facilities	Repair, Renovate, or Construct New Regional Libraries		
12	Conduct a study to coordinate development of Federal City with DOD and the Algiers community to facilitate development of shared commercial and community facilities along Newton Street/General Meyer frontage as well as address the potential for recreational levee access on site.	Economic Development	Corridor Revitalization		
12	Facilitate Newton/Opelousas/Teche Street Main Street concept through infrastructure and economic incentives; address zoning and streetscape requirements	Economic Development	Corridor Revitalization		
12	Implement infrastructure / incentives to redevelop Newton Street / General Meyer Avenue corridor; address zoning and streetscape requirements	Economic Development	Corridor Revitalization		
12	Implement infrastructure/incentives to improve/revitalize General DeGaulle Dr. corridor with street and streetscape improvements and improve and revitalize Aurora mixed-use village/Schwegmann's/Little Sisters of the Poor site	Economic Development	Corridor Revitalization		
12	Implement zoning changes and incentives to revitalize Algiers Point Main Street properties along Morgan Street/Patterson Drive from the ferry terminal (Delaronde St.) to Belleville St.	Economic Development	Corridor Revitalization	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)	
12	Infrastructure/incentives to redevelop Jo Ellen Smith site as a mixed-use residential site; address zoning changes needed to facilitate redevelopment	Economic Development	Corridor Revitalization		
12	Infrastructure/incentives to redevelop Todd Shipyard; address zoning changes needed to facilitate redevelopment	Economic Development	Corridor Revitalization		
12	Plan, design and implement a co-location complex with educational, community and commercial facilities – add civic uses (site to be determined)	Education and Health Care	Neighborhood Community Centers		
12	Re-establish Algiers Mental Health Clinic	Education and Health Care	Redevelop Neighborhood-Based Health Centers/Clinics		
12	Study market potential for redevelopment of a full service district medical facility	Education and Health Care	Redevelop Neighborhood-Based Health Centers/Clinics		
12	Reconstruct/reopen L.B. Landry High School	Education and Health Care	Repair and Renovate Existing School Facilities/Construct New School Facilities		
12	Repair/reopen Rosenwald Elementary School	Education and Health Care	Repair and Renovate Existing School Facilities/Construct New School Facilities		
12	Conduct a survey and investigate the potential for the development of "Historic District" status for the area bounded by Opelousas Street to Mardi Gras Boulevard and the Mississippi River to L. B. Landry Drive.	Historic Preservation	Implementation: Local/National Historic Districts (Section 4 of Plan)		
12	Address and implement revitalization for Old Algiers, McDonough and Algiers Point neighborhoods including Tunnisberg, McClendonville, Riverview, River Park and Cut-off	Housing	Study: Streamline process for purchase of blighted housing and lot next door program	Improve Sidewalks, Streetscapes, and Neutral Grounds	
12	Develop and administer incentive-based program to elevate homes in areas of lowest topography.	Housing	"Elevate the City" Incentive Program		
12	Create a District-based Community Development Corporation(s) that interfaces with NORA and consistently represents District 12 and neighborhood interests at a grass-roots level	Housing	Implementation: CDC and Other Formal Partnerships (Section 4 of Plan)		
12	Develop and administer incentive-based voluntary buyout program for home sites at lowest elevations	Housing	Neighborhood Stabilization Program (Clustering)		
12	Study and facilitate Christopher Park Homes and Woodland Apartments revitalization through existing and potential financial incentive programs.	Housing	Rehabilitate and Rebuild Low-Income Housing		
12	Develop & implement programs for redevelopment of blighted and adjudicated properties	Housing	Study: Streamline Process for Purchase of blighted housing and lot next door program		
12	Infrastructure/incentives to encourage infill housing in Lower Algiers (Lower Coast/Cut-off) neighborhood	Housing	Study: Streamline Process for Purchase of blighted housing and lot next door program	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)	
12	Conduct a zoning study to address future use/redevelopment of current multi-family sites; these sites should be rebuilt only in strategic locations.	Housing	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)		
12	Conduct a zoning/land use compatibility study to address rezoning of multi-family neighborhoods (to protect them from expansion of multi-family [HUD] homes). Neighborhoods such as McDonough, Whitney, Tunnisberg Elmwood Park Community need to be addressed; residents want to retain RS2/RS1 zoning	Housing	Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)		
12	Conduct a detailed flood protection/mitigation study for District 12	Hurricane/Flood Protection	Study: Hurricane Levee System for Algiers		
12	Conduct a study to explore and test secondary internal levee flood protection concepts for District 12. Study Donner Canal as levee flood protection- study elevating levee along District 12 side to protect adjacent neighborhoods	Hurricane/Flood Protection	Study: Hurricane Levee System for Algiers		
12	Repair/improve storm drainage/dredge canals as necessary (especially General DeGaulle culvert issues)	Infrastructure and Public Works	Drainage Improvements - Short Term Projects		
12	Study development potential and utility repairs/upgrades for possible increased residential and development capacity, drainage and sewerage (particularly in Behrman/Elmwood Park neighborhoods)	Infrastructure and Public Works	Conduct Small Area Adaptive Re-use Studies		
12	Construct additional Police substations on Newton, Texas & Tullis Streets	Public Safety	Develop a citywide network of state-of-the-art police and fire substations		
12	Restore/repair Fire Station #40	Public Safety	Develop a citywide network of state-of-the-art police and fire substations		
12	Restore/repair or relocate and rebuild existing police station in a more visible location	Public Safety	Develop a citywide network of state-of-the-art police and fire substations		
12	General Meyer Avenue paving, curbs, access management, streetscape, lighting and pedestrian improvements	Transportation/Transit	Repair/Restoration of Streets	Improve Sidewalks, Streetscapes, and Neutral Grounds	
12	Repair road paving, curbs, street lights, signalization & street signs on primary collector streets including General de Gaulle (focus from CCC to Holiday Drive)	Transportation/Transit	Repair/Restoration of Streets	Improve Sidewalks, Streetscapes, and Neutral Grounds	
12	RTA / Transit System- study ridership needs and modes (e.g. light rail) and address additional circulation/stops required in Algiers	Transportation/Transit	Streetcar/Light Rail Routes Expansion Study		

Appendix B-1: District Projects and Corresponding Citywide Projects

Planning District	Project Title/Description	Sector	Corresponding Citywide Team Project (Primary)	Corresponding Citywide Team Project (Secondary)	Corresponding Citywide Team Project (Tertiary)
12	Update and revisit feasibility/design study for "Donner Parkway" along Donner Canal as raised parkway from Tulis Drive to Hwy. 90	Transportation/Transit	Ongoing Replacement Program for Major and Minor Streets		
12	Repair curbs and street paving on Old Behrman Highway to improve driver safety on this street	Transportation/Transit	Repair/Restoration of Streets		
12	Repair road paving, curbs, street lights, signalization & street signs on secondary and local streets	Transportation/Transit	Repair/Restoration of Streets		
12	Improve/renovate RTA system facilities; implement bus stop renovations for all existing stations; add new stations in key areas based on ridership needs	Transportation/Transit	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
12	Maintain the Algiers Point public ferry as major public transportation access from East Bank New Orleans to the Algiers Point Historic District. Extend ferry operating hours.	Transportation/Transit	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
12	Restore RTA Park-n-Ride after trailers are removed	Transportation/Transit	Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)		
12	Conduct a comprehensive district-wide traffic study; address signalization and peak hour traffic levels	Transportation/Transit	Traffic and Parking Management Plan		
13	Create a master plan for the district	Ecological Design	Conduct Small Area Adaptive Re-use Studies		
13	Develop and implement a voluntary incentive based energy efficiency and sustainable materials program	Housing Recovery	Sustainable Environmental Strategies		
13	Conduct a study for coordinated emergency services and safe haven evacuation center	Hurricane/Flood/Environmental Protection	Develop a citywide network of state-of-the-art police and fire substations	Evacuation/Disaster Response Plan	
13	Develop and implement a voluntary rain garden program	Hurricane/Flood/Environmental Protection	Improve Sidewalks, Streetscapes, and Neutral Grounds	Sustainable Environmental Strategies	
13	Create a new public park in a low topographic zone along Highway 406	Hurricane/Flood/Environmental Protection	Create new parks and greenbelts, as needed		
13	Open private Audubon Institute and Coast Guard entrance in times of emergency	Hurricane/Flood/Environmental Protection	Evacuation/Disaster Response Plan		
13	Provide Category 5 hurricane and flood protection	Hurricane/Flood/Environmental Protection	Advocacy: Flood Protection & Coastal Restoration (Section 4 of Plan)		
13	Conduct a study to elevate Highway 406 in low topographic zone	Hurricane/Flood/Environmental Protection	Ongoing Replacement Program for Major and Minor Streets		
13	Extend English Turn Parkway from Stanton Road to Delacroix Road	Hurricane/Flood/Environmental Protection	Ongoing Replacement Program for Major and Minor Streets		
13	Conduct a detailed ecological study	Hurricane/Flood/Environmental Protection	Study: Hurricane Levee System for Algiers Lower Coast		
13	Complete an independent third party study of flood risk within the district	Hurricane/Flood/Environmental Protection	Study: Hurricane Levee System for Algiers Lower Coast		
13	Develop and implement a voluntary incentive based hurricane and flood building program	Hurricane/Flood/Environmental Protection	Sustainable Environmental Strategies		
13	Hardening of utility service and street infrastructure program	Public and Private Infrastructure and Utilities Recovery	Improve Sidewalks, Streetscapes, and Neutral Grounds	Floodproof essential public equipment	
13	Reinstate and repair district-wide basic infrastructure and public works services	Public and Private Infrastructure and Utilities Recovery	Advocacy: Basic Utility Infrastructure Repair (Section 3 of Plan) Advocacy		

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
FLOOD PROTECTION		
"Elevate New Orleans" Incentive Program for Residential and Small Business Owners	1	Raise residential and sensitive buildings to sea level or above
	2	Develop and implement a voluntary incentive-based home "FEMA Plus" flood mitigation elevation program
	3	Home elevation program for high and medium risk areas
	4	Home elevation program for high and medium risk areas
	5	Develop and administer incentive-based program to elevate homes in areas of lowest topography
	6	Establish grant, loan, and regulatory program to support elevation of homes in low-lying areas to above mean sea level
	6	Secure funding to facilitate elevating homes in vulnerable locations and supporting voluntary buyout program
	7 (Bywater/ Marigny)	Raise homes to sea level or above
	7 (Florida/ Desire)	Raise homes to sea level or above - Property owners will require funding assistance to raise structures which should include ADA accessible amenities
	7 (St. Claude/ St. Roch)	Raise homes to sea-level or above; property owners will require funding assistance to raise structures, which should include ADA accessibility features
	8	Develop and institute voluntary "FEMA Plus" home mitigation and elevation program
	9	Restoration of Lake Pontchartrain fishing camps as small "hardened" buildings, constructed to withstand wind and water
	9	Provide incentives to elevate or replace priority at-risk homes (priority is homes in lowest areas of elevation) based on pre-Katrina values, while not creating any hardships or financial penalties for homeowners
	10	Provide incentives to elevate or replace priority at-risk homes (priority is homes in lowest areas of elevation) based on pre-Katrina values, while not creating any hardships or financial penalties for homeowners
	12	Develop and administer incentive-based program to elevate homes in areas of lowest topography.
Floodproof Essential Public Equipment	1	"Harden" civic and other buildings
	2	Hardening of utility service and street infrastructure program
	3	Pumping station upgrades and associated flood protection projects
	4	Pumping stations upgrades and associated flood protection projects
	5	Repair/reopen and harden Hynes Charter School
	5	Rehabilitate (3) and harden existing fire stations in District 5
	5	Rehabilitate and harden police station on Canal Blvd.
	7 (Bywater/ Marigny)	Harden civic and other buildings
	7 (Florida/ Desire)	Harden civic and other buildings
	7 (St. Claude/ St. Roch)	Harden civic and other buildings
	8	Repair and upgrade to hardened underground utilities corridor and street infrastructure program
	8	Develop and Implement a safe havens, passive survivability, and evacuation plan
	9	Construct new school at Ray Abrams Elementary as hardened facility
	9	Rebuild schools at higher elevation
	9	Rehabilitate/restore existing fire stations (3) as hardened structures
	9	Rehabilitate/restore existing police station as hardened structure
	9	Construct two police substations as hardened structures
	10	Rebuild schools at higher elevation
	10	Rehabilitate/restore existing fire stations (3) as hardened structures

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
Study: Internal Flood Protection Study for Selected New Orleans East Neighborhoods	10	Rehabilitate/restore existing police station as hardened structure
	10	Construct two police substations as hardened structures
	13	Hardening of utility service and street infrastructure program
	9	Conduct a secondary internal levee flood protection study
	9	Conduct a detailed flood mitigation study
	10	Conduct a secondary internal levee flood protection study
Study: Hurricane Levee System for Algiers	10	Conduct a detailed flood mitigation study
	12	Conduct a detailed flood protection/mitigation study for District 12
	12	Conduct a study to explore and test secondary internal levee flood protection concepts for District 12. Study Donner Canal as levee flood protection- study elevating levee along District 12 side to protect adjacent neighborhoods
Study: Hurricane Levee System for Algiers Lower	13	Conduct a detailed ecological study
	13	Complete an independent third party study of flood risk within the district
Slab-on-Grade Remediation Program		
Study: Orleans/Jefferson Flood Protection	2	Complete an independent third party study of flood risk
	3	Equalize levee protection on both sides of Monticello Canal/study decking
	5	Conduct a detailed flood protection/mitigation study
	5	Conduct a secondary internal levee flood protection study for District 5
	8	Complete an independent third party study of flood risk in district
NEIGHBORHOOD STABILITY		
Neighborhood Stabilization Program (Clustering)	2	Develop and implement a voluntary incentive-based "premium plus" home flood mitigation relocating program
	3	Neighborhood green block and housing moving program
	4	Neighborhood green block and house moving program
	5	Develop and administer incentive-based voluntary buyout program for home sites at lowest elevations
	7 (Florida/ Desire)	Implement a voluntary residential buyout program
	8	Develop and Institute Home Flood Mitigation Relocation Program
	9	Adopt policies and create incentives for housing relocation/redevelopment at higher locations within district
	10	Adopt policies and create incentives for housing relocation/redevelopment at higher locations within district
	12	Develop and administer incentive-based voluntary buyout program for home sites at lowest elevations
Small Area Adaptive Re-use Studies	2	Facilitate mixed use development in Lower Garden District
	4	Revitalize Gert Town: new town center and community facilities
	6	Create a long-term framework for transformation of the Industrial Canal into a major mixed-use waterfront amenity
	6	Foster development of a great campus and public destination on the lake anchored by UNO and associated development
	8	Study Industrial Canal site for redevelopment as employment center
	9	Improve infrastructure to reopen/recover employment areas along Industrial Canal in D9
	9	Provide infrastructure/incentives to redevelop a clustered mixed-use center at Crowder Blvd. and Lake Forest Dr.
	9	Provide infrastructure/incentives to redevelop clustered mixed-use Neighborhood Centers at Morrison Road and Bundy Road, Bullard Ave. and Hayne, and Morrison Road and Martin Dr. (Kenilworth Shopping Center)
	9	Provide infrastructure/incentives to redevelop commercial/mixed-use center at Read Blvd. and I-10; address mitigation and hardening of structures; develop, adopt, and enforce design and development standards to ensure high-quality redevelopment
	9	Conduct an economic development study for alternative location of regional airport and entertainment study for Lakefront airport
	9	Provide infrastructure/incentives to redevelop high ground bounded by Industrial Canal, Chef Menteur, I-510, and Almonaster Blvd.

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
	9	Provide infrastructure and incentives to construct high-quality mixed income housing in the lowest-risk areas of New Orleans East
	10	Provide infrastructure and incentives to construct high-quality mixed income housing in the lowest-risk areas of New Orleans East
	12	Study development potential and utility repairs/upgrades for possible increased residential and development capacity, drainage and sewerage (particularly in Behrman/Elmwood Park neighborhoods)
	13	Create a master plan for the district
Study: Streamline Process for Purchase of blighted housing and lot next door program	2	Develop and implement an amended lot next door consolidation program
	6	Improve city's process for dealing with abandoned properties; establish strategy and timeline.
	7 (Bywater/ Marigny)	Establish an infill housing rehabilitation program for blighted/adjudicated
	8	Develop and implement an amended lot next door consolidation program
	12	Address and implement revitalization for Old Algiers, McDonough and Algiers Point neighborhoods including Tunnisberg, McClendonville, Riverview, River Park and Cut-off
	12	Develop & implement programs for redevelopment of blighted and adjudicated properties
	12	Infrastructure/incentives to encourage infill housing in Lower Algiers (Lower Coast/Cut-off) neighborhood
HOUSING		
Implement Permanent Housing Development Strategy for All Displaced Residents	1	Take a new look at housing homeless in downtown in conjunction with S. Rampart development where thousands of new units of mixed income housing will be created
	2	Develop and incentivize senior citizen housing
	5	Provide incentives/infrastructure for elderly housing development at potential sites such as West End, Beth Israel and/or Lakeview School
	6	Explore opportunities for new affordable/rental/senior housing via public/private partnerships. Undertake a study to assess needs and determine financing/development strategies.
	10	Provide infrastructure and incentives to construct high-quality, senior (55 and older) housing facilities along Dwyer Road
	7 (St. Claude/ St. Roch)	Assess needs and possible locations for elderly housing; develop elderly housing
Singles and Doubles Program: Homebuyer Assistance for Rental Properties		
Homebuyer Assistance for Low- and Moderate-Income Homeowners		
Rehabilitate and Rebuild Low-Income Housing	2	Construct housing at W.J. Guste
	2	Construct new housing at C.J. Peete
	2	Construct new housing at HANO scattered sites
	2	Renovate existing C.J. Peete housing
	4	Create new connections between Zion City/ Booker T. Washington/ B.W. Cooper
	4	Redevelop and improve Iberville Housing and adjacent areas
	4	Redevelop and improve Lafitte Housing and adjacent areas
	4	Redevelop and improve St. Bernard Housing and adjacent areas
	7 (Florida/ Desire)	Redevelop public housing sites together with vacant and underutilized land to transform Desire-Florida into a model mixed-income community that welcomes back all residents that seek to return as well as newcomers
	12	Study and facilitate Christopher Park Homes and Woodland Apartments revitalization through existing and potential financial incentive programs.

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
Home Rehabilitation Program for Low- to Moderate-Income Homeowners		
Transient Worker Housing		
Neighborhood Recovery Resource Centers	3	Program and develop community/recovery resource centers
	6	Launch a neighborhood information center/community hub. Undertake a study to assess long-term funding needs.
	7 (Bywater/ Marigny)	Launch neighborhood information/housing resource centers
	7 (Florida/ Desire)	Reopen Edwards Elementary School as a community resource center
	7 (Florida/ Desire)	Launch neighborhood information/housing resource centers
	7 (St. Claude/ St. Roch)	Launch neighborhood information/housing resource centers
Due to the complexity of the housing issue and the range of recommendations coming from District plans, certain District policy initiatives correspond less with individual Citywide housing projects and more with the full suite of Citywide projects and strategies. Those projects are shown in the list at right.	1	Fund the gap necessary to promote significant additional workforce ownership and rental housing.
	2	Develop a renter assistance program
	2	Develop and implement moderate and affordable housing incentive program
	3	Affordable and rental neighborhood housing renovation program (CDC)
	4	Affordable and rental neighborhood housing renovation program (CDC)
	7 (Bywater/ Marigny)	Preserve long-term economic and social diversity by encouraging infill development of appropriately scaled and designed mixed-income housing
	7 (St. Claude/ St. Roch)	Create live-work space for artists
	7 (St. Claude/ St. Roch)	Establish program to increase home ownership
	7 (St. Claude/ St. Roch)	Expand Musicians' Village
	7 (St. Claude/ St. Roch)	Rehabilitate existing housing stock (including blighted and adjudicated properties)
	8	Develop and institute housing incentive program
	8	Develop a renter assistance program
	9	Provide infrastructure and financial incentives to replace existing damaged multi-family housing with medium-density, high-quality "hardened" housing along I-10 corridor; typically build units above one floor of parking.
ECONOMIC DEVELOPMENT		
Bio-Innovation Center	1	Fund the gaps in finance required to construct BioInnovation Center, Cancer Center, and other key Medical District initiatives
LSU/VA/University Hospital	1	Support and promote new LSU/VA hospital
	4	Develop LSU/VA Regional Medical Center
Seed and Early Stage Equity Capital Fund		
Cruise Ship Terminal Expansion		
Replace Container Handling Capacity at Port	2	Relocate Port of New Orleans terminal to uptown complex at Napoleon Avenue

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
Expansion of Louis Armstrong International Airport		
Corridor Revitalization	1	Promote redevelopment of downtown's single riverfront site for strategic uses that will support the larger downtown economy
	1	Transfer development rights from historic landmarks along the South Rampart corridor
	1	Conduct study to determine steps to redevelop large surface parking lot in French Quarter along N. Peters Street in a manner compatible with the Quarter's regulations and character
	1	Encourage mixed-use development/mixed-income housing along the North and South Rampart Street Corridor
	2	Conduct Tchoupitoulas mixed use corridor study
	2	Develop and implement neighborhood commercial building program
	2	Revitalize Oretha Castle Haley Blvd. as a mixed use arts and cultural corridor
	2	Revitalize South Claiborne Avenue as a transit oriented mixed use corridor
	3	Broadmoor cultural and commercial corridor
	3	Redevelop Carrollton Shopping Center
	3	Redevelop intersection of S. Carrollton and S. Claiborne Ave.
	3	Revitalize Freret St. Commercial Corridor
	3	Revitalize Oak St. commercial corridor
	3	Revitalize S. Claiborne Ave. commercial corridor
	3	Tchoupitoulas St. corridor zoning overlay/limit commercial activity
	3	Washington and Broad Street corridor improvements
	4	Bayou Road/Governor Nicholls cultural corridor
	4	North Claiborne Ave. corridor study
	4	Redevelop Blue Plate node (Earhart/ Washington Street/ Jeff Davis intersection)
	4	Revitalization of the St. Bernard Ave. commercial corridor
	4	Revitalization of the Tulane Ave. commercial corridor with emphasis on biosciences district
	4	Revitalize Broad Street commercial corridor with Main Street Program
	4	Revitalize Canal Street commercial corridor
	4	Revitalize Earhart Boulevard commercial/industrial corridor
	4	Revitalize Galvez St. commercial corridor
	4	Redevelop the Lafitte corridor as an urban/mixed-use district with central greenway
	5	Facilitate West End Marina District mixed-use redevelopment project including addressing zoning and infrastructure requirements
	5	Address existing/ potential infrastructure/incentives requirements to facilitate Harrison Avenue redevelopment
	5	Address existing/potential infrastructure/incentives to facilitate Robert E. Lee Boulevard/West End redevelopment
	5	Address existing/potential infrastructure and financial incentives and address zoning needs to develop mid-rise condominiums adjacent to the West End Marina.
	6	Create Town Center/community nexus at Gentilly Blvd. and Elysian Fields. Undertake a study to quantify public costs and identify funding sources.
	6	Rehabilitate neighborhood commercial areas.
	6	Create sub-area master plans and study gap funding requirements/ways to encourage commercial recovery in key commercial nodes: Elysian Fields/Gentilly Boulevard, Gentilly Woods, Leon C. Simon/Franklin Ave.
	7 (St. Claude/ St. Roch)	Establish St. Claude Ave. beautification project
	7 (Bywater/ Marigny)	Extend Main Street Program to support redevelopment of St. Claude Ave. as a "main street"

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
	7 (Florida/ Desire)	Revitalize Louisa St. from Higgins to Almonaster as mixed-use corridor
	7 (Florida/ Desire)	Study opportunities to enhance and promote development along Chef Menteur Highway
	7 (St. Claude/ St. Roch)	Redevelopment of St. Claude as "Main Street"
	7 (St. Claude/ St. Roch)	Support redevelopment of Franklin, Desire Streets as secondary commercial corridors
	8	Study Reuse Options for Holy Cross School Site
	8	Create transit-oriented mixed-use redevelopment area along North Claiborne and St. Claude Avenues
	8	Study Mississippi riverfront site for mixed-use redevelopment
	9	Restore/improve function and appearance of Chef Menteur as "Main Street" with improved access management, roadway improvements, sidewalks, street lights, landscaping, and signage
	10	Plan, design, and implement an ethnic tourist destination near Chef/Michoud and Alcee Fortier
	10	Restore/improve function and appearance of Chef Menteur as "Main Street" with improved access management, roadway improvements, sidewalks, street lights, landscaping, and signage
	12	Conduct a study to coordinate development of Federal City with DOD and the Algiers community to facilitate development of shared commercial and community facilities along Newton Street/General Meyer frontage as well as address the potential for recreational levee access on site.
	12	Facilitate Newton/Opelousas/Teche Street Main Street concept through infrastructure and economic incentives; address zoning and streetscape requirements
	12	Implement infrastructure / incentives to redevelop Newton Street / General Meyer Avenue corridor; address zoning and streetscape requirements
	12	Implement infrastructure/incentives to improve/revitalize General DeGaulle Dr. corridor with street and streetscape improvements and improve and revitalize Aurora mixed-use village/Schwegmann's/Little Sisters of the Poor site
	12	Implement zoning changes and incentives to revitalize Algiers Point Main Street properties along Morgan Street/Patterson Drive from the ferry terminal (Delaronde St.) to Belleville St.
	12	Infrastructure/incentives to redevelop Jo Ellen Smith site as a mixed-use residential site; address zoning changes needed to facilitate redevelopment
	12	Infrastructure/incentives to redevelop Todd Shipyard; address zoning changes needed to facilitate redevelopment
Relocate New Orleans Cold Storage	2	Relocate Port of New Orleans terminal to uptown complex at Napoleon Avenue
Small Business Incubator and Assistance Program	2	Create a district-wide business plan
	2	Develop a business incubator in Central City
	2	Establish and implement a small business recovery loan program for business retention
	7 (Florida/ Desire)	Provide interim financing and capital for small businesses
	7 (St. Claude/ St. Roch)	Create incentives to attract desired uses: supermarket, bank, movie theater, family restaurants, service station, art galleries
	8	Develop a business incubator and assistance program
	8	Establish small business recovery loan program
Develop Louisiana Cancer Research Center	11	Document and promote redevelopment of Versailles Gardens and Market
	1	Fund the gaps in finance required to construct BioInnovation Center, Cancer Center, and other key Medical District initiatives

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
Workforce Training Program	1	Introduce a comprehensive workforce readiness and entrepreneurship program
	2	Develop and implement a comprehensive workforce program
	7 (Bywater/ Marigny)	Introduce a job-training program
	7 (Florida/ Desire)	Introduce a comprehensive workforce readiness and entrepreneurship program
	7 (Florida/ Desire)	Reopen Sidney Collier Technical School and establish a community enhancement team/job training program
	7 (St. Claude/ St. Roch)	Introduce comprehensive workforce readiness and job training programs
	8	Implement a comprehensive training and workforce plan
Canal Street/Downtown Revitalization	1	Facilitate conversion of upper-level vacant premises to residential, especially along Canal Street
	1	Determine the critical mix of downtown amenities necessary to promote downtown as a highly competitive center for tourism; identify any gap financing required.
	1	Provide financial support to meet tourism industry's need for hotel rooms
	1	Encourage developers to include a full service grocery store downtown through a combination of financial incentives, support, recruitment, site assembly and the creation of a parking strategy
Evaluation and Potential Reuse of Publicly Owned Property	1	Perform a study to determine alternate ways to stabilize the funding source for the Superdome
	1	Resolve financial feasibility and other issues necessary to convert Charity Hospital building to mixed income housing
	2	Develop a civil rights museum on Oretha Castle Haley Boulevard
	3	Program and develop interim use strategies for public facilities/schools
	4	Program and develop interim use strategies for public facilities/schools
	5	Prepare/remediate, redevelop JFK School site for new high school or low or mid-rise housing
	5	Facilitate LSP Troop B site options – Reuse/reopen existing Transportation Management Center site and create an Emergency Management Services Center on this site
	6	Explore reuse of Milne Boys Home as music/arts-oriented school and neighborhood facility
	7 (Bywater/ Marigny)	Rehabilitate and reopen St. Roch market for active public uses that may include sale of fresh produce, artisan crafts, etc.
	7 (St. Claude/ St. Roch)	Rehabilitate and reopen St. Roch market as it functioned historically (farmers' market)
INFRASTRUCTURE AND UTILITIES		
Algiers Drinking Water Plant-- Emergency Fuel Storage and Filter Valve Control System		
Carrollton Drinking Water Plant--Additional Flocculation and Sedimentation Capacity		
Carrollton Drinking Water Plant--Short-Term Projects		
	1	Undertake comprehensive repair/upgrade of drainage infrastructure
	1	Undertake improvement to water supply and raising water pressure and encourage adequate street drainage
	3	Pumping station upgrades and associated flood protection projects

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
Drainage Improvements - Short Term Projects	4	Pumping stations upgrades and associated flood protection projects
	5	Sewer & Water Board pump station landscape buffer improvements
	5	Repair/improve storm drainage structures within District 5
	5	Rehabilitation of Lakeview Sewer & Water Board Pump stations in district
	7 (Bywater/ Marigny)	Undertake comprehensive repair/upgrade of all streets, including signals, signs, lighting, gutters, drains, sidewalks, and curbs
	7 (Florida/ Desire)	Undertake comprehensive repair/upgrade of drainage infrastructure
	7 (St. Claude/ St. Roch)	Undertake comprehensive repair/upgrade of drainage infrastructure
	7 (St. Claude/ St. Roch)	Construct a fence and landscaping at Treasure to screen S&WB
	9	Construct street extensions for drainage improvement: Longfellow to Dwyer, Marques to Dwyer, Percelli to Dwyer, Lurline to Dwyer, Sandlewood to Dwyer, and Redwood to Dwyer; Dwyer between I-510 and Toulon
	9	Reinforce existing pumping capacity to Category 3 status--raise and rehabilitate pumping stations; construct new pumping station at Dwyer and Wilson
	9	Repair drainage structures, piping, and catch basins as needed; clean canals as needed
	10	Repair drainage structures, piping, and catch basins as needed; clean canals as needed
	11	Repair/improve storm drainage in Venetian Isles
Eastbank Wastewater Treatment Plant - Levee Improvement Mitigation and Wetlands Project	8	Restore Bayou Bienvenue and wetland assimilation program with the sewerage treatment plant system
Power Plant		
Sewerage and Water Board - Technical Staff		
Wastewater collection system - Short Term Improvements	5	Implement sewer & water services rehabilitation
Wastewater collection system - Medium Term Improvements	6	Prioritize repairs on major water and waste-water system lines; provide schedule for completion and monthly status reports
Water Distribution System - Short Term	5	Implement sewer & water services rehabilitation
	6	Prioritize repairs on major water and waste-water system lines; provide schedule for completion and monthly status reports
Water Distribution System--Medium Term	1	Undertake improvement to water supply and raising water pressure and encourage adequate street drainage
	11	Install community water and fire hydrants between the Chef Pass and the Rigolets and in Irish Bayou
Citywide wireless network	6	Establish city-wide free wireless network
TRANSPORTATION		
	1	Undertake comprehensive repair/upgrade of all streets, including signals, signs, lighting, gutters, drains, sidewalks, and curbs
	3	District-wide street/infrastructure repair and replacement program
	4	District-wide street/infrastructure repair and replacement program
	5	Design and implement City Park Avenue traffic-calming measures
	5	Repair/rehabilitate primary collector streets – paving, curbs, lighting, signals, signage: Canal Blvd., Pontchartrain/West End, Fleur de Lis, Harrison Avenue, Robert E. Lee Blvd.

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
Repair/Restoration of Streets: --High-Priority Major Arterial Roads --High-Priority Minor Arterial Roads --High-Priority Collector Roads --High-Priority Local Roads	5	Repair/rehabilitate secondary collector streets – paving, curbs, lighting, signals, signage: Lakeshore Drive, Fillmore Drive, Bellaire Drive & Marconi Drive as well as tertiary/local streets – paving, curbs, lighting, signals, signage
	7 (Florida/ Desire)	Undertake comprehensive repair/upgrade of all streets, including signals, signs, lighting, gutters, drains, sidewalks, and curbs
	9	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on primary streets (Chef Menteur, Alcee Fortier, Michoud Blvd., Dwyer Road)
	9	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on secondary streets
	9	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on tertiary streets
	11	Bulkhead the shorelines of Highway 90 to provide protection along Chef Menteur Pass, Lake Catherine, and Lake Pontchartrain Shorelines
	12	General Meyer Avenue paving, curbs, access management, streetscape, lighting and pedestrian improvements
	12	Repair road paving, curbs, street lights, signalization & street signs on primary collector streets including General de Gaulle (focus from CCC to Holiday Drive)
	12	Repair curbs and street paving on Old Behrman Highway to improve driver safety on this street
	12	Repair road paving, curbs, street lights, signalization & street signs on secondary and local streets
Ongoing Replacement Program for Major and Minor Streets	6	Establish implementation strategy for renewal of streets and sidewalks: Institute pavement management system to prioritize street improvements; Repair/rebuild all damaged streets, including sub-base; Reassess functional classification of streets to secure federal funding; Prepare inventory of existing street lights; Rebuild all sidewalks to be ADA-compliant, including curb cuts, truncated domes
	1	Extend Howard Avenue to improve Superdome access and operations
	7 (Florida/ Desire)	Install overpasses at appropriate locations that could include N. Miro, Florida, Almonaster, or Alva to avoid blockages at railroad crossings; enhance overpass at N. Galvez
	7 (St. Claude/ St. Roch)	Provide additional above-grade RR crossings
	7 (St. Claude/ St. Roch)	Extend Treasure Street between Florida and Desire
	9	Construct street extensions for drainage improvement: Longfellow to Dwyer, Marques to Dwyer, Percelli to Dwyer, Lurline to Dwyer, Sandlewood to Dwyer, and Redwood to Dwyer; Dwyer between I-510 and Toulon
	11	Raise Highway 11 in Irish Bayou 90 to provide continuous access during heavy rain event
	12	Update and revisit feasibility/design study for “Donner Parkway” along Donner Canal as raised parkway from Tullis Drive to Hwy. 90
Ongoing Replacement Program for Major and Minor Streets	13	Conduct a study to elevate Highway 406 in low topographic zone
Ongoing Replacement Program for Major and Minor Streets	13	Extend English Turn Parkway from Stanton Road to Delacroix Road
Streetcar Travel Time Improvement Study		
East-West Corridor/Downtown Loop	1	Light rail transit to airport
Extension of Riverfront Streetcar Line		
	1	Create bike-friendly corridors
	1	Improve pedestrian/bike connections to river

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
Implement Citywide Bike Path System	3	New open space connections within network (including bike paths)
	4	New open space connections within network (including bike paths)
	5	Improve pedestrian & bicycle access to City Park, New Basin Canal and Lakeshore Drive.
	6	Develop "rails to trails" walking/cycling path along People's Avenue corridor
	7 (Bywater/ Marigny)	Establish bike lanes on strategic streets--Chartres, St. Claude, and along the riverfront
	7 (St. Claude/ St. Roch)	Develop pedestrian/bike path along St. Roch to connect to the FL. Ave. Greenway
	9	Construct pedestrian walks and bike paths along primary streets such as Morrison, Hayne, and Dwyer Roads
	10	Construct pedestrian walks and bike paths along primary streets such as Chef Menteur and Michoud Blvds.
	12	Construct bike path and walking path along the length of the Mississippi River levee
Streetcar/Light Rail Routes Expansion Study	1	Expand streetcar service and routes
	2	Create new citywide light rail. streetcar system with multi-modal nodes
	6	Link the district, major institutions, and the lakefront to the rest of the city with Elysian Fields streetcar
	6	Prepare environmental impact statement for streetcar or light rail line on Elysian Fields.
	7 (Bywater/ Marigny)	Reestablish Desire Streetcar/St. Claude Streetcar
	7 (Florida/ Desire)	Establish streetcar line along Louisa St.
	7 (St. Claude/ St. Roch)	Re-establish streetcar service
	8	Create new citywide rail and streetcar system with multi-modal nodes
	9	Consider/study extension of light rail into NO East within the Chef Menteur Highway development corridor to provide transit service to the community
	10	Consider/study extension of light rail into NO East within the Chef Menteur Highway development corridor to provide transit service to the community
	12	RTA / Transit System- study ridership needs and modes (e.g. light rail) and address additional circulation/stops required in Algiers
Evacuation/Disaster Response Plan	1	Promote establishment of mass evacuation plan with law enforcement hierarchy (federal/state/local) for every district and determine role that light rail and commuter rail could play
	2	Develop and Implement a safe havens, passive survivability, and evacuation plan
	8	Develop and Implement a safe havens, passive survivability, and evacuation plan
	11	Create a "safe harbor" in District 11
	13	Open private Audubon Institute and Coast Guard entrance in times of emergency
	13	Conduct a study for coordinated emergency services and safe haven evacuation center
Study the removal of I-10 between Highway 90 and Elysian Fields Ave.	4	Fund study of I-10 removal
Study installation of sound walls along I-10 and I-610	6	Install landscaped sound wall/barriers along I-10 and I-610
	9	Design and Install sound barriers along I-10 and I-509
	10	Design and Install sound barriers along I-10 and I-510
	1	Resolve parking and other issues necessary to incentivize more loft renovation and mixed-use development

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
Traffic and Parking Management Plan	1	Introduce a parking management strategy for downtown that includes shared parking facilities and addresses the needs of residents, employees, visitors, and others
	1	Prepare a downtown traffic transportation plan that addresses traffic congestion and conflicts throughout downtown and the French Quarter
	7 (Bywater/ Marigny)	Devise RR crossing management plan for Norfolk Southern tracks
	7 (Bywater/ Marigny)	Mitigate/reduce truck routes through neighborhoods
	7 (Florida/ Desire)	Mitigate/reduce truck routes through neighborhoods
	7 (St. Claude/ St. Roch)	Devise RR crossing management plan
	7 (St. Claude/ St. Roch)	Reduce truck traffic on North Robertson/Claiborne
	12	Conduct a comprehensive district-wide traffic study; address signalization and peak hour traffic levels
HEALTH CARE		
Redevelop Neighborhood-Based Health Centers/Clinics	1	Explore need for neighborhood health center for growing population in Warehouse District and Rampart Street Corridor and Lafayette Square
	2	Incentivize continued recovery and expansion of health care industry
	5	Provide incentives/infrastructure to facilitate development of 1-2 new community medical clinics
	5	Provide incentives/infrastructure to repair/reopen Lindy Boggs Medical Center
	6	Support location of neighborhood health clinic in or near the planned Town Center/community nexus
	7 (Florida/ Desire)	Restore health care services (e.g. multipurpose health/community services building, Desire Mental Health Clinic, clinic at Louisa and Higgins)
	7 (St. Claude/ St. Roch)	Provide a family health center
	9	Develop health centers with community centers at multiple locations (e.g. Chef/Michoud, Downman/Dwyer)
	10	Develop health centers with community centers at multiple locations (e.g. Chef/Michoud, Downman/Dwyer)
	11	Provide infrastructure/incentives for a community clinic on Highway 90
	12	Re-establish Algiers Mental Health Clinic
	12	Study market potential for redevelopment of a full service district medical facility
Restore Comprehensive Medical Services to New Orleans East	9	Provide infrastructure/incentives to restore Methodist Hospital; rebuild as protected structure with only service uses on first floor
	9	Rehabilitate Lakeland Hospital
EDUCATION		
	4	Program and develop community centers in underutilized public buildings
	5	Conduct a feasibility study to assess Beth Israel Congregation for potential re-development of site as community center
	5	Restoration of Harrison Community Center including restoration of the Gernon Brown Gymnasium in City Park
	6	Renovate and re-open Pontchartrain Park Senior Community Center
	7 (Bywater/ Marigny)	Establish and improve community and recreation centers (including Stallings Recreation Center, Mandeville Center, and activity nodes at Colton Middle and Douglass High Schools)

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
Neighborhood Community Centers	7 (Florida/ Desire)	Co-locate community centers, libraries, and other facilities/services with schools
	7 (St. Claude/ St. Roch)	Create community, cultural, and recreation centers
	8	Develop and Implement a "District Community-Based Youth at Risk" recovery program
	8	Establish new Nature Interpretive Education and Outreach Center
	8	Renovate and expand Sanchez Center
	9	Develop health centers with community centers at multiple locations (e.g. Chef/Michoud, Downman/Dwyer)
	9	Restore/rebuild community center at Abrams Elementary School
	10	Develop health centers with community centers at multiple locations (e.g. Chef/Michoud, Downman/Dwyer)
	11	Build or provide incentives for a 5,000 sq. ft. community center to be located between Ft. Macomb and Fort Pike. This community center could offer a myriad of activities for the community as part of the region's recovery and support economic development found in fishing, wetlands, and eco-tourism
Repair and Renovate Existing School Facilities/Construct New School Facilities	1	Create new elementary school combined with refurbished or new library
	2	Complete comprehensive study of schools
	2	Renovate or provide new Lafon Elementary School
	5	Repair/reopen and harden Hynes Charter School
	6	Secure funding for reopening/replacement of district public schools
	7 (Bywater/ Marigny)	Provide schools within the community
	7 (Florida/ Desire)	Provide schools within the community (public preferences for initial reopenings are Moton Elementary and Carver Middle and High Schools)
	7 (St. Claude/ St. Roch)	Provide schools within the community (public preference is to locate at least one elementary and middle school within the community, and at least one high school within the district)
	8	Complete comprehensive study of school recommendations and re-openings
	9	Construct new school at Ray Abrams Elementary as hardened facility
	9	Rebuild schools at higher elevation
	9	Install high-quality modular units as soon as possible; rebuild and reopen damaged schools; mitigate damage to existing school building (gutting, mold remediation) as needed to accommodate repopulated areas
	10	Rebuild schools at higher elevation
	10	Install high-quality modular units as soon as possible; rebuild and reopen damaged schools; mitigate damage to existing school building (gutting, mold remediation) as needed to accommodate repopulated areas
	10	Fully renovate Sarah T. Reed High School via fast-tracking
Temporary Modular School Facilities	12	Reconstruct/reopen L.B. Landry High School
	12	Repair/reopen Rosenwald Elementary School
Rehabilitate Louisiana Technical College and Evaluate Need for Additional Facilities	9	Install high-quality modular units as soon as possible; rebuild and reopen damaged schools; mitigate damage to existing school building (gutting, mold remediation) as needed to accommodate repopulated areas
	10	Install high-quality modular units as soon as possible; rebuild and reopen damaged schools; mitigate damage to existing school building (gutting, mold remediation) as needed to accommodate repopulated areas
	7 (Florida/ Desire)	Reopen Sidney Collier Technical School and establish a community enhancement team/job training program
	11	Provide infrastructure/incentives for marine and fisheries vocational/technical school

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
COMMUNITY SERVICES: PUBLIC SAFETY		
Citywide Network of State-of-the-Art Police and Fire Substation	2	Study the feasibility of police security sub-stations and programs in the district
	5	Rehabilitate (3) and harden existing fire stations in District 5
	5	Rehabilitate and harden police station on Canal Blvd.
	7 (Bywater/ Marigny)	Establish a police precinct at Stallings Recreation Center
	7 (Florida/ Desire)	Enhance police and fire protection by reopening, rebuilding and adding appropriately staffed stations
	8	Study the Feasibility of Manned Police/Fire/Security Sub-Station and Programs in District
	9	Rehabilitate/restore existing fire stations (3) as hardened structures
	9	Rehabilitate/restore existing police station as hardened structure
	9	Construct two police substations as hardened structures
	10	Rehabilitate/restore existing fire stations (3) as hardened structures
	10	Rehabilitate/restore existing police station as hardened structure
	10	Construct two police substations as hardened structures
	11	Construct fire stations for Ft. Pike and Irish Bayou community volunteer fire department including a manned police substation
	11	Construct manned police substation in Venetian Isles
	11	Rebuild fire facilities in Venetian Isles and add a manned police substation
	12	Construct additional Police substations on Newton, Texas & Tullis Streets
	12	Restore/repair Fire Station #40
	12	Restore/repair or relocate and rebuild existing police station in a more visible location
	13	Conduct a study for coordinated emergency services and safe haven evacuation center
Develop and Integrate Crime Lab and Central Evidence and Property Storage Function		
Provide a Citywide Criminal Surveillance Program	7 (St. Claude/ St. Roch)	Install security cameras at certain intersections
Replace or Repair All NOPD Equipment		
Renovate NOPD Headquarters		
Renovate NOPD Special Operations Unit		
Renovate and/or Repair 7 NOPD District Headquarters Buildings		
Emergency Communications Center		
ENVIRONMENTAL CONCERNS		
Sustainable Environmental Strategies	1	Explore mechanisms currently being established in Boston and other cities that promote green buildings in the private sector
	2	Develop and implement a voluntary incentive based energy efficiency and sustainable materials program
	2	Develop and implement a voluntary Incentive-based rain garden program
	2	Develop and implement a voluntary incentive based hurricane and flood building program
	8	Develop energy-efficiency sustainable materials program
	8	Develop a sustainable building program and incentivize sustainable materials
	8	Develop and institute a rain garden program
	8	Develop and institute storm/flood water retention and mitigation program

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
	8	Develop and institute voluntary hurricane and flood building program
	8	Develop and implement alternative energy sources
	9	Restoration of Lake Pontchartrain fishing camps as small "hardened" buildings, constructed to withstand wind and water
	13	Develop and implement a voluntary incentive based energy efficiency and sustainable materials program
	13	Develop and implement a voluntary incentive based hurricane and flood building program
	13	Develop and implement a voluntary rain garden program
Hurricane Recovery Soil Assessment and Remediation Program	2	Remediate Saratoga incinerator site and determine redevelopment options
	3	Investigate and, if required, remediate Syncor Facility
	7 (Bywater/ Marigny)	Assess needs and costs related to remediation of contaminated soils and other flood-related environmental issues through the oversight of EPA
	7 (Florida/ Desire)	Assess need and costs related to remediation of contaminated soils and other flood-related environmental issues through the oversight of EPA
	7 (St. Claude/ St. Roch)	Assess needs and costs related to remediation of contaminated soils and other flood-related environmental issues through the oversight of EPA
Re-institute a Citywide Recycling Program	6	Return to biweekly trash pick-up and implement effective recycling system
	7 (Bywater/ Marigny)	Increase city staffing to improve reliability of trash and recyclables collection
	9	Implement a comprehensive recycling program and conduct environmental mediation for existing landfills
	10	Implement a comprehensive recycling program and conduct environmental mediation for existing landfills
COMMUNITY SERVICES: RECREATION AND LIBRARIES		
Renovate and Expand Main Library, Phases I and II		
Repair, Renovate, or Construct New Regional Libraries	5	Repair/reopen/upgrade the Robert E. Smith Public Library
	6	Renovate, expand, and re-open Norman Mayer regional branch library or establish a new library within the area with resource center, planning center, and usable community meeting space
	9	Relocate/rebuild Read Branch Library
	12	Replace existing facility with a new, larger Algiers Regional Library ; an alternate selection may also be considered
Repair, Renovate, or Construct New District/Neighborhood	2	Study locations for neighborhood libraries
	3	Broadmoor cultural and commercial corridor
	12	Upgrade/restore Hubbell Library in Algiers Point
Implement Master Plan for City Park	5	Implement City Park Master Plan redevelopment and reconstruction
Repair, Renovate, or Construct New Regional Parks	1	Reopen and rehabilitate Armstrong Park (see District 4 plan)
	4	Improve Louis Armstrong Park and surrounding areas
	5	Design and implement landscape improvements for open space formerly maintained by Orleans Levee District
	5	New Basin Light House
	5	Facilitate West End Marina District mixed-use redevelopment project including addressing zoning and infrastructure requirements
	5	Implement Lake Pontchartrain Seawall repairs
	6	Restore Pontchartrain Park and golf course as district's signature public space
	9	Restore/rebuild Joe Brown Park and facilities including hardened gymnasium
	12	Brechtel Park Renovation – Repair pavilions and clean lagoons and remove Hurricane Katrina debris from grounds and construct hiking trails; repair/upgrade existing golf course
	12	Rehabilitate Behrman Memorial Park Community Center, pool, baseball fields and supporting structures.

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
Repair and Renovate District/ Neighborhood Parks	2	Complete district park system study
	2	Rehabilitate Edgar B. Stern Tennis Center
	2	Restore existing parks, pocket parks, play spots, and recreational centers
	5	Rebuild neighborhood parks – including the proposed Levee Park/Katrina Memorial within West End Park
	6	Begin restoration of additional district green spaces: Eddie Gatto Playground, Filmore Gardens/Dauterive Playspot; Donnelly Playground, Wesley Barrow Stadium, Harris Playground, Union Playspot, Perry Roehm Park and Baseball Stadium, Duck pond at Dillard University, National Square/Rome Park/Boe Playspot, St. James/Milne/Mitenberger Playground
	7 (Florida/ Desire)	Rehabilitate parks, including McGruder Park and Gym, Sampson Park, Odell Park, and Jackson Memorial Park
	8	Complete district park system study
	8	Restore existing parks, playgrounds and play spots in district
	9	Renovate/reopen neighborhood park facilities
	10	Renovate/reopen neighborhood park facilities
	12	Restore River Park Playground after trailers are removed
Renovate Public Marinas	11	Clean debris and sunken vessels from Venetian Isle, Bayou Delassaires and Bayou Sauvage Canals
	11	Provide infrastructure incentives for Irish Bayou Marina development
	11	Provide infrastructure/incentives for Fort Macomb Marina restoration to serve commercial and recreational fisheries
	11	Provide infrastructure/incentives for Fort Pike Marina redevelopment including full-service marina, icehouse and fuel docking area to serve commercial and recreational fisheries
	11	Provide infrastructure/incentives for Phase II of Fort Macomb Marina Village Redevelopment, including seafood market, shops, parking, restrooms, food services, and tourist-related facilities
	11	Provide infrastructure/incentives to redevelop Lake Catherine Marina
	11	Provide infrastructure/incentives to redevelop Sauvage Ridge marine/industrial and fisheries infrastructure area
Create New Parks and Greenbelts as Needed	1	Create new downtown neighborhood parks within the S. Rampart Corridor and on a site bordering both Warehouse and Lafayette Square Districts; enhance existing parks including additional playgrounds
	3	New open space connections within network (including bike paths)
	3	Leake Ave. and levee park comprehensive planning study
	4	New open space connections within network (including bike paths)
	4	Redevelop the Lafitte corridor as an urban/mixed-use district with central greenway
	5	West End bomb shelter removal – potential community open space combined with New Basin Park
	6	Demolish Avery Alexander School and retain site for open space; no private development on site
	6	Enclose Dwyer Drainage Canal; develop linear park
	6	Work with ACOE to "green" the London Avenue Canal
	7 (Bywater/ Marigny)	Enhance and create parks—Press St., Plessy, Markey, and Chartres)
	7 (Bywater/ Marigny)	Retain riverfront wharfs as park facilities
	7 (Florida/ Desire)	Restore, enhance, and create new parks and open spaces
	7 (Florida/ Desire)	Cover the Florida Avenue canal; study removal of railroad tracks

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
	7 (St. Claude/ St. Roch)	Restore, enhance, and create new parks and open spaces
	9	Construct NORD playgrounds on sites of open schools and new schools within the district
	9	Study an opportunity to restore Lincoln Beach swimming and amusement facilities
	9	Construct drainage improvements in impacted areas such as Morrison and Dwyer Rds--cover canals to provide more amenity value; add sidewalks and bike paths
	10	Construct NORD playgrounds on sites of open schools and new schools within the district
	10	Construct drainage improvements in impacted areas such as Dwyer Rd.--cover canals to provide more amenity value; add sidewalks and bike paths
	13	Create a new public park in a low topographic zone along Highway 406
COMMUNITY SERVICES: OTHER MUNICIPAL AND CULTURAL FACILITIES		
Expansion of Existing Arts District		
Downtown Theater and Cultural District	1	"Broadway South" proposal
	1	Develop the New Orleans Music Hall of Fame, new jazz museum and cultural center and explore ways they may be integrated
	1	Rehabilitate existing theater buildings
	1	Increase financial support for cultural economy including an entertainment tax credit (comparable to the film tax credit) to promote Broadway South and performing arts elsewhere downtown
Invest in Cultural Recovery Programs		
HISTORIC PRESERVATION/URBAN DESIGN		
Katrina Memorial		
Historic Preservation Technical and Financial Assistance	1	Expand State Historic Preservation Office's restoration grant program and increase funding for other state and federal programs that support historic preservation--for example, the federal termite program
	6	Advance historic preservation initiatives: Edgewood Park neighborhood and Pontchartrain Park designations as national historic districts; Gentilly Terrace grant applications to National Park Service Historic Building Recovery Program
	7 (Florida/ Desire)	Provide incentives for restoration of historic architecture
	7 (St. Claude/ St. Roch)	Create financial incentives for rehabilitation of historic structures
Develop Urban Design Plans and Pattern Books of New Orleans Architecture	1	Extend design review throughout downtown and create design guidelines for areas outside of the Historic Districts
	1	Create a detailed urban design plan for the Medical District and S. Rampart Street Corridor
	2	Create neighborhood urban designs for the district
	2	Create residential and commercial neighborhood architecture pattern book for district
	3	Develop neighborhood-specific design guidelines for rebuilding and flood protection
	4	Neighborhood-specific design guidelines for rebuilding and flood protection
	5	Prepare District 5 "Pattern Book" to address residential standards
	6	Create revised zoning and urban design guidelines where needed to advance community rebuilding priorities: Implement urban design overlay ordinance for Elysian Fields and Gentilly Boulevard commercial areas; Maintain existing residential zoning in Pontilly, Dillard, Milneburg, and Gentilly Terrace

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
	7 (St. Claude/ St. Roch)	Create design guidelines and offer technical assistance to encourage rehabilitation/new development consistent with historic character
	8	Create an neighborhood urban design plans for the district
	9	Adopt and enforce community design standards for lower-density multi-family development; address hardening and flood protection construction standards; address limitations on expansion of multi-family housing density not to exceed 16 units/acre
	1	Conduct a detailed assessment of gaps for historic streetscape restoration in all historic districts
	1	Enhance key pedestrian connector streets to promote a framework of inviting pedestrian connections
	1	Enhance public realm around Superdome and improve the pedestrian connections to the Superdome
	2	Develop and implement a "Green Streets" program
	2	Hardening of utility service and street infrastructure program
	2	Develop and implement a voluntary Incentive-based rain garden program
	3	District-wide street/infrastructure repair and replacement program
	4	Create new connections between Zion City/ Booker T. Washington/ B.W. Cooper
	4	District-wide street/infrastructure repair and replacement program
	5	Repair or reconstruct neutral grounds on West End, Canal, Argonne, Milne, Fleur de Lis, Orleans Avenue, Robert E. Lee Blvd.
	5	Restore and upgrade Veterans Boulevard landscape buffer
	5	Implement restoration of Magnolia Gardens Bridge
	6	Establish implementation strategy for renewal of streets and sidewalks: Institute pavement management system to prioritize street improvements; Repair/rebuild all damaged streets, including sub-base; Reassess functional classification of streets to secure federal funding; Prepare inventory of existing street lights; Rebuild all sidewalks to be ADA-compliant, including curb cuts, truncated domes
	6	Restore all telephone line damage; implement system to withstand hurricane winds and flooding; investigate underground line placement.
	6	Install electric lines underground to protect them from winds/flooding
	6	Extend existing St. Anthony walking path to lakefront and Agriculture Street
	6	Implement CPC and RPC-adopted pedestrian improvements for Elysian Fields/Gentilly Blvd. and Elysian Fields/I-610 intersections
	6	Create gateway signage for neighborhoods/subdivisions along Congress, Press, Elysian Fields, St. Roch, Franklin, Lee, and Leon C. Simon
	6	Replace/repair street trees, street lights, and landscaping
	6	Prepare neutral grounds landscape master plan, tree inventory, and tree-planting policy to rehabilitate them as the district's green spines
	7 (Bywater/ Marigny)	Increase the presence of street trees throughout the community
	7 (Bywater/ Marigny)	Undertake comprehensive repair/upgrade of all streets, including signals, signs, lighting, gutters, drains, sidewalks, and curbs
	7 (Florida/ Desire)	Consider burying utility lines
	7 (Florida/ Desire)	Undertake comprehensive repair/upgrade of all streets, including signals, signs, lighting, gutters, drains, sidewalks, and curbs
	7 (Florida/ Desire)	Undertake streetscape improvements (targeting Almonaster, Alvar, Higgins, Louisa, Desire, and Florida)
	7 (St. Claude/ St. Roch)	Install neighborhood identification signs

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
Improve Sidewalks, Streetscapes, and Neutral Grounds	7 (St. Claude/ St. Roch)	Study undergrounding of utility lines
	7 (St. Claude/ St. Roch)	Create monuments or other elements to honor neighborhood heroes
	7 (St. Claude/ St. Roch)	Install neighborhood identification signs
	7 (St. Claude/ St. Roch)	Undertake streetscape enhancements; focus on trees
	7 (St. Claude/ St. Roch)	Install street lights in underlit areas
	7 (St. Claude/ St. Roch)	Undertake comprehensive repair/upgrade of all streets, including signals, signs, lighting, gutters, drains, sidewalks, and curbs
	8	Develop a comprehensive green streets program
	8	Develop a comprehensive tree loss and damage study/tree canopy restoration program
	8	Develop and institute a rain garden program
	8	Develop and institute storm/flood water retention and mitigation program
	8	Repair and upgrade to hardened underground utilities corridor and street infrastructure program
	9	Construct neighborhood identification signs
	9	Improve/landscape neutral grounds
	9	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on primary streets (Chef Menteur, Alcee Fortier, Michoud Blvd., Dwyer Road)
	9	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on secondary streets
	9	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on tertiary streets
	10	Construct neighborhood identification signs
	10	Improve/landscape neutral grounds
	10	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on primary streets (Chef Menteur, Hayne, and Morrison)
	10	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on secondary streets
	10	Implement repaving, street repair, repair of signalization, street lights, and street signs, sidewalks, and landscaping on tertiary streets
	11	Place all District 11 utilities underground
	11	Install Highway 90 lighting between Chef Menteur Bridge and Rigolets Bridge
	12	Address and implement revitalization for Old Algiers, McDonough and Algiers Point neighborhoods including Tunnisberg, McClendonville, Riverview, River Park and Cut-off
	12	General Meyer Avenue paving, curbs, access management, streetscape, lighting and pedestrian improvements
	12	Repair road paving, curbs, street lights, signalization & street signs on primary collector streets including General de Gaulle (focus from CCC to Holiday Drive)
	13	Develop and implement a voluntary rain garden program
	13	Hardening of utility service and street infrastructure program
Repair and Preserve Historic Forts	5	Implement Fort St. John stabilization / restoration
	11	Initiate Fort Pike Restoration--this facility needs substantial repairs and improvements after the eye of Hurricane Katrina passed directly over it.
IMPLEMENTATION AND ADVOCACY		
	1	Improve services including garbage collection and power supply

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
Advocacy: Basic Utility Infrastructure Repair (Section 3 of Plan)	2	Reinstate and repair District-wide basic infrastructure and public works services
	6	Repair all damaged electric/gas facilities including essential redundancy mechanisms
	6	Restore mail service to pre-storm levels
	6	Restore services to pre-Katrina levels including police/security and fire protection
	7 (Bywater/ Marigny)	Establish an ongoing upgrade/maintenance program for utilities
	8	Reinstate and repair district-wide basic infrastructure and public works services
	9	Improve electric services and power reliability along Chef Menteur Highway
	9	Implement sewer, water, gas, electric, data, and telephone restoration as needed in district--underground utilities
	10	Improve electric services and power reliability along Chef Menteur Highway
	10	Implement sewer, water, gas, electric, data, and telephone restoration as needed in District--underground utilities
	11	Provide public gas utility restoration (Chef Bridge to Rigolets Bridge)
	13	Reinstate and repair district-wide basic infrastructure and public works services
Advocacy: Flood Protection & Coastal Restoration (Section 4 of Plan)	1	Improved coastal restoration and protection
	2	Provide Category 5 hurricane and flood protection
	6	Improve protection and London Avenue and Industrial Canals: Install flood gates on London Ave. and Industrial Canals (France Road and Old Seabrook Bridge) at Lake Pontchartrain; Advance relocation of London Ave. Canal pump station to Lake Pontchartrain
	6	Restore coastal wetlands consistent with Coast 2050 objectives
	7 (Bywater/ Marigny)	Study closure of MRGO/ the Industrial Canal
	7 (Florida/ Desire)	Study closure of MRGO/ the Industrial Canal
	7 (St. Claude/ St. Roch)	Study closure of MRGO; study impacts on Industrial Canal
	8	Require category 5 hurricane and flood protection
	11	Implement floodgates at the Rigolets, Chef Menteur Pass, Intracoastal Waterway, and create 90' protection levee south and parallel to the CSX roadbed/levee
	11	Reinforce shoreline and restore wetlands on the southeast shore of Lake Pontchartrain west of Hospital Wall
	11	Reinforce the western shoreline of the Rigolets
	11	Restore channel bulkheading along Bayou Sauvage industrial corridor
	11	Restore protective wetlands on south side of the Fort Pike Canal
	13	Provide Category 5 hurricane and flood protection
Advocacy: Louisiana Commuter Rail (Section 3 of Plan)	1	Support commuter rail link to Baton Rouge
	2	Organize and fund an arts and cultural district council
	3	Affordable and rental neighborhood housing renovation program (CDC)
	4	Affordable and rental neighborhood housing renovation program (CDC)
	5	Create a District-based Community Development Corporation that interfaces with NORA and consistently represents district and neighborhood interests at a grass-roots level
	6	Support Dillard/CDC/neighborhood revitalization initiative. Provide public/foundation financial resources to partially support its operations.
	6	Continue community support for relocation of Holy Cross School as catalyst for neighborhood renewal

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
Implementation: CDC and other formal partnerships (Section 4 of Plan)	6	Work with University of New Orleans to determine permanent location for Early College High School
	6	Constitute a District 6 planning advisory committee
	6	Explore establishment of a district-based CDC
	6	Explore opportunities for potential recovery partnerships among educational institutional/educational compact. Prepare a study to evaluate potential costs and benefits
	9	Create a district-based CDC that interfaces with NORA and consistently represents district and neighborhood interests at grass-roots level
	10	Create a district-based CDC that interfaces with NORA and consistently represents district and neighborhood interests at grass-roots level
	12	Create a District-based Community Development Corporation(s) that interfaces with NORA and consistently represents District 12 and neighborhood interests at a grass-roots level
Implementation: Local/National Historic Districts (Section 4 of Plan)	1	Expand Warehouse District and Lafayette Square historic district boundaries
	1	Increase enforcement of historic district guidelines and regulations including enhanced planning and design review of pipeline and future projects
	2	Study the expansion and delineation of historic districts
	5	Conduct historic district boundaries study
	5	Facilitate placement of City Park on the National Register of Historic Places
	6	Advance historic preservation initiatives: Edgewood Park neighborhood and Pontchartrain Park designations as national historic districts; Gentilly Terrace grant applications to National Park Service Historic Building Recovery Program
	7 (Bywater/ Marigny)	Strengthen regulations that support historic preservation
	8	Study the expansion of the historic district
Implementation: Restore Transit Service and Infrastructure (Section 3 of Plan)	12	Conduct a survey and investigate the potential for the development of "Historic District" status for the area bounded by Opelousas Street to Mardi Gras Boulevard and the Mississippi River to L. B. Landry Drive.
	1	Restore bus service to pre-Katrina levels and introduce new shelters on key transit routes
	1	Restore St. Charles streetcar service
	2	Re-open fully functional St. Charles Streetcar Line
	2	Develop appropriate transit schedule and vehicle types for RTA bus lines
	2	Reinstate Jackson ferry service
	3	Analyze transit loops and vehicle size/evaluate additional routes
	5	Improve the existing transportation center at the foot of Canal Boulevard to better link the City Park Avenue bus shelter and the Canal Street streetcar shelter.
	5	RTA System – bus stop renovation for all district bus stops
	6	Improve bus transit service: Replace bus shelters, benches, and surrounding landscaping; Restore transit service to pre-Katrina levels and routes
	7 (St. Claude/ St. Roch)	Restore bus service along Desire/Galvez
	8	Reinstate and develop appropriate transit schedule and vehicle types for RTA bus lines
	9	Facilitate RTA system improvements --Renovate transit stops with amenities necessary to restore transit usage and user safety (e.g. benches, shelters, lighting)
	9	Add bus lanes to Chef Menteur Hwy and Dwyer Rd.
	10	Facilitate RTA system improvements --Renovate transit stops with amenities necessary to restore transit usage and user safety (e.g. benches, shelters, lighting)
	10	Add bus lanes to Chef Menteur Hwy and Dwyer Rd.
	10	Implement expansion of bus network further east to serve District 10 residents and connect new nodes of development

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
	12	Improve/renovate RTA system facilities; implement bus stop renovations for all existing stations; add new stations in key areas based on ridership needs
	12	Maintain the Algiers Point public ferry as major public transportation access from East Bank New Orleans to the Algiers Point Historic District. Extend ferry operating hours.
	12	Restore RTA Park-n-Ride after trailers are removed
Implementation: Changes to Court System (Section 4 of Plan)	1	Establish a Livability Court to assist with determination of citizen complaints
Implementation: Changes to Road Home Program (Section 4 of Plan)	6	Support Citizens Road Home Program Action (CHAT) principles covering disposition of and payment for properties either acquired or to be mitigated through the Road Home Program
Implementation: Economic Development Department (Section 4 of Plan)	1	Develop a business retention and development strategy
Implementation: Special Taxing Districts (Section 4 of Plan)	1	Create a Medical District Development Corporation in order to formalize the status of the Medical District
	1	Explore creation of a self-taxing district to provide additional district-wide security
Recovery Implementation: Staffing (Section 4 of Plan)	1	Increase police presence and enforcement downtown
	6	Return to biweekly trash pick-up and implement effective recycling system
	6	Implement efforts to exterminate rodents and insects
	7 (Bywater/ Marigny)	Select a Riverfront Project Liaison
	7 (Bywater/ Marigny)	Increase city staffing to improve reliability of trash and recyclables collection
	7 (Bywater/ Marigny)	Establish a community policing program
	7 (Florida/ Desire)	Staff and fund tutoring programs such as PAB PEAM
	7 (St. Claude/ St. Roch)	Create a program to closely monitor establishments selling alcoholic beverages
	1	Implement adapted version of the New Jersey Rehabilitation Subcode
	1	Facilitate conversion of upper-level vacant premises to residential, especially along Canal Street
	1	Resolve parking and other issues necessary to incentivize more loft renovation and mixed-use development
	1	Extend design review throughout downtown and create design guidelines for areas outside of the Historic Districts
	1	Along key connector streets, encourage new development and, where possible, existing buildings to provide street-fronting retail and other uses that engage pedestrians
	3	Tchoupitoulas St. corridor zoning overlay/limit commercial activity
	5	Adopt proposed Lake Area Zoning Districts that have been submitted to the City Planning Office
	5	Address existing/potential infrastructure and financial incentives and address zoning needs to develop mid-rise condominiums adjacent to the West End Marina.
	7 (Bywater/ Marigny)	Riverfront Flood/Development Controls
	7 (Bywater/ Marigny)	Establish a commercial overlay in Bywater for mixed uses

Appendix B-2: Citywide Projects and Corresponding District Projects

Citywide Team Projects	District	Corresponding District Projects
Regulatory Amendments: Comprehensive Zoning Ordinances and Other Updates (Section 4 of Plan)	7 (Florida/ Desire)	Create landscaped buffers between incompatible uses
	7 (Florida/ Desire)	Designate "no alcohol sales" districts
	7 (St. Claude/ St. Roch)	Establish no alcohol sales zones
	9	Provide infrastructure and financial incentives to replace existing damaged multi-family housing with medium-density, high-quality "hardened" housing along I-10 corridor; typically build units above one floor of parking.
	9	Adopt and enforce community design standards for lower-density multi-family development; address hardening and flood protection construction standards; address limitations on expansion of multi-family housing density not to exceed 16 units/acre
	11	Develop and land use plan and adopt new zoning that is appropriate to the District's needs
	12	Conduct a zoning study to address future use/redevelopment of current multi-family sites; these sites should be rebuilt only in strategic locations.
	12	Implement zoning changes and incentives to revitalize Algiers Point Main Street properties along Morgan Street/Patterson Drive from the ferry terminal (Delaronde St.) to Belleville St.
	12	Infrastructure/incentives to encourage infill housing in Lower Algiers (Lower Coast/Cut-off) neighborhood
	12	Conduct a zoning/land use compatibility study to address rezoning of multi-family neighborhoods (to protect them from expansion of multi-family [HUD] homes). Neighborhoods such as McDonough, Whitney, Tunnisberg Elmwood Park Community need to be addressed; residents want to retain RS2/RS1 zoning



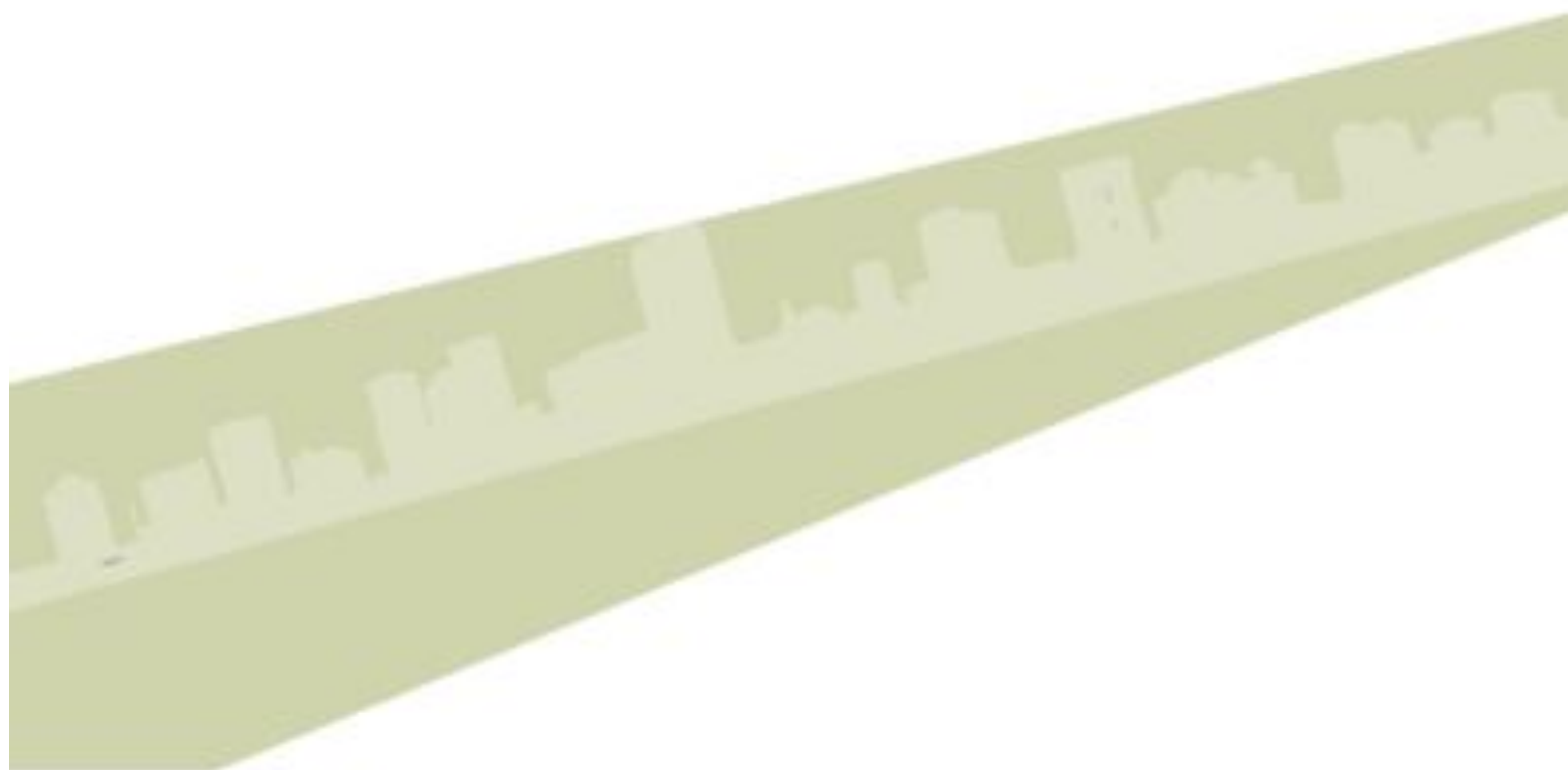
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The Unified
New Orleans Plan

CITYWIDE STRATEGIC RECOVERY
AND REBUILDING PLAN

Appendix C

SUMMARY OF COMMUNITY CONGRESSES



Results of Voting From Community Congress I, October 28, 2006

Turning Results by Question

Session Name: New Session 10-28-2006 12-23 PM edit.tpz

Created: 10/28/2006 12:33 PM

1.) What is your gender?

Female
Male

Responses		
	(percent)	(count)
Female	50.72%	105
Male	49.28%	102
Totals	100%	207

2.) How old are you?

15 – 19
20 – 34
35 – 44
45 – 54
55 – 64
Over 65

Responses		
	(percent)	(count)
15 – 19	0.96%	2
20 – 34	22.97%	48
35 – 44	15.79%	33
45 – 54	23.92%	50
55 – 64	25.84%	54
Over 65	10.53%	22
Totals	100%	209

3.) How many generations has your family lived in New Orleans?

1st Generation
2nd Generation
3rd Generation
4th Generation
5th Generation or more

Responses		
	(percent)	(count)
1st Generation	43.63%	89
2nd Generation	6.86%	14
3rd Generation	9.80%	20
4th Generation	13.73%	28
5th Generation or more	25.98%	53
Totals	100%	204

4.) Where did you live before Katrina?

District 1 or 2
District 3 or 4
District 5 or 6
District 7 or 8
District 9 or 10
District 11 or 12
District 13
Elsewhere

Responses		
	(percent)	(count)
District 1 or 2	20.50%	41
District 3 or 4	31.50%	63
District 5 or 6	17%	34
District 7 or 8	8.50%	17
District 9 or 10	2.50%	5
District 11 or 12	5%	10
District 13	1.50%	3
Elsewhere	13.50%	27
Totals	100%	200

Results of Voting From Community Congress I, October 28, 2006

5.) What is your race or ethnicity?

African American
Asian American
Caucasian
Hispanic/Latino
Native American
More than one race
Other

Responses	
(percent)	(count)
16.59%	35
0%	0
75.36%	159
0.47%	1
0%	0
4.74%	10
2.84%	6
Totals	211

6.) What is your annual household income?

<\$20K
\$20K-\$29K
\$30K-\$39K
\$40K-\$49K
\$50K-\$59K
\$60K-\$74K
>\$75
Don't know/Prefer not to answer

Responses	
(percent)	(count)
10.80%	23
6.57%	14
7.51%	16
9.86%	21
8.92%	19
10.33%	22
40.85%	87
5.16%	11
Totals	213

7.) What is the minimum percentage of people that must return to your neighborhood in order for you to decide to stay or move back?

100%
75%
50%
25%
I'm moving back no matter what
I'm moving somewhere else no matter what
Not sure

Responses	
(percent)	(count)
3.28%	6
21.86%	40
17.49%	32
3.28%	6
44.81%	82
1.09%	2
8.20%	15
Totals	183

Results of Voting From Community Congress I, October 28, 2006

8.) Compared to other factors that may shape your decision to stay or return to your home, how important is it to you that your neighborhood keep its previous racial composition/diversity?

	Responses	
	(percent)	(count)
Most important	12.06%	24
Important	27.14%	54
Somewhat important	22.61%	45
Of little importance	17.59%	35
Not at all important	17.09%	34
Not sure	3.52%	7
Totals	100%	199

9.) Compared to other factors that may shape your decision to stay or return to your home, how important is it to you that your neighborhood keep its previous mix of incomes?

	Responses	
	(percent)	(count)
Most important	12.14%	25
Important	36.89%	76
Somewhat important	27.18%	56
Of little importance	10.19%	21
Not at all important	8.74%	18
Not sure	4.85%	10
Totals	100%	206

10.) How important is it to you that New Orleans remain the largest city in Louisiana?

	Responses	
	(percent)	(count)
Very important	39.81%	84
Important	14.69%	31
Somewhat important	17.06%	36
Of little importance	15.17%	32
Not at all important	12.80%	27
Not sure	0.47%	1
Totals	100%	211

11.) How important is it to you that New Orleans remain the same physical size?

	Responses	
	(percent)	(count)
Very important	11.11%	23
Important	11.11%	23
Somewhat important	26.57%	55
Of little importance	22.22%	46
Not at all important	26.09%	54
Not sure	2.90%	6
Totals	100%	207

Results of Voting From Community Congress I, October 28, 2006

12.) Compared to other factors that may shape your decision to stay or return to home, how important is the availability of housing that is affordable for lower and middle income people?

	Responses	
	(percent)	(count)
Most important	45.83%	99
Important	38.89%	84
Somewhat important	7.87%	17
Of little importance	3.24%	7
Not at all important	3.70%	8
Not sure	0.46%	1
Totals	100%	216

13.) Where did you live before Katrina?

	Responses	
	(percent)	(count)
District 1	12.18%	24
District 2	10.66%	21
District 3	23.35%	46
District 4	10.66%	21
District 5	8.63%	17
District 6	13.20%	26
District 7	5.58%	11
District 8	4.57%	9
District 9, 10 or 11	5.08%	10
District 12 or 13	6.09%	12
Totals	100%	197

14.) How important is flood protection at the Category 3 level to your decision to stay or return?

	Responses	
	(percent)	(count)
Most important	61.06%	127
Important	26.44%	55
Somewhat important	7.21%	15
Of little importance	1.92%	4
Not at all important	2.40%	5
Not sure	0.96%	2
Totals	100%	208

Results of Voting From Community Congress I, October 28, 2006

15.) If your neighborhood is provided with Category 3 flood protection now with the promise of Category 5 protection in 10 years, how likely are you to stay or return?

	Responses	
	(percent)	(count)
Very likely	74.64%	156
Likely	17.70%	37
Not sure	7.18%	15
Unlikely	0%	0
Very unlikely	0.48%	1
Totals	100%	209

16.) If you were provided with information about the relative risk of flooding in different areas of the City, how important would that information be in influencing your decision where to live?

	Responses	
	(percent)	(count)
Very important	65.73%	140
Important	20.66%	44
Somewhat important	6.57%	14
Of little importance	2.82%	6
Not at all important	3.29%	7
Not sure	0.94%	2
Totals	100%	213

17.) Given limited resources, where should we prioritize spending to maintain our city's infrastructure (streets, utilities, etc.)?

	Responses	
	(percent)	(count)
Equally throughout the city	17.97%	39
In those areas that received the most damage	20.74%	45
In those less damaged areas that have the largest concentrations of people and businesses	55.30%	120
Not sure	5.99%	13
Totals	100%	217

18.) Compared to other factors that may shape your decision to stay or return to your home, how important is the response time of police, fire and EMS?

	Responses	
	(percent)	(count)
Most important	43.09%	81
Important	42.02%	79
Somewhat important	10.64%	20
Of little importance	1.60%	3
Not at all important	2.13%	4
Not sure	0.53%	1
Totals	100%	188

Results of Voting From Community Congress I, October 28, 2006

19.) Compared to other factors that may shape your decision to stay or return to your home, how important is the quality of public schools?

	Responses	
	(percent)	(count)
Most important	43.81%	85
Important	41.75%	81
Somewhat important	5.67%	11
Of little importance	4.12%	8
Not at all important	4.64%	9
Not sure	0%	0
Totals	100%	194

20.) Given significantly reduced resource for parks and recreation, where should the city focus its resources?

	Responses	
	(percent)	(count)
Distribute services equally across all recreation sites regardless of where they are located	14.21%	27
Focus recreation resources on major recreation sites and parks, and "mothball" neighborhood playgrounds that do not have "booster clubs" to maintain them	48.95%	93
Focus recreation resources at the neighborhood level and reduce funding for major recreation sites and parks	22.63%	43
Not sure	14.21%	27
Totals	100%	190

21.) Compared to other factors that may shape your decision to stay or return to your home, how important are the accessibility of hospitals, clinics and medical services?

	Responses	
	(percent)	(count)
Most important	42.93%	85
Important	41.92%	83
Somewhat important	13.13%	26
Of little importance	0.51%	1
Not at all important	1.52%	3
Not sure	0%	0
Totals	100%	198

Results of Voting From Community Congress I, October 28, 2006

22.) Hopes

1
2
3
4
5
6
7
8
9
0

Responses	
(percent)	(count)
17.18%	105
14.57%	89
6.71%	41
10.64%	65
5.40%	33
10.64%	65
6.06%	37
18.17%	111
7.04%	43
3.60%	22
Totals	100% 611

23.) Concerns

1
2
3
4
5
6
7
8
9
0

Responses	
(percent)	(count)
11.02%	64
7.92%	46
6.88%	40
12.22%	71
17.90%	104
13.25%	77
9.81%	57
14.11%	82
2.24%	13
4.65%	27
Totals	100% 581

24.) Did you learn anything new?

Yes
No

Responses	
(percent)	(count)
87.34%	138
12.66%	20
Totals	100% 158

25.) Have your opinions changed at all since you walked in this room?

Yes
No

Responses	
(percent)	(count)
34.72%	50
65.28%	94
Totals	100% 144

Results of Voting From Community Congress I, October 28, 2006

26.) Overall, how do you rate today's Town Meeting

Excellent
Good
Fair
Poor
Very Poor

Responses	
(percent)	(count)
26.03%	38
47.95%	70
17.81%	26
7.53%	11
0.68%	1
Totals	146

27.) How committed are you to remaining involved with the process?

Very committed
Committed
Somewhat committed
Uncommitted

Responses	
(percent)	(count)
80.56%	116
15.28%	22
4.17%	6
0%	0
Totals	144

Preliminary Report UPDATED



Community Congress II

December 2, 2006

New Orleans, Atlanta, Baton Rouge, Dallas, Houston & 16 other cities

More than 2,500 New Orleanians gathered for Community Congress II, a large-scale community meeting that took place simultaneously in 21 cities. The unique interactive assembly connected participants in New Orleans with those in the four cities with the largest number of Katrina evacuees – Atlanta, Baton Rouge, Dallas, and Houston through satellite technology. Meetings held in public libraries and community organizations in 16 other cities engaged other members of the diaspora via webcast in this critical conversation.

Community Congress II focused on updating New Orleans residents on recovery efforts, creating a public dialogue to identify rebuilding priorities, and strengthening public awareness for continued recovery and rebuilding efforts.

Participants began the day-long Community Congress by sharing their ideas on the most important elements to preserve and to change as New Orleans is rebuilt. The next discussions focused on identifying and prioritizing action-based solutions on six key aspects of rebuilding: 1) Flood Protection; 2) Roads, Transit and Utilities; 3) Neighborhood Stability; 4) Rental and Affordable Housing; 5) Education and Health Services; and 6) Other Public Services. Finally, citizens weighed in on what needs to happen in order to ensure that the necessary resources are available to allow these ideas to be put into action.



Who Attended Community Congress II?

UNOP sought participants that represent the diversity of pre-Katrina New Orleans. Participants' demographics are compared below to the pre-Katrina demographics of the city, according to 2000 Census Bureau data.

<u>I Am Participating in...</u>	<u>Dec 2nd</u>	<u>Age</u>	<u>Dec 2nd</u>	<u>Actual Pre-Katrina</u>
New Orleans	60%	15 to 19	2%	7%
Houston	13%	20 to 34	12%	22.6%
Dallas	11%	35 to 44	16%	14.8%
Baton Rouge	8%	45 to 54	27%	13.1%
Atlanta	8%	55 to 64	27%	7.8%
		Over 65	16%	11.7%
<u>Location of Residence</u>	<u>Dec 2nd</u>	<u>Race/Ethnicity</u>	<u>Dec 2nd</u>	<u>Actual Pre-Katrina</u>
District 1	3.1%	African-American	64%	67.3%
District 2	6.6%	Asian	4%	2.3%
District 3	11.9%	Caucasian	27%	28.1%
District 4	11.4%	Hispanic/Latino	2%	3.1%
District 5	10.0%	Native American	0%	0.2%
District 6	13.7%	More than one race	2%	1.3%
District 7	5.9%	Other	1%	1%
District 8	7.4%			
District 9	19.3%			
District 10	4.8%			
District 11	0.8%			
District 12	4.6%			
District 13	0.5%			
<u>Home Ownership</u>	<u>Dec 2nd</u>	<u>Income</u>	<u>Dec 2nd</u>	<u>Actual Pre-Katrina</u>
Home Owner	65%	Less than \$20,000	25%	37%
Renter	29%	\$20,000 - \$39,999	22%	24%
Other	6%	\$40,000 - \$59,999	17%	14%
		\$60,000 - \$74,999	8%	7%
		More than \$75,000	20%	19%
		Don't know/	7%	N/A
		Prefer not to answer		

How Did Community Congress II Work?

Community Congress II is a part of a process to develop the Unified New Orleans Plan (UNOP). The meeting was organized and facilitated by AmericaSpeaks, a non partisan, non-profit organization. AmericaSpeaks raised private funds to pay for Community Congress II – no recovery dollars were used for this meeting. The Unified New Orleans Plan process was established by the Mayor, the City Council, and the City Planning Commission on July 5, 2006. It is funded by the Rockefeller Foundation, the Greater New Orleans Foundation, and the Bush-Clinton Katrina Fund.

Participants at Community Congress II were divided into small groups of 8-10, each with its own table facilitator. Throughout the day, the meeting's lead moderator presented discussion questions to the groups for conversation. The ideas from each discussion were collected with computers found at every table. The "theme team" reviewed the comments from all of the tables simultaneously and reported the common ideas back within minutes. Then using keypads, the participants reviewed and prioritized these ideas to develop a clear plan for action. The results from the polls were reported instantly to the group.

What is Important in Rebuilding

Before focusing on the six issues involved in the rebuilding, participants began by sharing their experiences with New Orleans prior to Hurricane Katrina. They discussed those things which they particularly appreciate about New Orleans which should be preserved, as well as factors they would like to see changed as part of the rebuilding process.

Things to Preserve

New Orleanians were asked to identify the most important things that they would want to preserve through the rebuilding process. The following themes emerged from the table conversations (not listed in any order):

- Ethnic, cultural, racial diversity
- Character of neighborhoods
- "Big city/small town atmosphere"
- "Spirit of New Orleans" – culture, food, music, etc.
- Recreation, green space, wetlands, parks
- Relationships – family, camaraderie
- Affordability – ability to live well without much
- "Don't knock down architecture that is still standing"
- Health care and medical facilities
- "Free to live the lifestyle you want"

Things to Change

Participants also had the chance to discuss those things that they would like to see improved about New Orleans as part of the rebuilding. The following themes emerged from the table conversations (not listed in any order):

- Improve schools across the board
- Need a safer city
- Reduce poverty and pockets of low-income housing
- Preserve affordable home ownership opportunities
- More connection for families to stay together
- Create living-wage jobs, especially for young people
- Process of government
- Improved access to health care
- Infrastructure updates in all neighborhoods
- Levee improvements and wetlands restoration
- Address all populations, including the disabled
- More recreational and other opportunities for young people

Do You Plan to Stay/Return to New Orleans?

When asked about their intentions to stay or return home:

- ♦ 40% Live in New Orleans now & intend to stay
- ♦ 9% Live in New Orleans now & are not sure if they will stay
- ♦ 2% Live in New Orleans now & intend to leave
- ♦ 30% Don't live in New Orleans now & hope to come back
- ♦ 14% Don't live in New Orleans & don't know if they want to come back
- ♦ 6% Don't live in New Orleans & don't intend to come

Webcast Meetings Reach Many New Orleanians

Webcast meetings were held in 16 cities around the country to extend the reach of Community Congress II to other cities serving as temporary homes for New Orleanians. Participants at community meetings watched the proceedings from New Orleans through webcast technology. Using laptop computers, ideas were captured from their table conversations were captured and sent in real time to New Orleans where it was reviewed along with the feedback from other cities, serving as the basis of the themes.

Community Meetings took place in the following cities: Austin, TX; Charlotte, NC; Chicago, IL; Denver, CO; Detroit, MI; Jackson, MS; Jacksonville, FL; Los Angeles, CA; Memphis, TN; Minneapolis, MN; New York, NY; Princeton, NJ; San Antonio, TX; San Francisco, CA; Seattle, WA; and Washington, DC.

Next Steps & Staying Involved

Your voice and involvement still matter. There are future opportunities to interact with your community regarding the unified planning process. District Meeting #3 will be held across the city on December 16 – 17. Next month, District Meeting #4 will be held on January 6-7 and Community Congress #3 will be held on January 13.

Check the UNOP website for updates on the meeting times and location, and sign up for the weekly UNOP Eletter. If you cannot access the website, you can call 1-877-527-3284 for all UNOP updated information.

You can also share your thoughts with Community Support Organization, the advisory board for UNOP. Future dates include Dec 7 and 21, Jan 11 and 25. All of these meetings will be held from 5:30 to 7:30 pm at the City Council Chamber.

Roads, Transit and Utilities

Next, participants focused on what should be done to rebuild New Orleans' infrastructure. Discussions at tables opened with conversation on three options developed by UNOP to repair roads, the transit system, and city utilities. Later, participants voted to show their level of support for these options, based on a scale of 1 to 5 with 1 signifying very low support and 5 signifying very high support:

1. Spread available funds evenly throughout the city.

- 1 – Very low level of support – 59%
- 2 – Low level of support – 16%
- 3 – Neither high nor low level of support – 10%
- 4 – High level of support – 7%
- 5 – Very high level of support – 9%

2. Concentrate available recovery funds in areas of the city with the greatest need.

- 1 – Very low level of support – 12%
- 2 – Low level of support – 8%
- 3 – Neither high nor low level of support – 12%
- 4 – High level of support – 28%
- 5 – Very high level of support – 39%

3. Raise additional funds, possibly through higher taxes or user fees, so that all infrastructure can be repaired and improved.

- 1 – Very low level of support – 30%
- 2 – Low level of support – 11%
- 3 – Neither high nor low level of support – 14%
- 4 – High level of support – 18%
- 5 – Very high level of support – 26%

Then tables developed their own options and strategies for rebuilding this infrastructure. Finally, participants reviewed and voted on all of the options (both those developed by UNOP and those suggested by participants) to select the options they believe most important to adopt. All options are listed below in order of priority – *the options developed by participants are in italics*:

1. Concentrate funds in areas with the greatest need. (43%)
2. *Focus on making quality of infrastructure equal across city.* (33%)
3. *Get additional funds from the business community (casinos, etc.).* (32%)
4. *Look into alternative types of energy & transportation.* (28%)
5. *Combine options 2 & 3.* (26%)
6. *Spend in areas of greatest population return.* (26%)
7. Raise additional funds so that all infrastructure can be repaired and improved. (17%)
8. Spread available funds for repairs evenly throughout the city. (16%)
9. *Consider alternative taxation options.* (14%)

Flood Protection

Next, participants focused on what should be done to reduce the risk of flooding. Discussions at tables opened with conversation on three options developed by UNOP to further protect New Orleans from flooding. Later, participants voted to show their level of support for these options, based on a scale of 1 to 5 with 1 signifying very low support and 5 signifying very high support:

1. Residents and businesses use the best available information to make personal decisions about flood prevention.

- 1 – Very low level of support - 38%
- 2 – Low level of support – 12%
- 3 – Neither high nor low level of support -10%
- 4 – High level of support – 15%
- 5 – Very high level of support – 25%

2. Provide financial incentives to residents and businesses to reduce their flood risk.

- 1 – Very low level of support – 15%
- 2 – Low level of support – 9%
- 3 – Neither high nor low level of support – 13%
- 4 – High level of support – 29%
- 5 – Very high level of support – 35%

3. Create and enforce standards and programs to reduce flood risk.

- 1 – Very low level of support – 14%
- 2 – Low level of support – 7%
- 3 – Neither high nor low level of support – 9%
- 4 – High level of support – 22%
- 5 – Very high level of support – 49%

Then tables developed their own options and strategies for reducing the risk of flood. Finally, participants reviewed and voted on all of the options (both those developed by UNOP and those suggested by participants) to select the options they believe most important to adopt. All options are listed below in order of priority – *the options developed by participants are in italics*:

1. *Effective Category 5 levees have to be built faster, regardless of what homeowners do – more pumping stations, look to the Dutch.* (58%)
2. *Apply holistic approach – wetlands rebuilding and conservation are part of flood protection.* (39%)
3. *Combine #2 (financial incentives) with #3 (standards): provides standards while still giving people choice.* (36%)
4. *Make flood insurance mandatory and affordable.* (33%)
5. *Close MRGO.* (26%)
6. *Refine #3: Need different standards for different parts of the city – flooding due to different reasons (broken levees and storm surge) while ensuring affordability to residents.* (25%)
7. Provide financial incentives to reduce flood risk. (18%)
8. Create and enforce standards and programs to reduce flood risk. (18%)
9. Use best available information to make personal decisions about flood protection. (9%)

Rental and Affordable Housing

Participants voted to show their level of support for these options, based on a scale of 1 to 5 with 1 signifying very low support and 5 signifying very high support:

- 1. Rely on market forces and existing programs to create rental and affordable housing.**
 - 1 – Very low level of support – 45%
 - 2 – Low level of support – 14%
 - 3 – Neither high nor low level of support – 11%
 - 4 – High level of support – 9%
 - 5 – Very high level of support – 21%
- 2. Fund the development of transitional housing for workers.**
 - 1 – Very low level of support – 32%
 - 2 – Low level of support – 13%
 - 3 – Neither high nor low level of support – 16%
 - 4 – High level of support – 18%
 - 5 – Very high level of support – 20%
- 3. Provide financial incentives to developers to build affordable housing.**
 - 1 – Very low level of support – 36%
 - 2 – Low level of support – 9%
 - 3 – Neither high nor low level of support – 9%
 - 4 – High level of support – 16%
 - 5 – Very high level of support – 30%
- 4. Fund the development of low- and moderate-income public housing.**
 - 1 – Very low level of support – 27%
 - 2 – Low level of support – 9%
 - 3 – Neither high nor low level of support – 11%
 - 4 – High level of support – 18%
 - 5 – Very high level of support – 35%

All options are listed below in order of priority – *the options developed by participants are in italics*:

1. *Create homeownership opportunities for low-income and public housing residents, such as mixed-income development: "We reject any option that would concentrate poverty."* (15.8%)
2. *Refine #4: connect public housing with job training and support services.* (13%)
3. *Provide housing priority for evacuees so we can come back* (12.5%)
4. *Consider rent caps to increase affordable rental options.* (11.7%)
5. *Sell or develop vacant and/or abandoned property to accelerate repopulation.* (10.6%)
6. *Subsidize and assist small property owners to lease affordable units.* (8.6%)
7. *Provide immediate housing – "clean out and repair" existing public housing.* (6.5%)
8. *Combine #3 and #4: provide incentives and public housing: "It's the right thing to do."* (5.7%)
9. *Provide financial incentives to build affordable housing.* (5.4%)
10. *Rely on market forces and existing programs to create rental and affordable housing.* (3.9%)
11. *Fund low- and moderate-income public housing.* (3.5%)
12. *Fund transitional housing for workers.* (2.9%)

Neighborhood Stability

Participants focused on what should be done to rebuild more stable neighborhoods. Discussions at tables opened with conversation on the three options developed by UNOP to help homemakers make critical decisions about their houses: repair; rebuild; tear down; or sell. Later, participants voted to show their level of support for these options, based on a scale of 1 to 5 with 1 signifying very low support and 5 signifying very high support:

- 1. Homeowners make their own rebuilding decisions with the best available information.**
 - 1 – Very low level of support – 18%
 - 2 – Low level of support – 10%
 - 3 – Neither high nor low level of support – 10%
 - 4 – High level of support – 17%
 - 5 – Very high level of support – 45%
- 2. Provide financial incentives for people to rebuild near one another.**
 - 1 – Very low level of support – 13%
 - 2 – Low level of support – 10%
 - 3 – Neither high nor low level of support – 13%
 - 4 – High level of support – 23%
 - 5 – Very high level of support – 42%
- 3. Set and enforce standards for homeowners to rebuild one another.**
 - 1 – Very low level of support – 44%
 - 2 – Low level of support – 14%
 - 3 – Neither high nor low level of support – 11%
 - 4 – High level of support – 11%
 - 5 – Very high level of support – 20%

Then tables developed their own options and strategies for neighborhood stability. Finally, participants reviewed and voted on all of the options (both those developed by UNOP and those suggested by participants) to select the options they believe most important to adopt. All options are listed below in order of priority – *the options developed by participants are in italics*.

1. *Provide incentives for homeowners to buy blighted property in their neighborhoods quickly & easily.* (57%)
2. *Homeowners make their own rebuilding decisions with the best available information.* (42%)
3. *Neighborhood-based approach focusing on realities of neighborhoods – "one size does not fit all."* (39%)
4. *Provide financial incentives for people to rebuild near one another.* (38%)
5. *Find alternate uses for blighted properties – public space & parks.* (37%)
6. *Let people choose where to rebuild but tear down blighted homes.* (36%)
7. *Establish and enforce standards for homeowners to rebuild near one another.* (11%)
8. *Developers should build new housing in clusters.* (7%)

Education and Health Services

The fifth topic of the day was to determine the steps that need to be taken to rebuild schools, hospitals and clinics to meet the city's post-Katrina needs and realities. Discussions at tables opened with conversation on three options developed by UNOP. Later, participants voted to show their level of support for these options, based on a scale of 1 to 5 with 1 signifying very low support and 5 signifying very high support:

1. Locate and staff facilities evenly throughout the city.

- 1 – Very low level of support - 40%
- 2 – Low level of support - 12%
- 3 – Neither high nor low level of support - 8%
- 4 – High level of support - 10%
- 5 – Very high level of support - 30%

2. Facilities are opened and rebuilt based upon repopulation and recovery rates.

- 1 – Very low level of support - 12%
- 2 – Low level of support - 7%
- 3 – Neither high nor low level of support - 8%
- 4 – High level of support - 26%
- 5 – Very high level of support - 47%

3. Combine facilities to reduce costs.

- 1 – Very low level of support - 18%
- 2 – Low level of support - 5%
- 3 – Neither high nor low level of support - 9%
- 4 – High level of support - 20%
- 5 – Very high level of support - 48%

Participants were able to develop their own options and strategies during the discussions. After evaluating the options developed by UNOP, participants were then able to vote on all of the options (both those developed by UNOP and those suggested by participants). All options are listed below in order of priority with options developed by participants in italics:

1. *Make schools 24/7 community centers (64%)*
2. *Improve school quality – better paid teachers, improved admin. and facilities (62%)*
3. *Health Care – utilize mobile units and temporary sites with joint services – ensure equal access until population warrants permanent facilities (52%)*
4. *Health care – pay more attention to growing mental health problem for police, first responders, and all residents (37%)*
5. Facilities are opened and rebuilt based upon repopulation and recovery rates (27%)
6. Combine facilities to reduce costs (19%)
7. Locate and staff facilities evenly throughout the city (14%)

Other Public Services

Finally, participants discussed how the city should provide vital services, like police, fire and criminal justice, to meet the city's post-Katrina needs and realities. Discussions at tables opened with conversation on three options developed by UNOP. Later, participants voted to show their level of support for these options, based on a scale of 1 to 5 with 1 signifying very low support and 5 signifying very high support:

1. Keep the pattern of public service that existed pre-Katrina.

- 1 – Very low level of support - 65%
- 2 – Low level of support - 8%
- 3 – Neither high nor low level of support - 6%
- 4 – High level of support - 7%
- 5 – Very high level of support - 15%

2. Facilities are opened and rebuilt based upon the city's greatest needs.

- 1 – Very low level of support - 13%
- 2 – Low level of support - 6%
- 3 – Neither high nor low level of support - 10%
- 4 – High level of support - 30%
- 5 – Very high level of support - 41%

3. Combine facilities to reduce costs.

- 1 – Very low level of support - 18%
- 2 – Low level of support - 7%
- 3 – Neither high nor low level of support - 10%
- 4 – High level of support - 22%
- 5 – Very high level of support - 44%

Participants were able to develop their own options and strategies during the discussions. After evaluating the options developed by UNOP, participants were then able to vote on all of the options (both those developed by UNOP and those suggested by participants). All options are listed below in order of priority with options developed by participants in italics:

1. *Place main stations where people are and satellite/mobile stations in low population areas (49%)*
2. *Develop a plan to increase services as population grows (42%)*
3. *Restructure criminal justice system – e.g. access, response and coverage (39%)*
4. Facilities are opened and rebuilt based upon repopulation and recovery rates (35%)
5. Combine facilities to reduce costs (33%)
6. *Provide incentives for public servants to return through housing, credit and other benefits (32%)*
7. *Keep national guard in place while “gearing up” (28%)*
8. Keep pattern of public services that existed pre-Katrina (7%)

Rebuilding Priorities

At the end of the day, participants were presented with a list of the 16 options that had risen to the top in their voting across the six topics that were discussed earlier. Following a period of time for reflection, participants were asked to identify the five options that they believed were most important to rebuilding the city. The following is the list of the 16 options in the order with which they were prioritized by participants:

1. (15%) Effective Cat. 5 levees have to be built faster, regardless of what we homeowners do – more pumping stations, look to the Dutch
2. (9%) Improve school quality – better paid teachers, improved admin. and facilities
3. (8%) Apply holistic approach – wetlands rebuilding and conservation are part of flood protection
4. (8%) Health Care – utilize mobile units and temporary sites with joint services – ensure equal access until population warrants permanent facilities
5. (8%) Create homeownership opportunities for low-income and public housing residents, such as mixed-income development. “We reject any option that would concentrate poverty.”
6. (8%) Make schools 24/7 community centers in neighborhoods where people live; physically rebuild community around schools
7. (6%) Concentrate available infrastructure funds in areas of the city with the greatest need
8. (5%) Provide housing priority for evacuees so we can come back
9. (5%) Homeowners make their own rebuilding decisions with the best available information.
10. (5%) Place main stations where people are, and satellite/mobile stations in low population areas
11. (5%) Provide incentives for homeowners to buy blighted property in their neighborhoods quickly & easily
12. (4%) Focus on making quality of infrastructure equal across city – don’t worry about equal spending
13. (4%) Restructure criminal justice system, e.g. access, response and coverage “adjust system before brick and mortar”
14. (4%) Develop a plan to increase services as population grows
15. (3%) Connect public housing with job training and support services.
16. (2%) Get additional infrastructure funds from the business community (casinos, etc.)

Polling Results, Community Congress II, Dec. 2, 2006

Question #	Choice #	Correct Answer	All Participants	
1	What site are you participating from?			
	1	New Orleans	774	59.8%
	2	Houston	174	13.4%
	3	Dallas	138	10.7%
	4	Baton Rouge	100	7.7%
	5	Atlanta	109	8.4%
			N	1295
2	How deep are your New Orleans roots?			
	1	First Generation		
	2	Second Generation		
	3	Third Generation		
	4	Fourth Generation		
	5	Fifth Generation		
	6	Sixth or more		
	7	Don't know		
			N	
3	What is your age?			
	1	15 - 19	39	2.2%
	2	20 - 34	212	12.1%
	3	35 - 44	286	16.3%
	4	45 - 54	467	26.7%
	5	55 - 64	468	26.7%
	6	65 or better	280	16.0%
			N	1752
4	What is your race/ethnicity?			
	1	African American	1090	63.5%
	2	Asian American	65	3.8%
	3	Caucasian	466	27.2%
	4	Hispanic/Latino	26	1.5%
	5	Native American	5	0.3%
	6	More than one race	42	2.4%
	7	Other	22	1.3%
			N	1716

Polling Results, Community Congress II, Dec. 2, 2006

Question #	Choice #	Correct Answer	All Participants	
5	What district did you live in pre-Katrina			
	1	District 1	40	3.1%
	2	District 2	86	6.6%
	3	District 3	155	11.9%
	4	District 4	148	11.4%
	5	District 5	130	10.0%
	6	District 6	179	13.7%
	7	District 7	77	5.9%
	8	District 8	96	7.4%
	9	District 9	252	19.3%
	10	District 10	63	4.8%
	11	District 11	11	0.8%
	12	District 12	60	4.6%
	13	District 13	6	0.5%
			N	1303
6	Household income pre-Katrina?			
	1	< \$20k	405	24.7%
	2	\$20k-\$39k	368	22.5%
	3	\$40k-\$59k	280	17.1%
	4	\$60k-\$74k	138	8.4%
	5	>\$75k or more	327	20.0%
	6	Don't know/Prefer not to answer	120	7.3%
			N	1638
7	Intentions about living in New Orleans			
	1	Live in NO now and intend to stay	684	39.8%
	2	Live in NO now and not sure if I intend to stay	150	8.7%
	3	Live in NO now and intend to leave	26	1.5%
	4	Don't live in NO now and hope to come back	514	29.9%
	5	Don't live in NO now and don't know if I want to come back	243	14.1%
	6	Don't live in NO and don't intend to come back	102	5.9%
			N	1719

Polling Results, Community Congress II, Dec. 2, 2006

Question #	Choice #	Correct Answer	All Participants
8 What services do you still need? (Select all that apply, then press send)			
	1	Housing	
	2	Health	
	3	Mental Health	
	4	Jobs	
	5	Legal Services	
	6	Schools	
	7	Safety	
	8	Recreation	
	9	Other	
			N
9 To what extent do you feel New Orleans is safe from further flooding?			
	1	Very safe	
	2	Safe	
	3	Neither safe nor unsafe	
	4	Unsafe	
	5	Very unsafe	
			N
10 How does New Orleans' flood protection affect your decision to stay in New Orleans if you are already here or to return to New Orleans if you are not back yet?			
	1	No impact	
	2	Some impact	
	3	Moderate impact	
	4	Major impact	
			N
11 Option 1: Use best available information to make personal decisions about flood protection.			
	1	Very low level of support	615 37.6%
	2	Low level of support	193 11.8%
	3	Neither high nor low level of support	166 10.2%
	4	High level of support	253 15.5%
	5	Very high level of support	408 25.0%
			N 1635

Polling Results, Community Congress II, Dec. 2, 2006

Question #	Choice #	Correct Answer	All Participants	
12	Option 2: Provide financial incentives to reduce flood risk.			
	1	Very low level of support	224	14.7%
	2	Low level of support	133	8.7%
	3	Neither high nor low level of support	202	13.2%
	4	High level of support	438	28.6%
	5	Very high level of support	532	34.8%
			N	1529
13	Option 3: Create and enforce standards and programs to reduce flood risk.			
	1	Very low level of support	214	13.5%
	2	Low level of support	104	6.6%
	3	Neither high nor low level of support	142	9.0%
	4	High level of support	348	22.0%
	5	Very high level of support	773	48.9%
			N	1581
14	Flood Protection (select three, then press send)			
	1	Use the best available information to make personal decisions about flood protection	158	9.4%
	2	Provide financial incentives to reduce flood risk	309	18.4%
	3	Create and enforce standards and programs to reduce flood risk	308	18.3%
	4	Effective Cat. 5 levees have to be built faster, regardless of what we homeowner do -- more pumping stations, look to the Dutch	971	57.8%
	5	Combine #2 (financial incentives) with #3 (standards): provides standards while still giving people choice	600	35.7%
	6	Refine #3: need different standards for different parts of the city -- flooding due to different reasons (broken levees and storm surge) while ensuring affordability to residents)	427	25.4%
	7	Make flood insurance mandatory and affordable	551	32.8%
	8	Apply holistic approach -- wetlands rebuild digna nd conservation are part of flood protections	653	38.9%
	9	Close MRGO (Miss. River Gulf Outlet)	439	26.1%
			N	1680

Polling Results, Community Congress II, Dec. 2, 2006

Question #	Choice #	Correct Answer	All Participants	
15	Flood Protection (select two, then press send)			
	1	Choice 1		
	2	Choice 2		
	3	Choice 3		
	4	Choice 4		
	5	Choice 5		
	6	Choice 6		
			N	
16	Option 1: Spread available funds evenly throughout the city.			
	1	Very low level of support	831	58.9%
	2	Low level of support	220	15.6%
	3	Neither high nor low level of support	137	9.7%
	4	High level of support	98	6.9%
	5	Very high level of support	125	8.9%
			N	1411
17	Option 2: Concentrate funds in areas with the greatest need.			
	1	Very low level of support	182	12.0%
	2	Low level of support	116	7.6%
	3	Neither high nor low level of support	190	12.5%
	4	High level of support	434	28.5%
	5	Very high level of support	601	39.5%
			N	1523
18	Option 3: Raise additional funds so that all infrastructure can be repaired and improved.			
	1	Very low level of support	472	29.9%
	2	Low level of support	180	11.4%
	3	Neither high nor low level of support	228	14.4%
	4	High level of support	283	17.9%
	5	Very high level of support	417	26.4%
			N	1580

Polling Results, Community Congress II, Dec. 2, 2006

Question #	Choice #	Correct Answer	All Participants	
19	Roads, Transit, and Utilities (select three, then press send)			
	1	Spreak limited funds for repairs evenly throughout the city	244	16.1%
	2	Concentrate available recovery funds in areas of the city with the greatest need	645	42.7%
	3	Raise additional funds, possibly through higher taxes and user fees, so that all infrastructure can be repaired and improved	256	16.9%
	4	Get additional fund from the business community (casinos, etc)	477	31.6%
	5	Consider alternative taxation options	208	13.8%
	6	Combine options 2 and 3	393	26.0%
	7	Look into alternative types of energy and transportation	421	27.9%
	8	Spend in areas of greatest population return	399	26.4%
	9	Focus on making qualit of infrastructure equal acorss city-- don't worry about equal spending	499	33.0%
			N	1511
20	Do you think the theme team deserves lunch?			
	1	Absolutely	1080	71.5%
	2	Yes but no dessert	162	10.7%
	3	Only after we've finished	84	5.6%
	4	Bread and water only	185	12.2%
			N	1511
21	Home owner versus renter...			
	1	Home-owner	1147	64.7%
	2	Renter	521	29.4%
	3	Other	106	6.0%
			N	1774
22	Option 1: Homeowners make their own rebuilding decisions with the best available information.			
	1	Very low level of support	286	18.0%
	2	Low level of support	154	9.7%
	3	Neither high nor low level of support	162	10.2%
	4	High level of support	275	17.3%
	5	Very high level of support	712	44.8%
			N	1589

Polling Results, Community Congress II, Dec. 2, 2006

Question #	Choice #	Correct Answer	All Participants	
Option 2: Provide financial incentives for people to rebuild near one another.				
23				
	1	Very low level of support	207	12.6%
	2	Low level of support	159	9.7%
	3	Neither high nor low level of support	209	12.7%
	4	High level of support	384	23.3%
	5	Very high level of support	688	41.8%
			N	1647
Option 3: Set and enforce standards for homeowners to rebuild near one another.				
24				
	1	Very low level of support	701	44.0%
	2	Low level of support	223	14.0%
	3	Neither high nor low level of support	174	10.9%
	4	High level of support	170	10.7%
	5	Very high level of support	325	20.4%
			N	1593
Neighborhood Stability (select three, then press send)				
25				
	1	Homeowners make their own rebuilding decisions with the best available information	689	42.3%
	2	Provide financial incentives for people to rebuild near one another	618	37.9%
	3	Establish and enforce standards for homeowner to rebuild near one another	180	11.0%
	4	Provide incentives for homeowners to buy blighted property in their neighborhoods quickly and easily	931	57.2%
	5	Let people choose where to rebuild but tear down blighted homes	588	36.1%
	6	Developers should build new housing in clusters	119	7.3%
	7	Neighborhood based approach focusing on realities of neighborhoods -- "one size does not fit all"	641	39.3%
	8	Find alternative uses for blighted properties -- public space and parks	597	36.6%
			N	1629

Polling Results, Community Congress II, Dec. 2, 2006

Question #	Choice #	Correct Answer	All Participants	
26	Option 1: Rely on market forces and existing programs to create rental and affordable housing.			
	1	Very low level of support	674	45.3%
	2	Low level of support	203	13.6%
	3	Neither high nor low level of support	158	10.6%
	4	High level of support	141	9.5%
	5	Very high level of support	312	21.0%
			N	1488
27	Option 2: Fund transitional housing for workers.			
	1	Very low level of support	474	32.2%
	2	Low level of support	195	13.2%
	3	Neither high nor low level of support	241	16.4%
	4	High level of support	267	18.1%
	5	Very high level of support	297	20.1%
			N	1474
28	Option 3: Provide financial incentives to build affordable housing.			
	1	Very low level of support	195	13.1%
	2	Low level of support	54	3.6%
	3	Neither high nor low level of support	113	7.6%
	4	High level of support	297	20.0%
	5	Very high level of support	827	55.7%
			N	1486
29	Option 4: Fund low- and moderate-income public housing.			
	1	Very low level of support	418	26.9%
	2	Low level of support	141	9.1%
	3	Neither high nor low level of support	166	10.7%
	4	High level of support	279	17.9%
	5	Very high level of support	551	35.4%
			N	1555

Polling Results, Community Congress II, Dec. 2, 2006

Question #	Choice #	Correct Answer	All Participants	
Option 3: Provide financial incentives to developers to build affordable housing.				
30				
	1	Very low level of support	470	36.2%
	2	Low level of support	119	9.2%
	3	Neither high nor low level of support	115	8.8%
	4	High level of support	202	15.5%
	5	Very high level of support	394	30.3%
			N	1300
Please Respond				
31				
		Rely on market forces and existing programs to create rental and affordable housing		
	1		110	8.0%
	2	Fund transitional housing for workers	31	2.3%
	3	Provide financial incentives to developers to build affordable housing	110	8.0%
	4	Fund low- and moderate-income public housing	80	5.8%
		Create homeownership opportunities for low-income and public housing resident, such as mix-ed income development. "We reject any option that would concentrate poverty."		
	5		381	27.7%
	6	Combine #3 and #4: provide incentives and public housing -- "It's the right thing to do."	93	6.8%
		Provide housing priority for evacuees so we can come back	161	11.7%
	8	Consider rent caps to increase affordable rental options	77	5.6%
	9	Subsidize and assist small property owners to lease affordable units	62	4.5%
	10	Sell or develop vacant and/or abandoned property to accelerate repopulation	61	4.4%
	11	Provide immediate housing - "clean out and repair" existing public housing	84	6.1%
	12	Refine #4: connect public housing with job training and support services	123	9.0%
			N	1373

Polling Results, Community Congress II, Dec. 2, 2006

Question #	Choice #	Correct Answer	All Participants
32	Please Respond		
1	Option 1		36 2.8%
2	Option 2		51 3.9%
3	Option 3		73 5.6%
4	Option 4		40 3.1%
5	Option 5		245 18.9%
6	Option 6		102 7.9%
7	Option 7		211 16.3%
8	Option 8		159 12.3%
9	Option 9		95 7.3%
10	Option 10		106 8.2%
11	Option 11		69 5.3%
12	Option 12		110 8.5%
			N 1297
33	Please Respond (3)		
1	Option 1		35 2.4%
2	Option 2		31 2.1%
3	Option 3		61 4.2%
4	Option 4		34 2.4%
5	Option 5		134 9.3%
6	Option 6		60 4.2%
7	Option 7		191 13.2%
8	Option 8		263 18.2%
9	Option 9		160 11.1%
10	Option 10		199 13.8%
11	Option 11		112 7.8%
12	Option 12		162 11.2%
			N 1443
34	Please Respond (4)		
1	Option 1		39 2.9%
2	Option 2		45 3.3%
3	Option 3		52 3.9%
4	Option 4		33 2.5%
5	Option 5		99 7.4%
6	Option 6		48 3.6%
7	Option 7		117 8.7%
8	Option 8		130 9.7%
9	Option 9		156 11.6%
10	Option 10		207 15.4%
11	Option 11		94 7.0%
12	Option 12		324 24.1%
			N 1344

Polling Results, Community Congress II, Dec. 2, 2006

Question #	Choice #	Correct Answer	All Participants
35 Option 1: Locate and staff facilities evenly throughout the city.			
	1	Very low level of support	552 39.7%
	2	Low level of support	162 11.6%
	3	Neither high nor low level of support	114 8.2%
	4	High level of support	144 10.3%
	5	Very high level of support	420 30.2%
			N 1392
36 Option 2: Facilities are opened and rebuilt based upon repopulation and recovery rates.			
	1	Very low level of support	174 12.0%
	2	Low level of support	107 7.4%
	3	Neither high nor low level of support	115 7.9%
	4	High level of support	373 25.7%
	5	Very high level of support	682 47.0%
			N 1451
37 Option 3: Combine facilities to reduce costs.			
	1	Very low level of support	256 17.9%
	2	Low level of support	75 5.2%
	3	Neither high nor low level of support	123 8.6%
	4	High level of support	291 20.3%
	5	Very high level of support	686 47.9%
			N 1431

Polling Results, Community Congress II, Dec. 2, 2006

Question #	Choice #	Correct Answer	All Participants
38	Education & Health Services (select three, then press send)		
	1	Locate and staff facilities evenly throughout the city	200 14.4%
	2	Facilities are opened and rebuilt based upon repopulation and recovery rates	377 27.1%
	3	Combine facilities to reduce costs	263 18.9%
	4	Combine #2 and #3: Make schools 24/7 community centers in neighborhoods where people live; physically rebuild community around schools	894 64.3%
	5	Improve school quality - better paid teachers, improved admin. and facilities	863 62.0%
	6	Health Care -- pay more attention to growing mental health problem for police, first responders, and all residents	515 37.0%
	7	Health care -- utilize mobile units and temporary sites with joint services -- ensure equal access until population warrants permanent facilities	717 51.5%
		N	1391
39	Option 1: Keep the pattern of public service that existed pre-Katrina.		
	1	Very low level of support	900 65.3%
	2	Low level of support	105 7.6%
	3	Neither high nor low level of support	78 5.7%
	4	High level of support	92 6.7%
	5	Very high level of support	203 14.7%
		N	1378
40	Option 2: Facilities are opened and rebuilt based upon the city's greatest needs.		
	1	Very low level of support	188 13.1%
	2	Low level of support	91 6.3%
	3	Neither high nor low level of support	147 10.2%
	4	High level of support	425 29.6%
	5	Very high level of support	584 40.7%
		N	1435

Polling Results, Community Congress II, Dec. 2, 2006

Question #	Choice #	Correct Answer	All Participants	
41	Option 3: Combine facilities to reduce costs.			
	1	Very low level of support	261	18.1%
	2	Low level of support	95	6.6%
	3	Neither high nor low level of support	148	10.3%
	4	High level of support	310	21.5%
	5	Very high level of support	626	43.5%
			N	1440
42	Other Public Services (select three, then press send)			
	1	Keep pattern of public services that existed pre-Katrina	96	7.1%
	2	Facilities are opened and rebuilt based upon repopulation and recovery rates	475	35.0%
	3	Combine facilities to reduce costs	450	33.2%
	4	Keep national guard in place while "gearing up"	381	28.1%
	5	Place main stations where people are and satellite/mobile stations in low population areas	666	49.1%
	6	Develop a plan to increase services as population grows	574	42.3%
	7	Provide incentives for public servants to return through housing, credit and other benefits	432	31.9%
	8	Restructure criminal justice system -- e.g. access, response and coverage "adjust system before brick & mortar"	527	38.9%
			N	1356

Polling Results, Community Congress II, Dec. 2, 2006

Question #	Choice #	Correct Answer	All Participants
43	Enter your first choice then press send		
	1	Effective Category 5 levees have to be built faster	782 63.0%
	2	Apply holistic approach - wetland rebuilding and conservation	118 9.5%
	3	Concentrate available infrastructure funds in areas of the city with greatest need	43 3.5%
	4	Get additional infrastructure funds from business community	7 0.6%
	5	Focus on making quality of infrastructure equal across the city	24 1.9%
	6	Homeowner make their own rebuilding decisions with the best available information	37 3.0%
	7	Provide incentives for homeowners to buy blighted property	24 1.9%
	8	Create homeownership opportunities for low-income and public housing residents	33 2.7%
	9	Connect public housing with job training	23 1.9%
	10	Provide housing priority for evacuees so we can come back	48 3.9%
	11	Place main stations where people are, and satellite/mobile stations in low population areas	7 0.6%
	12	Develop a plan to increase services as population grows	11 0.9%
	13	Restructure criminal justice system	12 1.0%
	14	Make schools 24/7 community centers	27 2.2%
	15	Improve school quality	31 2.5%
	16	Health care - utilize mobile units and temp sites	13 1.0%
	17	Choice 17	0 0.0%
	18	Choice 18	0 0.0%
			N 1242
44	Enter your second choice then press send		
	1	Effective Category 5 levees have to be built faster	110 8.7%
	2	Apply holistic approach - wetland rebuilding and conservation	291 22.9%
	3	Concentrate available infrastructure funds in areas of the city with greatest need	128 10.1%
	4	Get additional infrastructure funds from business community	38 3.0%
	5	Focus on making quality of infrastructure equal across the city	80 6.3%
	6	Homeowner make their own rebuilding decisions with the best available information	114 9.0%
	7	Provide incentives for homeowners to buy blighted property	63 5.0%
	8	Create homeownership opportunities for low-income and public housing residents	98 7.7%
	9	Connect public housing with job training	23 1.8%
	10	Provide housing priority for evacuees so we can come back	76 6.0%
	11	Place main stations where people are, and satellite/mobile stations in low population areas	25 2.0%
	12	Develop a plan to increase services as population grows	29 2.3%
	13	Restructure criminal justice system	27 2.1%
	14	Make schools 24/7 community centers	57 4.5%
	15	Improve school quality	70 5.5%
	16	Health care - utilize mobile units and temp sites	39 3.1%
	17	Choice 17	1 0.1%
	18	Choice 18	1 0.1%
			N 1270

Polling Results, Community Congress II, Dec. 2, 2006

Question #	Choice #	Correct Answer	All Participants
45	Enter your third response then press send		
1	Effective Category 5 levees have to be built faster	38	2.9%
2	Apply holistic approach - wetland rebuilding and conservation	39	3.0%
3	Concentrate available infrastructure funds in areas of the city with greatest need	117	8.9%
4	Get additional infrastructure funds from business community	30	2.3%
5	Focus on making quality of infrastructure equal across the city	67	5.1%
6	Homeowner make their own rebuilding decisions with the best available information	98	7.4%
7	Provide incentives for homeowners to buy blighted property	92	7.0%
8	Create homeownership opportunities for low-income and public housing residents	152	11.6%
9	Connect public housing with job training	76	5.8%
10	Provide housing priority for evacuees so we can come back	100	7.6%
11	Place main stations where people are, and satellite/mobile stations in low population areas	84	6.4%
12	Develop a plan to increase services as population grows	60	4.6%
13	Restructure criminal justice system	62	4.7%
14	Make schools 24/7 community centers	126	9.6%
15	Improve school quality	104	7.9%
16	Health care - utilize mobile units and temp sites	69	5.2%
17	Choice 17	1	0.1%
18	Choice 18	0	0.0%
			N 1316
46	Enter your fourth choice then press send		
1	Effective Category 5 levees have to be built faster	27	2.1%
2	Apply holistic approach - wetland rebuilding and conservation	26	2.0%
3	Concentrate available infrastructure funds in areas of the city with greatest need	49	3.8%
4	Get additional infrastructure funds from business community	46	3.5%
5	Focus on making quality of infrastructure equal across the city	63	4.8%
6	Homeowner make their own rebuilding decisions with the best available information	50	3.8%
7	Provide incentives for homeowners to buy blighted property	57	4.4%
8	Create homeownership opportunities for low-income and public housing residents	122	9.4%
9	Connect public housing with job training	50	3.8%
10	Provide housing priority for evacuees so we can come back	63	4.8%
11	Place main stations where people are, and satellite/mobile stations in low population areas	112	8.6%
12	Develop a plan to increase services as population grows	64	4.9%
13	Restructure criminal justice system	110	8.5%
14	Make schools 24/7 community centers	163	12.5%
15	Improve school quality	177	13.6%
16	Health care - utilize mobile units and temp sites	120	9.2%
17	Choice 17	0	0.0%
18	Choice 18	0	0.0%
			N 1299

Polling Results, Community Congress II, Dec. 2, 2006

Question #	Choice #	Correct Answer	All Participants	
47	Enter your fifth choice then press send			
	1	Effective Category 5 levees have to be built faster	39	3.0%
	2	Apply holistic approach - wetland rebuilding and conservation	42	3.2%
		Concentrate available infrastructure funds in areas of the city with greatest		
	3	need	47	3.6%
	4	Get additional infrastructure funds from business community	16	1.2%
	5	Focus on making quality of infrastructure equal across the city	50	3.8%
		Homeowner make their own rebuilding decisions with the best availabel		
	6	information	49	3.7%
	7	Provide incentives for homeowners to buy blighted property	60	4.6%
		Create homeownership opportunities for low-income and public housing		
	8	residents	94	7.2%
	9	Connect public housing with job training	44	3.4%
	10	Provide housing priority for evacuees so we can come back	54	4.1%
		Place main stations where people are, and satellite/mobile stations in low pop		
	11	areas	69	5.3%
	12	Develop a plan to increase services as population grows	80	6.1%
	13	Restructure criminal ustice system	67	5.1%
	14	Make schools 24/7 communit centers	126	9.6%
	15	Improve school quality	197	15.0%
	16	Health care - utilize mobile uints and temp sites	273	20.9%
	17	Choice 17	2	0.2%
	18	Choice 18	0	0.0%
			N	1309
48	Overall, how satisfied are you with today's meeting?			
	1	Very poor	14	1.3%
	2	...	17	1.6%
	3	...	59	5.4%
	4	...	202	18.5%
	5	Excellent	798	73.2%
			N	1090
49	Did you learn anything new today?			
	1	Yes		
	2	No		
			N	

Preliminary Report UPDATED

Community Congress III

January 20, 2007

New Orleans, Atlanta, Dallas & Houston



Nearly 1,300 New Orleanians gathered for Community Congress III, a large-scale public meeting that took place simultaneously in New Orleans, Atlanta, Dallas, and Houston. Citizens displaced to Baton Rouge were bused to and from New Orleans to participate in the meeting. This unique interactive meeting connected New Orleanians at home with friends and neighbors who have not yet made it home through the use of Internet webcast technology.

Community Congress III was the public's collective opportunity to review and give final input on the draft Unified New Orleans Plan before it is sent to city leaders. The discussion guide used at the meeting summarized draft recommendations from the Citywide recovery plan and served as the basis for table discussions.

The Unified New Orleans Plan process was established by the Mayor, the City Council, and the City Planning Commission. UNOP is funded by grants from the Rockefeller Foundation, Greater New Orleans Foundation, Bush-Clinton Katrina Fund, and DaimlerChrysler.



Photo: Jim Belfon, Gulf South Photography Project

Community Congress II and III have been organized and facilitated by AmericaSpeaks, a non partisan, non-profit organization.

Who Attended Community Congress III?

Participants shared their demographic information to see how well they represent the diversity of pre-Katrina New Orleans. When available, participants' demographics are compared to Pre-Katrina New Orleans.

I am Participating in...	Jan 20th -	Age	Jan 20th -	Actual Pre-Katrina
Atlanta	5%	15 to 19	6%	7.0%
Houston	19%	20 to 34	10%	22.6%
Dallas	11%	35 to 44	12%	14.8%
New Orleans (but I currently live in Baton Rouge)	3%	45 to 54	24%	13.1%
New Orleans	62%	55 to 64	29%	7.8%
		Over 65	18%	11.7%
I have participated in these UNOP activities	Jan 20th -	Race/Ethnicity	Jan 20th -	Actual Pre-Katrina
District Planning Meetings	50%	African American/Black	55%	67.3%
Community Congress I (October 28, 2006)	23%	Asian American	4%	2.3%
Community Congress II (December 2, 2006)	55%	Caucasian/White	34%	28.1%
A hearing - City Council, Planning Commission	23%	Hispanic/Latino	2%	3.1%
Student Congress	2%	Native American	1%	0.2%
Lambert Plan Meetings	26%	More than one race	3%	1.3%
Bring New Orleans Back Meetings	44%	Other	1%	1.0%
Others	57%			
Pre-Katrina Residence	Jan 20th -	Income	Jan 20th -	Actual Pre-Katrina
District 1	3%	Less than \$20,000	24%	35%
District 2	9%	\$20,000 - \$39,999	21%	24%
District 3	15%	\$40,000 - \$59,999	14%	15%
District 4	8%	\$60,000 - \$74,999	8%	7%
District 5	7%	More than \$75,000	22%	19%
District 6	11%	Don't know/prefer not to answer	11%	N/A
District 7	6%			
District 8	8%			
District 9	16%			
District 10	7%			
District 11	3%			
District 12	4%			
District 13	3%			

What Happened at Community Congress III?

The meeting focused on presenting the major elements of the draft UNOP Citywide plan, including the ways in which the plan was influenced by the priorities identified by citizens at Community Congress II on December 2nd. Participants began the day-long conversation by sharing an experience that has most inspired them in the recovery and rebuilding process. The next four discussions focused on reviewing and providing feedback on the way the citywide recovery plan responds to the strong messages expressed at Community Congress II: 1) Safety from Future Flooding; 2) Rebuilding Safe and Stable Neighborhoods; 3) Affordable Housing; and 4) Public Services. Citizens then weighed in on ten other draft recommendations that will be a part of the citywide recovery plan. Finally, participants reviewed and identified new options to ensure that citizens are involved in the implementation of the unified plan.

Participants at Community Congress III were divided into small groups of 8-10, each with its own facilitator. Throughout the day, the tables deliberated on recommendations from the plan and their comments were captured with laptop computers. The “theme team” reviewed the feedback from all of the tables in all sites simultaneously and reported the most common ideas back within minutes. Then using keypads, the participants reviewed and prioritized these ideas to develop a clear plan for action. The results from the polls were reported instantly to the group.

What Has Inspired You?

Participants began the day by sharing an experience in the recovery and rebuilding process that has inspired them.

The following themes emerged from the table conversations (not listed in any order):

- Seeing people rebuild their houses – “neighbors helping neighbors” and new neighborhood leaders emerging
- The march against violence
- Our faith, trust in God, and the strength of the church communities, and public service
- The overall level of *diverse* public participation, volunteerism
- The spirit and will of the people in New Orleans and around the country that have come together to help
- “Children have been an inspiration”
- “Everyone came back despite all logic because there is something special about this city” - “New Orleans is home”
- New Orleans is “a family of communities: people; God, humanity, my family”
- “Seeing growth and progress every time I come back to the city”
- The “positive attitudes of people who have lost so much”
- The hope of rebuilding “better than before”
- The “new belief that my voice can make a difference”
- The beauty of the area coming back – plants, trees & birds
- The unique culture of the city – our food, music and art
- THE SAINTS!!

Safety from Future Flooding

One of the strong messages that came from Community Congress II was the need to build Category 5 flood protection faster, and to restore the wetlands to protect the City from future storms. At the same time, participants said that they need leaders to set voluntary standards for rebuilding the city stronger and more safely to help citizens take personal responsibility for reducing flood risk. They also said that incentives should be provided to enable residents to meet those standards.

Participants reviewed and provided feedback on what they liked and what concerned them about the seven recommendations in the draft UNOP plan.

What Do You Like About the Recommendations?

The following themes emerged from the table conversations and are listed in order of priority based on keypad voting*:

1. Recommendation # 1 is priority # 1: emphasis on Category 5 Flood protection (80%)
2. Focus of wetlands restoration – it is essential (68%)
3. The incentives for elevating homes (35%)
4. Combining voluntary incentives with good information (32%)
4. Flood proof essential public facilities (32%)
5. The comprehensive approach to recommendations (24%)

What Concerns You About the Recommendations?

The following themes emerged from the table conversations and are listed in order of priority based on keypad voting*:

1. Bad governance could undercut speed and fairness of implementation (59%)
2. Focus on effective levees over elevation (52%)
3. Where is the money for incentives? Is 100% of cost being financed? (48%)
4. Unclear guidelines and red tape (example: How will incentives be distributed?) (37%)
5. Elevating homes creates an access problem for elderly & disabled (29%)
6. Gap between 2007 and 2010 - “2010 is too long to wait for new systems” (26%)
7. Visual appearance – elevating structures will destroy character of neighborhoods (14%)
8. Elevation equals increased wind risk (11%)

Thank You to Our Funders

Community Congress II and III would not have been possible without the support of:

Carnegie Corporation of New York, Case Foundation, City of Houston/George R. Brown Convention Center, Ford Foundation, Greater New Orleans Foundation, Louisiana Recovery Fund, Mary Reynolds Babcock Foundation, Rockefeller Brothers Fund, Rockefeller Foundation, Surdna Foundation, and W.K. Kellogg Foundation

Rebuilding Safe and Stable Neighborhoods

Community Congress II participants also said that leaders should empower residents to rebuild stable and safe neighborhoods through financial incentives and the best possible information, rather than mandating where people can live.

Participants reviewed and provided feedback on what they liked and what concerned them about the five recommendations to rebuild New Orleans' neighborhoods so they are safe and stable.

What Do You Like About the Recommendations?

The following themes emerged from the table conversations and are listed in order of priority based on keypad voting*:

1. That renters are included in these programs (50%)
2. The financial incentives for safer, denser neighborhoods – “clustering is good” (48%)
3. Programs manage blight and promote reuse of properties (46%)
4. The incentives in the plan, esp. funding (37%)
5. That the programs are voluntary (31%)
6. The overall neighborhood stabilization plan is good (21%)
7. Clustering provides closer access to facilities and services (18%)
8. This creates the potential for more green space (15%)
8. Clustering can create real communities (15%)

What Concerns You About the Recommendations?

The following themes emerged from the table conversations and are listed in order of priority based on keypad voting*:

1. Must preserve affordable housing and mitigate gentrification (38%)
2. “We didn’t handle blight well before; can we now?” (34%)
3. How do we ensure the integrity of the political process? (33%)
4. “What happens to people that stay in high risk, low populations areas?” (30%)
5. “What resources will be made available to implement this program?” (28%)
5. Need to ensure that this results in quality, strategic planning (28%)
6. Need more details about the mechanics of the cluster program (27%)
6. “How does this help reduce crime?” (27%)
7. “How would renters be impacted?” (23%)
8. “Does the program give preference to local developers?” (16%)

Affordable Housing

Another one of the strong messages that came from Community Congress II was that leaders need to 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. Participants also said that it is important to fund the development of low- and moderate-income public housing and link housing to job training and support services.

Participants reviewed and provided feedback on what they liked and what concerned them about the six recommendations to create affordable housing for all New Orleanians.

What Do You Like About the Recommendations?

The following themes emerged from the table conversations and are listed in order of priority based on keypad voting*:

1. Reexamining & speeding up Road Home (50%)
2. Good to tie jobs & job training to public housing residents (49%)
3. Building mixed-income communities to prevent concentration of poverty & violence (48%)
4. Homeownership assistance “is empowering” & “will help build communities” (44%)
5. Providing housing opportunities for all – public housing residents, homeowners, renters (40%)
6. Utilizing existing housing stock – esp. duplexes to provide affordable rental units (34%)
7. Programs encourages displaced people to return home – esp. public housing residents (18%)

What Concerns You about the Recommendations?

The following themes emerged from the table conversations*.

1. Strengthen Recommendation #2 – Road Home program needs full overhaul (55%)
2. Skyrocketing cost of living (taxes, insurance, utilities) decreases affordability & slows recovery (52%)
3. We need affordable housing immediately (41%)
4. Need a new model of public housing – “public housing cannot return to pre-Katrina status” (39%)
4. Not enough good quality jobs to support rebuilding & maintaining housing (39%)
5. Make design guidelines specific to New Orleans, not generic “everywhere USA” (29%)
6. Needs of moderate-income people who do not qualify for assistance are not addressed in plan (28%)

Public Services

Another strong message that came from Community Congress II was the need to reopen and rebuild public facilities (like schools and health centers) based on repopulation and recovery rates. Participants recommended using temporary and mobile facilities, which could be combined, in less populated areas with a plan to develop permanent facilities as neighborhoods repopulate. Participants also wanted to improve the quality of New Orleans' schools.

Participants reviewed and provided feedback on what they liked and what concerned them about the seven recommendations in the draft UNOP plan.

What Do You Like About the Recommendations?

The following themes emerged from the table conversations and are listed in order of priority based on keypad voting*:

1. More health centers and clinics are based in communities (61%)
2. Multi-use facilities are good - schools as community centers can provide expanded recreation services to the public; (59%)
3. Police and fire are prioritized (44%)
4. Access to services is provided immediately through temporary, mobile service centers (36%)
5. "Comprehensive nature of the plan addressing status of all neighborhoods" (34%)
6. Police services are brought through substations (28%)
7. Services are repaired and rebuilt based upon population (23%)

What Concerns You about the Recommendations?

The following themes emerged from the table conversations and are listed in order of priority based on keypad voting*:

1. We need not only clinics, but also full service medical facilities. (63%)
2. Are the 9th & 7th Wards getting their fair share of public services? (53%)
3. Will we have the resources to support these facilities given our existing tax base? How do we pay for these recommendations? (47%)
4. How will services transition from temporary to permanent structures? What is the expected timeline? (45%)
5. "Spend money on people and services, not facilities" (38%)
6. Why are we providing services to under-populated areas? This seems at odds with the clustering concept. (20%)
7. How do we safely manage having children and adults in the same facilities? (15%)

What Happens Next?

For the unified plan to be successful, **it will be critical for citizens to remain involved with the process**. In the short term, citizens need to express their priorities to city leaders as they consider adopting the plan. Over the longer term, citizens need to do their part to act on their priorities and to hold city leaders accountable.

The following steps will take place after Community Congress III to adopt the unified plan.

Community Support Organization and Foundation:

The unified plan will first be presented to the organizations that have been responsible for overseeing the process – the Community Support Organization and the Community Support Foundation. The final public meeting of the Community Support Organization at which the Unified New Orleans Plan will be presented is January 25.

City Planning Commission:

If and when the plan is approved by the Community Support Foundation, it will be submitted to the City Planning Commission for review. The Planning Commission is currently scheduled to hold public meetings for input – on February 22 and March 7 – before voting on a recovery plan.

City Council and Mayor:

The City Council and Mayor will have final review of the City's recovery plan. If and when the plan is approved, it will become the City's official blueprint for recovery.

Louisiana Recovery Authority:

The City's recovery plan will be submitted to the LRA, as well as other public and private entities, to solicit implementation funding for appropriate recovery activities.



Remaining Recommendations

In addition to the four recommendation areas discussed earlier at Community Congress III, the UNOP Citywide plan will include other recommendations. Participants had the opportunity to review summaries of these additional draft recommendations and provide feedback on them.

The following ideas emerged from a table discussion on the additional areas of the plan. There was only enough time to share one idea from each area of the plan.

Flood Protection

- Utilize military, international engineers & technology in the protection system

Neighborhood Stabilization

- Involve children in the planning process

Housing

- Work with CDCs and other non-profits to implement housing programs and incentives

Economic Development

- Our culture is an industry

Infrastructure and Utilities

- “The Port should be developed as a National treasure”

Transportation

- “New Orleans should be a city in which you could live easily without a car” – bicycles, light rail are alternative options

Health Care

- Focus on mental health

Education

- Address education equity – equal resources for all schools

Public Safety

- “Restore integrity at NOPD & revamp system and then move on to the recommended strategies”

Environmental Services

- Reinstate citywide recycling program

Recreation and Libraries

- More and better-maintained public open spaces that are accessible to children & the elderly

Other Municipal and Cultural Resources

- Reinforce & grow cultural heritage of New Orleans: jazz, Mardi Gras Indians, performing arts

Historic Preservation/Urban Design

- Need neighborhood specific design guidelines with technical assistance provided

Citizen Participation

The last part of the day was dedicated to a discussion on the role that citizens can play in implementing the UNOP citywide plan.

This conversation began with participants sharing some personal lessons about what it takes to stay engaged and work together in the rebuilding process. Next, participants had the opportunity to review eight options for ongoing citizen participation and provide feedback on these options. Even more importantly, participants were able to develop additional options for citizen participation that were missing from the original list. Nine new options emerged from this discussion:

- Quarterly citizen meetings and annual community congress
- Report more neighborhood success stories in the media, especially in the national media
- We need meetings specifically for young adults
- Create a scorecard of recovery progress
- Establish a TV program specifically on recovery
- Create seed funding for community development corporations
- Support independent, neighborhood-based organizations to engage citizens
- Provide more information to citizens, at home and away, through all available means – print and internet
- Create a volunteer center

Participants were asked to identify the best citizen participation options from both the original eight options and the nine new ones. The following options received the most support (listed in order of priority)*:

1. Provide more information to citizens, at home and away, through all available means – print and internet (54%)
2. Support independent, neighborhood-based organizations to engage citizens (43%)
3. Quarterly citizen meetings and annual community congress (33%)
4. Neighborhood Association Network keeps citizens involved, disseminates information & advocates on behalf of their needs (25%)
5. Citywide Recovery Council that keeps citizens informed about the recovery process & provides a mechanism for public accountability (22%)
6. Recovery Clearinghouse that provides information about the city's recovery & the progress of implementing the unified plan (16%)

Final Feedback

At the end of the day participants voted to show their support for the UNOP plan – 91% of participants “agreed” or “strongly agreed” that the unified plan should go forward.

92% of participants indicated that they had a “very high” or “high” level of commitment to remaining engaged with the effort to rebuild New Orleans.

* Sum of polling percentages may exceed 100% because participants were able to select more than one option.

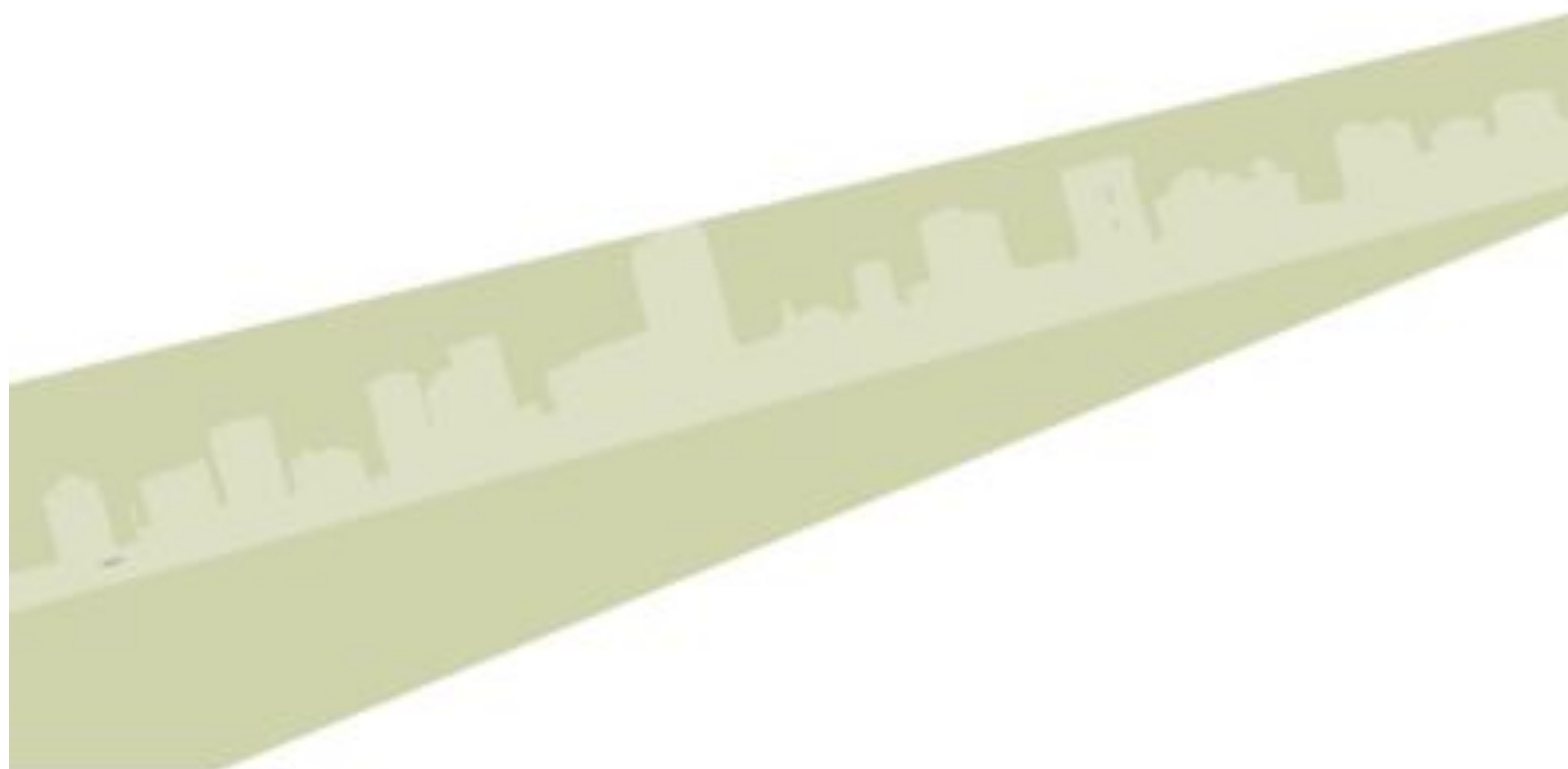


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The Unified
New Orleans Plan

CITYWIDE STRATEGIC RECOVERY
AND REBUILDING PLAN

Appendix D CITYWIDE BASELINE RECOVERY ASSESSMENT





Citywide Baseline Recovery Assessment

A Report Prepared by
The Citywide Planning Team

October 2006

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Section 1:

Economic Recovery Assessment

Introduction

There are many questions and issues that need to be addressed as the City of New Orleans moves forward with its recovery. However, one very important and fundamental question must be addressed: What are the economic drivers that will fuel the recovery? In other words, what are the economic sectors most likely to produce the jobs, income and capital investment that will restore the City's economic vitality? Its tax base? Its economic growth platform for the next generation?

The short answer to these questions is not original or necessarily complicated. Short-term recovery over the next one to five years will be largely driven by the business sectors on which the New Orleans area has relied for the past ten to twenty years with some slight deviations from time to time. However, over the next five years the New Orleans economic recovery will be driven by the following major sectors: the Port, Tourism, Energy and Healthcare. In fact, the recovery of the local economy since just after the storm has seen significant job growth in each of these sectors enough so in a few cases to bring employment above Pre-Katrina levels. This is most notable in the mining and utilities sectors as well as in chemical manufacturing and non-durable goods wholesale trade. This was true for both the New Orleans metropolitan area and for Orleans Parish (City of New Orleans).

However, for these and other major economic drivers to have their most significant impact on fueling job recovery, there are major infrastructure and support issues that must be addressed. In some cases, these represent potential barriers that potentially block or impede growth or further development in a particular sector or sectors. In other cases they may possibly be addressed or remedied either entirely or sufficiently by strategic investment of financial resources, the exercise of creative public policy, or both.

Recovery and growth over the long term (ten to twenty years into the future) is likely to be driven by an evolving mixture of business sectors that grow and adapt in response to the economic realities of the region at large and the City of New Orleans in particular. As new opportunities emerge, entrepreneurial initiative will respond to create new enterprises that add value, attract investment and create jobs. It is highly unlikely that New Orleans will attract a major corporate headquarters firm or major government agency presence. The City and region had difficulty competing for these major corporate presences before Katrina and its post-storm profile does not add much to the attraction scale. And, it would be a mistake at best for the City in particular to link its long term destiny to a decision over which it exerts no control or influence. The resources otherwise spent on recruiting and providing expensive concessions, even if they existed, would be better invested in that which is more certain: namely existing businesses that can be nurtured for growth and emerging entrepreneurial

firms driven by innovation and new technologies that can provide an ever improving number of quality jobs. That is, jobs offering upward mobility, good benefits and a living wage.

There are no quick fixes for the long-term economic challenges faced by New Orleans. This was true before Katrina and it is truer now. Ignoring this reality will ensure a replay of the spectacle seen around the world in the hours and days just after the storm. As Benjamin Franklin so aptly said, “Doing the same thing over and over and expecting different results is a definition of insanity.”

The Regional Context

The City of New Orleans, as an economic unit of activity, functions within a much larger geographic context. This includes linkages at the regional or metropolitan level, and reaches upward to the state, national and global levels. Although much of the discussion that follows centers on the metropolitan area level, linkages beyond the immediate seven parish region are essential to the City’s long term viability and growth. Tourism, for example, relies on national and international visitors to the City and its many events, while the Port serves markets on a national and global stage.

Prior to Katrina, the seven parish New Orleans metropolitan area was growing in terms of new jobs on an average basis of 1% to 2% annually. In some years over the past decade, growth was actually flat to non-existent and in some years negative. To say that the regional economy was an underperformer in comparison to other metropolitan areas in the state (i.e. Lafayette and Baton Rouge) or elsewhere in the South (i.e. Memphis, Jackson, Birmingham to name a few) is a kind understatement.

Hurricane Katrina dealt a severe blow to the regional economy. Just prior to the storm in August 2005, total wage and salary employment stood at 612,000, down slightly (0.2%) from the 613,400 recorded in 2004. The storm caused a massive loss of employment. At its lowest point, the metropolitan area lost 216,900 jobs. The biggest losses were recorded in Orleans (99,037) and St. Bernard (11,407) Parishes, the recipients of most flooding and storm surge damage from Katrina. Since the recovery started, a total of 42,100 jobs have been added to the region’s job base. This represents a growth/recovery rate of about 5,000 jobs per month. When one considers that the entire region might have previously grown at a rate of 4,000 to 5,000 for an entire year, this pace is certainly encouraging. The issue ultimately is how sustainable such a pace of growth can be over time. In the short run, it might be the norm. Over the long term, the pace of growth is likely to return to levels comparable to pre-storm periods absent radical changes in the economic development strategic thinking of local and state leadership.

At the current pace of recovery, total employment in the region now stands at approximately 71% of its pre-storm level. The recovery and growth has varied by sector or business category. Sectors leading the way to recovery are mining (at 127% of pre-storm employment), chemical manufacturing (at 99.2%), non-durable goods wholesale trade (at 99.2%) and utilities (at 100.4%). The first two sector performances shed encouraging light for the future as these two are part of the very important

energy engine of the economy. As oil prices climbed above \$60 and then briefly to \$70 per barrel, investment in more offshore drilling activity became more feasible. This is reflected in a steady rise in the Louisiana rig count over the past twelve months. Growth in the wholesale trade and utilities sectors is a direct reflection of activities related to the rebuilding and recovery effort throughout the region.

On the other hand, there are a number of sectors on a regional level that are lagging in their rate of job recovery. These include construction (at 65.9% of Pre-Katrina employment), retail trade (at 64.1%), professional, technical and scientific (at 51.6%), educational services (at 53.2%), health and social assistance (at 59.7%) and leisure and hospitality (at 68.0%).

The construction sector's lagging performance is primarily an aberration. Many in the construction trades work as sole proprietors or in partnerships that are not subject to the same employment reporting requirements. As such, many who work in this sector are not included in the wage and salary employment series reported by the State. Also, many now engaged in the recovery and rebuilding are employed by non-Louisiana firms or are working for "cash" as part of the growing underground economy of construction and clean-up workers. If any sector is poised for more growth over the next five years it is certainly construction. Providing suitable housing for these workers will be a challenge, however. Worker housing is essential.

Within retail trade, food and beverage stores (supermarkets and groceries) are lagging the most. In this category, just over 32% percent of the jobs have been restored to pre-Katrina levels. Like many other sectors, this one also faces the challenge of too few workers available to fill job slots. Some of this manpower shortage is due to a lack of affordable housing as well as to competition from other sectors where wage levels have been bid up relatively high by historic standards.

The shortage of qualified teachers, which is particularly acute in Orleans Parish, is also a major contributor to the slow recovery in the educational services sector. Especially hard hit are primary and secondary schools in both public and private systems. Among colleges and universities in the region, employment has returned to almost 75% of pre-Katrina levels. However, some of this recovery may be soon truncated if enrollments remain stagnant and incoming freshman classes do not show significant growth. A lack of full recovery among the region's institutions of higher education has particularly grave implications for the City's long-term recovery. These institutions, along with the medical schools and their teaching hospitals, comprise a significant portion of the technological infrastructure needed to fuel long term economic development and diversification. Tulane University, for example, is the largest private employer in the parish.

Although hospital employment in the region has recovered to just under 88% of pre-Katrina levels, recovery of jobs in the ambulatory health comes in at just above fifty-three percent of pre-Katrina levels. These jobs include a wide range of skills and services that are essential to a fully functioning healthcare delivery system.

Tourism jobs have recovered to 68% of their Pre-Katrina level in the metropolitan area. Hotels, as reflected in the accommodation sub-sector, have recovered to just under 84% of its pre-storm job level. This is generally consistent with a recovery of room supply which now stands at approximately 73.1% of pre-storm inventory or 28,100 rooms in service. This is still 10,340 rooms less than the pre-storm total inventory of 38,440 rooms, however. To reopen another 9,000 to 10,000 rooms, another 12,000 to 15,000 jobs would need to be filled within the hospitality sector. Like many other sectors, this one also suffers from the shortage of affordable housing and rising wage rates in other industries competing for a limited qualified labor pool.

The Arts, Entertainment and Recreation sub-sector has experienced one of the slowest recovery rates at just 44.1% of pre-storm job levels. Most troubling for both short- and long-term recovery is the fact that this sector accounts for much of what is attractive to tourists and convention visitors to New Orleans. Similarly, food services and drinking places, another major part of the area's attraction package has recovered less than 70% of its pre-storm employment. This has resulted in shorter hours and limited menus for restaurants that have reopened and delays in reopening other restaurants, some which have worldwide appeal and define the New Orleans eating experience. Once again, the shortage of affordable housing is limiting this sector's ability to attract the workforce necessary to recover more rapidly. Competitive wages from other job sources are also evident. However, many upscale establishments and major chain limited service outlets have shown a willingness to compete with higher wages, signing bonuses and offering a benefits package for those who remain employed some minimum number of months.

City of New Orleans Recovery: Progress and Outlook

With the exception of very hard hit St. Bernard Parish, the City of New Orleans (Orleans Parish) has been the slowest in the metropolitan area to recover jobs to Pre-Katrina levels. Prior to the storm, the City was consistently under-performing other parishes in the region. For most of the past ten years, the City either lost jobs year to year or recorded very modest gains (under 0.5% growth rates). In fact, had the year 2005 continued to unfold without Katrina, the City was on pace to lose 5,700 jobs, a decrease of 23% from 2004's annual average of 248,069. Hurricane Katrina produced a net loss of just over 99,000 jobs in the City or about 41% of its pre-storm employment level.

Since recovery has begun, the City's employment stands at about 62% of its pre-storm level. However, the recovery to date has only generated the net addition of 6,100 jobs from the post-Katrina low of 143,332 jobs. The other six parishes accounted for the balance of 40,000+ jobs added over this same period, with most of these in Jefferson and St. Tammany Parishes. The mining, construction and utilities sectors have all recovered to very near their Pre-Katrina employment levels in the City. Each of these three sectors is at or above 95% of pre-storm job levels. The only other sector showing comparable recovery strength is professional and technical services at 94%. Average weekly wages in Orleans Parish are 134% of pre-storm levels. This is good news for workers but puts pressure on sustainability and profitability for many businesses.

As previously mentioned, for good or bad, the economic engines likely to drive the City's recovery over the next five years and possibly longer are, for the most part, the same sectors that have provided the economic underpinnings of the City for the past two decades:

Oil and Gas (Energy): Since the advent of offshore drilling in the 1940's and 1950's, the City of New Orleans has provided both back office and technical support functions for exploration, drilling, production and equipment construction activities. Although the City has lost much of the critical mass it once had in this sector through consolidations, re-locations, corporate re-engineering and the like, it continues to have major presences of companies like Shell Oil, Texaco and Chevron. (Although Chevron has recently announced plans to relocate its operations to St Tammany Parish) There remains enough critical mass to support a network of smaller firms engaged in exploration and production as well as some aspects of construction and oil field services. These are the infrastructure of the energy cluster that still has value to others seeking employment and entrepreneurial opportunities. Growth in this sector (mining) since Katrina has no doubt been driven by steadily escalating oil prices and similarly escalating uncertainties regarding the energy supply chain. Reliance on volatile foreign governments for oil supplies is no longer a tolerable situation. Alternative sources including new drilling in the Gulf of Mexico, in some cases in areas once considered off limits. This sector's recovery and long term growth will also be helped by further production capacity gains among refineries in the river corridor and development of facilities such as Freeport McMoran's offshore liquefied gas facility.

A major threat to the City's critical mass in this sector are additional relocations of large corporate offices. The relocation of Chevron to St. Tammany Parish is the most recent example. This will move about jobs out of the City. On the positive side, this move will make available approximately 300,000 square feet of Class A office space in the CBD.

Port of New Orleans: The Port is very often an overlooked and under-leveraged asset in the City's package of economic engines. Despite significant damage to many port facilities and physical obstacles created by the storm in several ship channels, the Port recovered quickly and is now handling import and export tonnage volumes exceeding Pre-Katrina levels. Employment in port related sectors has also recovered at a faster rate than the average for both the metropolitan area and the City. In the transportation/warehouse sector, metropolitan-wide growth has restored employment to just under 90% of its pre-storm levels; while, in the City, this sector's current employment is at 76% of pre-storm levels.

Long-term growth and recovery in this sector can be aided by addressing several major infrastructure issues that have public policy implications. The most obvious is resolution of the Mississippi River Gulf Outlet (MRGO) debate. If it is necessary for the Port's long term viability, then investment strategies must be focused on providing adequate storm surge protection for St. Bernard Parish and Eastern New Orleans. If, on the other hand, there are viable alternatives to MRGO, then the channel could and should be abandoned as a

transportation route. Failing to resolve the debate, however, creates an economic “black cloud” over the Port and offers no concrete or satisfactory solutions to residents severely impacted by the storm surge.

Last, but by no means least, is the issue of the New Orleans Regional Business Park. The widening of the Industrial Canal would improve access to some land in the park and provide an opportunity to utilize some of this acreage in value-added manufacturing or processing a small portion of the raw material currently handled by the Port. This is not a new strategy, but it is one that needs to be resurrected in some form to encourage entrepreneurial initiative in the local manufacturing sector. This would help to create new jobs and capital investment and diversify the employment base with higher-paying, higher-quality jobs.

Tourism: This is a multifaceted cluster of economic activities that largely defines the character of New Orleans and survives or thrives to the extent to which people from elsewhere on the globe desire to observe and be a part of the culture producing this character. The cluster includes everything from the convention and group meetings activities to hosting the casual weekend visitor. As previously stated, restaurants are an integral element of the unique cultural experience as are the major events offered to attract visitors, such as Mardi Gras and Jazz Fest. Several key recovery projects have played and will continue to play a strategic role in fueling this very critical economic engine. These include:

- The renovation and reopening of the Louisiana Superdome. This brings the City’s NFL team back home and serves as a symbol of progress.
- The repair and reopening of the Arena and Convention Center. This opens very important venues for sporting events and major entertainment events and makes possible the return of major conventions and group meetings.
- The return of cruise ships to New Orleans. This brings more liberal-spending visitors to the City and generates significant demand for lodging facilities.
- The investment by the State through the Louisiana Recovery Authority in a significant marketing campaign. This makes possible the sending of a critical message throughout the U.S. and beyond that New Orleans is open for business and is, of course, fun.

There are, however, several strategic areas that must be addressed through significant investment and policy choices that might not win votes. Failure to do so has the potential of slowing recovery in this sector and impeding long-term growth through diversification and leveraging of the City’s tourism assets. These include restoration of the City’s hotel inventory, expansion of daily air service at Louis Armstrong Airport and reduction in violent crime.

As previously noted, the 10,000+ hotel rooms that remain unavailable hinder the City’s ability to host very large conventions and puts upward pressure on room rates thus making

the City less competitive from a pricing perspective. Some cities offset higher conference rates by offering other concessions and direct financial incentives to conference and convention organizers. Given the limited financial resources of the state and local agencies charged with marketing and production, offering financial subsidies or other incentives is not feasible or practical. However, restoration of the City's hotel room inventory is an important element of the short- and long-term recovery strategy.

Although air service at Louis Armstrong has recovered significantly since the storm, the 1,075 flights currently serving the City and surrounding region limit the volume of convention visitors that can conveniently and economically access the area. In August 2005, just prior to Katrina there were 162 daily flights accounting for 20,676 available seats serving Armstrong. As of October 2006, the number of flights stands at 105 (35% down from pre-storm levels) accounting for 12,582 total available seats (down 38% from just before Katrina). As a result, flights are fuller (78% in July 2006 versus 69% in July of 2005) and airfares are higher. Also, since ten fewer cities are directly served by flights originating in New Orleans (32 in October 2006 versus 42 just before Katrina), travelers are required to make more inconvenient and time-consuming connections. These air travel difficulties place New Orleans at a significant disadvantage when trying to attract major conventions and group meetings. This shortage introduces another hurdle for economic developers attempting to retain existing businesses and recruit new business to the region and City.

Although increasing flights is a market-driven process controlled largely by the airlines, strategic necessity may force the City-owned airport to offer concessions and fee reductions as incentives to attract more airlines to the facility and encourage existing operators to increase their daily flight service. This is a policy decision with financial implications that may need to be addressed if the City is going to aggressively and successfully rebuild its businesses that depend on outside visitors.

Thirdly, the tourist and convention business is fighting an even more uphill competitive battle if the image of the City remains one of utter devastation where thugs rule and crime runs rampant in the streets. Violent crime, even if not necessarily perpetrated against tourists and convention visitors, sends the wrong message to the national and global market of potential visitors to the City. Of course, residents would also benefit from a reduced crime rate and might make their plans to stay or leave in good part on progress in controlling crime.

Healthcare: This sector is critical to the City's recovery on several fronts. First, it accounts for a large number of professional and technical high-paying jobs and is a catalyst for an even larger number of jobs among allied healthcare providers. The latter provide much of the necessary support infrastructure for physicians and the hospitals from which they serve the public. Many of these allied health fields also provide points of entry for those seeking upward mobility and higher paying jobs accompanied with more training and education. Secondly, the healthcare cluster also accounts for a significant portion of research and

development funding that supports new cures and treatments and that has the potential of spawning new entrepreneurial businesses that create jobs (usually high paying) and attract investment capital. Of particular note are the research activities of Tulane School of Medicine and the LSU Health Sciences Center. These facilities prior to Katrina typically attracted \$120 million to \$130 million for research on an annual basis and served as a base of operations for many individuals who were in the top of their respective fields nationally and internationally. The devastation to these facilities resulting from the storm has badly damaged an important economic engine for the City.

Third, and by no means least important, an effective healthcare delivery system speaks directly to the City's quality of life. People, in particular the elderly or infirm, cannot return if they cannot obtain accessible, reliable and affordable healthcare. Information released recently showed that as a result of the storm, the region lost 77% of its primary care physicians, 70% of its dentists and almost 80% of its psychiatrists. In some specialty areas, such as cardiology and orthopedics, the losses have been even steeper. The good news is that those who remain have more patients than they can handle. The bad news is that those individuals requiring ordinary service may wait one to two months for an appointment. The other bad news is that hospitals that have reopened cannot operate at full capacity. Their ability to increase the supply of available beds is directly related to the number of admitting physicians and the supply of other support personnel available, particularly registered nurses. The shortage of nurses that existed before Katrina has only become more acute since the storm and is not projected to improve significantly in the short term.

From an economic recovery viewpoint in the City, development or redevelopment of the Downtown Medical District is an absolute necessity. This district, with Tulane and LSUHSC as the anchors, is the hub of medical and healthcare education, training, research and service delivery for the region. This is certainly not to discount the essential importance of hospitals such as East and West Jefferson or Ochsner, but the Medical District serves to enhance and leverage the respective roles these facilities play in the region's provision of high quality and reliable healthcare services. The link to quality of life is obvious as is the link to support of existing and creation of new jobs.

Significant economic infrastructure issues that need to be addressed and resolved quickly including the construction of a new teaching hospital for the LSU Health Sciences Center (possibly in conjunction with the Veterans Administration) and funding for the new BioInnovation Center on Canal Street. The former is being addressed by a commission appointed by the Governor in partnership with the Federal Government. Resolution of disagreements on strategy must be resolved as quickly and effectively as possible so the project can move to the next stage – design and build. Postponing decisions regarding the future of healthcare are damaging to the short and long term phases of the City's economic recovery.

The BioInnovation Center is a \$30+ million investment which is intended to provide a focal point for support of cutting edge biosciences research that will then attract entrepreneurial risk capital to create new businesses and jobs. This multi-faceted facility, one of three in the state (the others are in Baton Rouge and Shreveport), will provide state of the art wet labs and incubator space for professionals engaged in a wide variety of bio and health sciences research. When this research results in marketable products or formulations, the intent is to graduate or spin-off these enterprises into other commercial space in the downtown area. Since most of these enterprises require long lead times for research and development, FDA approvals, clinical trials and the like, they also require economic infrastructure support and significant venture or risk capital financing. The latter is not something in which the New Orleans area has been awash for any type of business, particularly bioscience start-ups. The risk for the City is a loss of viable new businesses that can germinate and spawn yet more businesses, jobs and capital investment. Addressing the venture and risk capital gaps for this kind of technologically-driven economic development is essential to both the short- and long-term recovery of the City.

The Recovery/Rebuilding Economy

Over the next 5 to 10 years, billions of dollars in private, public and nonprofit funding is going to be invested in the region at large and City in particular to fix, restore and rebuild what Katrina damaged or destroyed. Estimates range from \$60 to \$80 billion, and the upper end of this range of estimates tends to creep higher every month.

The Recovery Economy (RECON) involves a wide variety of activities requiring an even wider range of skills, training, experience and expertise. Included in RECON is the ever-important rebuilding and refortifying of the area's flood protection system (pumps, levees, floodgates, etc.), the reconstruction of destroyed or severely damaged infrastructure (streets, sewer, water, gas, etc.) and the massive task of restoring or rebuilding over 180,000 residential housing units and possibly as much as 50 to 70 million square feet of commercial, industrial and institutional structure.

The RECON is huge in scope and scale and is faced with a daunting task by historic standards. In a good typical year before Katrina, contract spending for all types of construction in the New Orleans region averages \$1.6 to \$2.0 billion annually. This would typically be accomplished with a construction workforce in the seven-parish area consisting of 28,000 to 30,000 workers. Unless the delivery capacity of the construction industry is ramped up significantly, the rebuilding effort could extend for two or more decades. In the overall scheme of sustainable economic recovery, that is not tolerable. As a result, ramping up the industry becomes essential to the short and long term recovery of the region and the City of New Orleans. At a minimum, this involves significantly increasing the pool of qualified labor, utilizing and leveraging the best available construction techniques and technologies, ensuring a steady flow of construction supplies and materials and providing space for affordable transitional housing to meet the immediate needs of the construction workforce.

Increasing the skilled labor pool can be addressed on at least two fronts. The first is the importation of transitional laborers. They will need safe, affordable temporary housing. The second is a full court press in the workforce development arena to train New Orleans area residents to do skilled and semi-unskilled construction jobs. The latter strategy addresses the desire or goal of benefiting local residents as much as possible from the massive rebuilding effort and encouraging self-sufficiency and entrepreneurship.

One of the most frequently mentioned uses of technology to accelerate the supply of housing is manufactured or modular units. These alternatives are also quickly viewed as opportunities to bring new manufacturing or assembly plants to or near the New Orleans area. These housing alternatives, particularly modular dwellings, have the potential of significantly increasing the supply of residential units more rapidly and at a more cost effective and affordable price level. The prospect of attracting a major manufacturing facility closer to or even in New Orleans, however, is still somewhat questionable despite recent hopeful signs. The biggest challenge such a facility would face is lack of available skilled workers. One representative of a modular facility commented that it is more cost effective for his company to manufacture units at a plant in the Dallas area where average wages for skilled, experienced and motivated plant workers is \$11 to \$12 per hour. The location of temporary or transitional housing units has been a controversial and very often divisive issue since shortly after the first FEMA trailers started rolling into the area. If sufficient quantities of safe, affordable housing are going to be provided for the transient workforce, the City needs to actively assist in the rebuilding effort. Convenient, readily-accessible sites will need to be selected and set aside for as long as it takes to accommodate the rebuilding effort.

Section 2: Population Assessment

Overview

Prior to Hurricane Katrina, the city of New Orleans was in a moderately stable condition. It had steadily lost population since the 1960 Census, but the rate of population loss had slowed considerably between the 1990 and 2000 Censuses. The economy of the city and the metropolitan region was not expanding rapidly, but neither was it shrinking. As with many other central cities in the United States, New Orleans prior to Katrina faced a number of tremendous challenges—from a chronically underperforming public school system to persistent poverty and joblessness among its low income population to a staggering violent crime rate. In spite of these problems, the City had a stable and rooted middle class, a rapidly appreciating real estate market, and a number of vital neighborhoods.

Table 2.1

City of New Orleans Population Totals, 1960 – 2005

Population Totals, 1960 - 2005 (est.)							
	1960	1970	1980	1990	2000	2005 (est.)	Percentage Change, 1960 - 2005
New Orleans	627,525	593,471	557,515	496,938	484,674	454,863	-27.51%

Percent Change, 1960 - 2005							
		1960 - 1970	1970 - 1980	1980 - 1990	1990 - 2000	2000 - 2005	Average Per. Change, 1960 - 2000
Citywide Total		-5.43%	-6.06%	-10.87%	-2.47%	-6.15%	-6.20%

Hurricane Katrina has drastically altered this landscape. The damage that Katrina caused to the city of New Orleans in particular cannot be understated. Virtually all of the city's 455,000 residents were displaced as floodwaters remained for weeks. According to FEMA's on-the-ground inspections, 134,344 of the city's approximately 188,000 housing units sustained reportable damage. Of this total, 105,155 units were placed in the "major" or "severe" damage classifications. Of all of the damage that the state of Louisiana experienced from both Hurricane Katrina and Hurricane Rita, fully 57% of the major and severe housing damage in the entire state was in Orleans Parish. The impact was overwhelming.

In the year that has elapsed since the storm, New Orleans has rebounded somewhat; but, its prospects are uncertain. Those neighborhoods that were undamaged by Katrina have rebounded impressively, and construction activity hums along in areas that were moderately or slightly damaged. In other parts

of the city, though, neighborhoods are virtually indistinguishable from the way they appeared in September, 2005: uninhabited, derelict, and untouched. Meanwhile, city services remain erratic at best; and investment decisions have been postponed as a result of uncertainty regarding the redevelopment prospects of heavily damaged neighborhoods.

It is in this context that GCR & Associates, Inc. (GCR) has attempted to ascertain the present and future population of New Orleans so that intelligent planning and investment decisions may be made. GCR has developed population estimates and projections without any biases and with as dispassionate a perspective as is possible. We have evaluated a number of data sources—from FEMA inspection reports to FEMA trailer counts to historical building permit activity to post-Katrina economic analyses—to arrive at near-term and long-term population projections. GCR’s near-term, January, 2007 population projections range from 210,000 to 232,000, based on three different population models. The “moderate scenario” that GCR feels has the greatest degree of probability projects a population of 225,000. GCR has also completed long-term population projections through January, 2017, a ten-year timeframe. We are reasonably confident that the January, 2007 population will fall within the fairly narrow range that our projections delineate. Over time, of course, there are considerably more variables to consider and more variability in the potential rate of population growth in New Orleans. The outcome of the Unified New Orleans Plan process, for one, will have a profound effect upon the scale and character of the redevelopment effort. Because of these myriad variables, the longer term population projections that GCR has put forth are population models—models that establish a relatively broad potential population range ten years down the road. The 2017 population projections range from a low of 389,000 to a high of 461,000. GCR’s moderate scenario for long-term population anticipates a 2017 population of 429,000.

What follows is a more detailed discussion of the methodology behind these projections and a more detailed examination of the results themselves.

Methodology

Population – Short-term

Within several weeks of Hurricane Katrina striking New Orleans, GCR began to devise short-term projections for the repopulation of the city. At the core of any demographic exercise is the notion that estimates and projections should be guided by the best available data. Early on in the process of crafting these projections, two critical, easily-quantifiable data elements were identified: the number of housing units within each block in the City and the peak flood depth that each block experienced from Katrina’s floodwaters. Preliminary evidence in the initial weeks and months following Katrina’s landfall highlighted the scarcity of housing as a major impediment to economic recovery and also highlighted the premiums that prospective renters and purchasers were willing to pay for dry, intact housing. Indeed, more recent data indicate that the appreciation in housing value that the metro area has witnessed since Katrina greatly exceeds typical rates of appreciation.

GCR's analysis, therefore, began with the postulate that the contraction in the housing market has exceeded the contraction in the local job market. Not only do sales figures reinforce this notion but anecdotal evidence buttresses this perspective. Simply stated, those neighborhoods that were spared from Katrina's floodwaters have recovered rapidly; and in those areas that did flood, levels of observable activity are inversely proportional to the depth of flooding that those areas experienced. Thus, in GCR's analysis of the short-term repopulation of New Orleans, the impact of flooding upon the housing stock establishes a ceiling on the pace of recovery and the rate at which neighborhoods are anticipated to recover. This methodology has proven to be highly accurate when compared with the most recent "on-the-ground" estimate of the City's population. The City of New Orleans' Emergency Operations Center (EOC) conducted a "rapid population estimating survey" at the end of January, 2006 in conjunction with the Census Bureau and Centers for Disease Control. Due to the difficulty inherent in such a survey, the results allow for a fairly broad confidence interval—anywhere from 160,000 to 200,000 residents when dormitory accommodations are included. The midpoint of their estimates, though, and the figure that is put forth as their overall best estimate is 187,000. GCR's estimates for January, 2006, generated from the housing capacity and flood depth methodology, yielded a population of 188,726. While the EOC report readily acknowledged the relatively wide margin of error in the estimates, the methodology that GCR has used is clearly in the same vicinity as this other credible estimate.

In addition to flood depth-specific rates of return for the pre-Katrina housing stock and population, numerous other factors were incorporated into this model. One of those elements was an index that adjusts the rate of return based on the socio-economic profile of a particular block. The underlying assumption of the index is that not all blocks with the same level of flooding will return at the same rate. It stands to reason that those individuals who a) have much of their wealth tied up in their property, b) have flood insurance, and c) have a degree of financial flexibility have both an incentive and the means to re-occupy or repair their homes expeditiously. Thus, each of the blocks in the city was given an index score based on median income, homeownership rates, median home values, and levels of flood insurance. For those blocks with a high score, the standard rates of return were modulated upward while the rates of return for blocks with low scores were retarded somewhat.

Another characteristic that was incorporated into this methodology was the location of FEMA group trailer sites. Because the group trailer sites are installed and occupied outside of the ordinary machinations of home renovations and neighborhood recovery and because they can be placed in any location with functioning utilities, they were examined apart from the rest of the housing stock. A single, somewhat below average ratio of residents to households was applied to these housing units to determine a population figure for these group sites.

The results of this methodology are January 1, 2007 population projections ranging from 209,893 to 232,269. There is precious little evidence to buttress these near term projections, but the evidence that does exist suggests that GCR's projections are credible. As was mentioned above, the city's Emergency Operations Center conducted an on-the-ground Rapid Population Estimating Survey in January of 2006, which pegged the city's population at 187,000. All observable evidence suggests

that the city has experienced moderate population growth since that time. Thus, the absolute floor for New Orleans' present population is likely in the 180,000 range. Another source of real-time information on the rate of re-population is utility activity. According to an analysis of Entergy account activity, the city's present (summer, 2006) rate of utility usage stands at about 48% of pre-Katrina levels. This level of activity would imply a present population of approximately 219,000 residents.

More recent evidence of where the City's population currently stands comes in the form of an updated Rapid Population Estimating Survey. In October, 2006, the Louisiana Department of Health and Hospitals (DHH) released population estimates based on surveys conducted throughout the summer of 2006. These estimates also place the current population of New Orleans at 187,525—a nearly identical figure to the estimate for January of 2006. While this estimate appears to paint a considerably less optimistic picture of the city's repopulation than GCR's estimates do, a closer inspection of the report's methodology and findings reveals that the DHH estimates are within roughly the same range as GCR's estimates.

The DHH's margin of error is 11.5%, thereby establishing 165,960 and 209,090 as the upper and lower boundaries of its estimates. The upper end of this range approaches the January, 2007 estimates put forth by GCR, the low end of which is 209,893. If one assumes even a modest increase in population between June, 2006, when some of the surveys were taken and year's end, a significant overlap between the two estimates emerges.

Another factor to consider in analyzing the DHH study is that their estimates do not include those residents living in group quarters. This population subset, which includes college dormitories, prisons, nursing homes, and other group homes, numbered approximately 18,000 before Katrina. A conservative analysis places the current number somewhere between 6,000 and 12,000. Incorporating the group quarters population into DHH's findings brings the upper end of the DHH estimates into the same general range as GCR's projections.

The DHH's estimates are also subject to another statistical quandary—the extraordinary difficulty of conducting a truly dependable survey in post-Katrina New Orleans. While a rigorous methodology was employed in gathering the data, there is still the possibility of an undercount. The dramatic shift in the percentage of owner occupied vs. renter occupied housing and the dramatic shift in the city's racial composition that the DHH study reports suggest that there may have been a slight statistical skew to the survey results.

When examined in a broader context, though, the DHH estimates do clearly run counter to overly optimistic appraisals of the city's repopulation. Both the DHS and GCR estimates suggest that well over a year after Katrina's landfall, roughly half of the city's pre-Katrina population has not returned. The on-going restoration of the city's housing stock and the increasing viability of neighborhoods will attract additional residents, but the timetable of the process will be on the order of years or even decades rather than months.

Population – Long term

Projecting New Orleans' population even one year into the future is an intrinsically difficult exercise because, unlike nearer term projections, long term projections cannot derive value from anecdotal observation and from data that describe a recent condition. The context in which the projections are made is, therefore, incredibly dynamic. Nonetheless, there are several reasonable assumptions that one can make to isolate variables and to inform the manipulation of those variables. One such assumption is the notion that any remaining frictional vacancy within the undamaged housing stock will be absorbed by the two year anniversary of the storm. In the year following Katrina, the housing market has been robust; but the overall vacancy rate is probably slightly higher than it was before Katrina as many houses are put on the market and as residents make decisions involving their jobs and their ties to New Orleans. By the two year mark, though, due to the inexorable demand for intact housing, buying and selling activity should calm and excess vacancy should be absorbed.

Another such assumption is that the greatest degree of rebuilding activity should occur in neighborhoods that were minimally flooded, that are proximate to intact employment and commercial centers, and that are already experiencing observable activity. In essence, certain neighborhoods should reach a "tipping point" whereby housing, infrastructure, and the commercial sector are sufficiently restored. At this point "hold-outs" who have not yet renovated their homes will be encouraged by the rate of progress and will likely renovate. At the same time, outside investors will canvas neighborhoods for affordable, un-renovated properties and will lease or re-sell them as investment income. In other neighborhoods, however, the destruction was truly vast. Residences there are relatively isolated from un-flooded, viable neighborhoods; and, the observed level of activity is substantially lower than in other neighborhoods in the city. For these reasons, their recovery will likely be a lengthier, more arduous process.

GCR has incorporated these geographically-specific assumptions into its longer term projections for the city's population growth. Because a housing-based methodology is the bedrock of census population estimates and decennial census counts, and because a city's population hinges on the availability of beds to sleep in, GCR has utilized the same housing-based methodology for its long-range projections. The aforementioned factors have been incorporated into the geographically-specific and flood depth-specific repopulation models, of course; and, several other resources have helped to inform the estimated pace of recovery.

One such resource is the rate at which other communities have recovered from natural disasters. Research on other communities affected by recent natural disasters in the United States suggests that these communities are largely resilient and that recovery has been expeditious for the most part. From the Northridge earthquake to the Loma Prieta earthquake to Hurricane Hugo to Hurricane Andrew, the heavily urbanized areas that were affected by these disasters all rebounded to their pre-disaster profile within a matter of years. Hurricane Andrew provides the most relevant comparison to Katrina's impact upon New Orleans. In 1992, Hurricane Andrew struck the south Florida coast as a Category 4 storm with winds of 145 miles per hour. Approximately 80,000 housing units in the

communities south of Miami were rendered uninhabitable. Within only a few years, though, the houses that had been damaged or destroyed had been completely replaced; and, by the 2000 Census, the communities that were most severely affected by Andrew—Homestead and Florida City—had populations that exceeded their 1990 populations.

This example serves to illustrate that recovery from a similarly destructive hurricane is possible and that it can even be rapid. Given the economic infrastructure in New Orleans, the well documented social and historical ties to the region, its cultural significance, and the sheer amount of federal resources that are flowing into the region, recovery and population gain are inevitable. There are a variety of salient factors that distinguish New Orleans from the Miami area, though, not the least of which is that there was tremendous immigration and population growth in the Miami region prior to Hurricane Andrew. The New Orleans area, on the other hand, had a stable but not rapidly increasing population. For this reason and a variety of other reasons (extent of damage to critical infrastructure, complete suspension of economic activity, quality of life issues prior to Katrina, etc.), the pace of housing recovery in the city is not likely to match that of south Florida after Andrew. Thus, one can safely say that the pre-Katrina population is the likely upper limit of growth over the next ten years.

Another resource that helps to inform estimates of the pace of housing renovation and recovery is any estimate regarding the capacity of homebuilders and contractors to build new units or renovate damaged units. A recent report by James Richardson, Professor of Economics at LSU, estimated the maximum amount of annual, post-Katrina housing production in the New Orleans region to be 13,000 units. This estimate has helped to delineate a reasonable range of estimates for the repopulation of the city by flood depth, and GCR's repopulation models are consistent with this capacity estimate.

A final resource for estimating long-term population growth is any credible estimate for the construction of entirely new housing within areas that did not have a substantial residential population prior to the storm. This housing type will surely be a significant source of New Orleans' population growth in the coming years. Vacant office buildings and industrial buildings, surface parking lots, and the underutilized upper floors of commercial buildings all provide an outstanding opportunity to build more efficiently and more sustainably in a post-Katrina New Orleans. Potentially lucrative incentives, such as expanded New Market Tax Credits and expanded federal Historic Rehabilitation Tax Credits, encourage this form of development. Thus far, the market has responded in kind. Approximately 7,000 new residential units are in the planning, permitting, or construction phases in the city, with most of these projects concentrated in the largely un-flooded Central Business District and environs. It will probably not be before 2009 that many of these projects will be completed. From that point forward, a healthy rate of housing production—well in excess of pre-Katrina housing production—can be expected. To quantify what this likely rate of production will be, GCR consulted historical building permit data for similarly sized cities whose new housing units fit the profile of the kind of new housing that New Orleans is witnessing. Consulting these figures helps to establish reasonable boundaries for the rate of new, urban-scaled, infill housing development that New Orleans can expect in the coming years.

Table 2.2

New Residential Unit Totals, 2000 - 2005

Annual Building Permits - New Residential Units									
	Population, 2000	2000	2001	2002	2003	2004	2005	Average, 2000 - 2005	Permits per resident
Seattle, WA	563,374	4,732	3,646	3,770	2,705	3,544	3,718	3,686	0.0065
Atlanta, GA	416,474	5,819	6,794	6,649	6,893	9,726	7,974	7,309	0.0176
Portland, OR	529,121	1,798	1,672	2,334	3,566	2,882	3,736	2,665	0.0050
Washington, DC	572,059	806	896	1,591	1,427	1,936	2,860	1,586	0.0028
Boston, MA	589,141	567	883	772	1,508	1,079	1,156	994	0.0017
Denver, CO	554,636	3,649	4,458	4,626	3,036	4,098	3,164	3,839	0.0069
San Francisco, CA	776,733	2,766	1,191	1,243	1,430	2,051	2,538	1,870	0.0024
New Orleans, LA	484,674	679	627	616	917	887	617	724	0.0015

The three recovery models that GCR has developed—a low, high, and moderate scenario—all take these myriad factors into account. The exact rate at which recovery takes hold, though, is highly variable and hinges on a variety of issues. The federal government’s commitment to coastal restoration and storm protection, the city’s commitment to rebuild in a more sustainable manner, the attractiveness of New Orleans as a tourist destination, the future of the medical research industry in the city, and the future of the oil and gas industry will all play a major role in the pace of recovery. Thus, GCR estimates that by 2017, the city’s population will likely lie between 389,000 and 460,000 residents.

Results

GCR has completed population projections for 2007, 2008, 2009, 2012, and 2017. The following tables provide detailed breakdowns of those projections. The city can anticipate substantial growth within the next ten years such that under the most optimistic of scenarios, the city may see its population approach its pre-Katrina population by January 1, 2017. Due to delays in the implementation of the state’s Road Home Program, delays in the disposition of government acquired property through Road Home, and the length of time inherent in building new, infill units in an urban context, population growth will occur slowly at the outset. GCR foresees relatively little population growth between September, 2006 (present day) and January 1, 2007; but the pace should accelerate considerably by the beginning of 2008. From 2008 onward, the city should see a relative flurry of building activity, both in renovations and new construction.

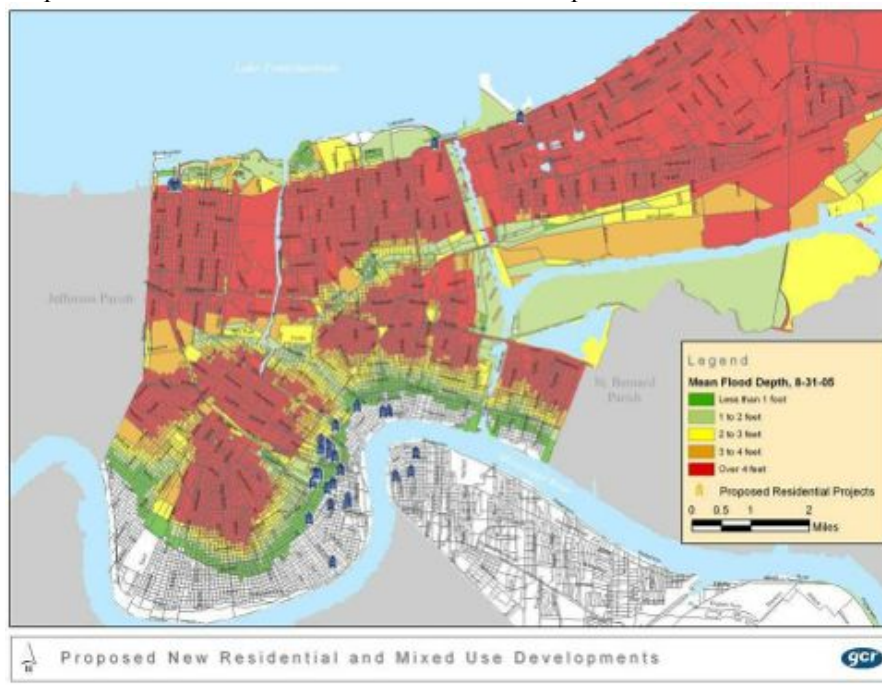
It should be noted that these projections hinge on New Orleans avoiding another Katrina-like hurricane within the next five years at a minimum. Such an event would likely have a chilling effect upon the business and real estate climate. While the city would continue to function after a second such disaster, its recovery would be prolonged considerably.

It should also be noted, from the standpoint of land use and infrastructure planning, that there is considerable variability in these long range projections. If the federal government were to make a pronounced commitment to coastal restoration and substantially-enhanced levee protection, if the

commitment of New Orleans' displaced residents were unwavering, if New Orleans were to rapidly regain its position as a chosen convention and vacation destination, and if the (relatively small but significant) corporate presence in the city were to fully recommit to the city, then New Orleans might approach its pre-Katrina population in a ten-year timeframe. In all likelihood, not all of these things will come to pass; and the population will fall considerably short of the pre-Katrina population, even with a decade's worth of reconstruction.

Furthermore, even if the 2017 population were to approximate the pre-Katrina population, it is possible that there would be a significant geographical shift in the city's population. It is instructive to examine the location of proposed new development activity since Katrina. As indicated by the map below, virtually all of the new residential or mixed-use development projects that have been proposed are located in areas that received minimal to no flooding. In addition to being home to intact residences and commercial centers, these neighborhoods are also viewed by the private sector as a more secure investment risk and as less of an insurance challenge. Even the most optimistic of GCR's population scenarios do not assume a full recovery of severely flood damaged neighborhoods. Instead, they assume that a considerable source of growth will be in the form of "infill" construction in areas that were relatively unmolested by Katrina. Almost all of the 7,000 or so new residential units that have been proposed or are under development fit into this category of new development. Thus, a denser core population could compensate for a sparser repopulation of the most flood damaged neighborhoods which may be seen as a greater investment risk.

Figure 2.1
Proposed New Residential and Mixed Use Developments



From the standpoint of future land use and infrastructure planning, it is also worth noting that the pre-Katrina population of the city did not come close to fully utilizing the infrastructure and geographical extent of pre-Katrina New Orleans. The 2000 Census counted approximately 27,000 vacant housing units in the city, many of which were in older neighborhoods that had lost population to newer subdivisions in the city and suburbs. The most compelling illustration of this incongruity between the city's pre-Katrina population and geographical extent is a comparison of population figures through the decades. New Orleans' peak population was in 1960 when the city was home to over 627,000 residents. Since that time, New Orleans has lost over 172,000 residents while at the same time development has sprawled into New Orleans East, Algiers, and the Lakefront. Consequently, the land-use pattern and infrastructure of the city should not be viewed through the lens of pre-Katrina New Orleans but instead through the lens of what is appropriate, efficient, and sustainable for an eventual population that is smaller and whose spatial concentration is somewhat different than the pre-Katrina population.

The following tables illustrate the results of these projections. Once again, the "high" scenario assumes a near-optimal confluence of circumstances, resources, and personal and corporate re-commitment to New Orleans. The "low" and "moderate" scenarios assume a more modest commitment of government resources and investment activity more in line with commitments that have been outlined to date.

Table 2.3
Population Totals, 2007¹

	Pre-Katrina Population/ Households	January 1, 2007 Projected Population Low Scenario	January 1, 2007 Projected Population Moderate Scenario	January 1, 2007 Projected Population High Scenario
Citywide Total Pop	484,674	209,893	225,257	232,269
Citywide Total HH	188,251	81,524	87,491	90,215

Table 2.4.
Population Totals as a Percent of Pre-Katrina Population, 2007

	Pre-Katrina Population/ Households	January 1, 2007 Projected Population Low Scenario	January 1, 2007 Projected Population Moderate Scenario	January 1, 2007 Projected Population High Scenario
Citywide Total	484,674	43.31%	46.48%	47.92%
Citywide Total HH	188,251	43.31%	46.48%	47.92%

Table 2.5.
Population Totals, 2008

	Pre-Katrina Population/ Households	January 1, 2008 Projected Population Low Scenario	January 1, 2008 Projected Population Moderate Scenario	January 1, 2008 Projected Population High Scenario
Citywide Total	484,674	254,787	267,631	287,570
Citywide Total HH	188,251	98,961	103,950	111,694

¹ Population projections provided by gcr, inc., 2006

Table 2.6

Population Totals as a Percent of Pre-Katrina Population, 2008

	Pre-Katrina Population/ Households	January 1, 2008 Projected Population Low Scenario	January 1, 2008 Projected Population Moderate Scenario	January 1, 2008 Projected Population High Scenario
Citywide Total	484,674	52.57%	55.22%	59.33%
Citywide Total HH	188,251	52.57%	55.22%	59.33%

Table 2.7

Population Totals, 2009

	Pre-Katrina Population/ Households	January 1, 2009 Projected Population Low Scenario	January 1, 2009 Projected Population Moderate Scenario	January 1, 2009 Projected Population High Scenario
Citywide Total	484,674	286,152	299,278	323,169
Citywide Total HH	188,251	111,143	116,242	125,521

Table 2.8

Population Totals as a Percent of Pre-Katrina Population, 2009

	Pre-Katrina Population/ Households	January 1, 2009 Projected Population Low Scenario	January 1, 2009 Projected Population Moderate Scenario	January 1, 2009 Projected Population High Scenario
Citywide Total	484,674	59.04%	61.75%	66.68%
Citywide Total HH	188,251	59.04%	61.75%	66.68%

Table 2.9
Population Totals, 2012

	Pre-Katrina Population/ Households	January 1, 2012 Projected Population Low Scenario	January 1, 2012 Projected Population Moderate Scenario	January 1, 2012 Projected Population High Scenario
Citywide Total	484,674	333,709	357,050	404,341
Citywide Total HH	188,251	129,615	138,681	157,049

Table 2.10
Population Totals as a Percent of Pre-Katrina Population, 2012

	Pre-Katrina Population/ Households	January 1, 2012 Projected Population Low Scenario	January 1, 2012 Projected Population Moderate Scenario	January 1, 2012 Projected Population High Scenario
Citywide Total	484,674	68.85%	73.67%	83.43%
Citywide Total HH	188,251	68.85%	73.67%	83.43%

Table 2.11
Population Totals, 2017

	Pre-Katrina Population/ Households	January 1, 2017 Projected Population Low Scenario	January 1, 2017 Projected Population Moderate Scenario	January 1, 2017 Projected Population High Scenario
Citywide Total	484,674	389,477	429,155	460,844
Citywide Total HH	188,251	151,276	166,687	178,995

Table 2.12

Population Totals as a Percent of Pre-Katrina Population, 2017

	Pre-Katrina Population/ Households	January 1, 2017 Projected Population Low Scenario	January 1, 2017 Projected Population Moderate Scenario	January 1, 2017 Projected Population High Scenario
Citywide Total	484,674	80.36%	88.54%	95.08%
Citywide Total HH	188,251	80.36%	88.54%	95.08%

Conclusion

The next ten years will be a time of tremendous change in the city of New Orleans. In the twelve months since Katrina, the city has witnessed changes to its neighborhoods, demography, economy, and transportation patterns. There is already ample evidence to suggest that population growth is a virtual inevitability. By attempting to quantify those impending population changes, GCR has attempted to provide the UNOP team with critical information that will help to inform intelligent planning decisions.

Section 3:

Citywide Housing Recovery Assessment

Introduction

The Citywide Housing Recovery Assessment describes the current state of housing in New Orleans.

New Orleans experienced a severe blow to all types and tenures of housing during hurricane Katrina. Although the full extent of the housing losses may be impossible to quantify precisely, it is possible to estimate the impacts of Katrina and the current state of the housing recovery. Data from a variety of governmental agencies such as the Census Bureau, FEMA, and the City of New Orleans were collected and analyzed for this housing recovery assessment. Additionally, interviews conducted with housing officials, real estate market professionals, and research from a variety of other sources such as the press, non-profits and professional organizations have been utilized. These data include:

- Door to Door Damage Surveys
- Building Permit Analysis
- Emergency Housing Locations
- Private Housing Market Data (Sales Prices)

These and other available data sets were analyzed using numerous techniques including those that employed the use of GIS (Geographic Information Systems) and database queries. The key findings of this Housing Recovery Assessment are as follows.

Citywide Data Analysis

To fully understand the impacts of Katrina one must first quantify the extent of the losses. The 2000 U.S. Census counted a total of 188,251 owner- and renter-occupied housing units in New Orleans.¹ Prior to Katrina, New Orleans contained 11.37% of the statewide total of owner-occupied units. The comparative percentage of the state wide renter occupied units located in Orleans Parish was 18.96%.²

Table 3.1
U.S. Census of Housing

Census 2000	Louisiana	Orleans Parish Louisiana	Percentage of LA Housing	Percentage of New Orleans Occupied Housing
Owner occupied	1,125,135	87,589	7.78%	46.53%
Renter occupied	530,918	100,662	18.96%	53.47%
Total occupied	1,656,053	188,251	11.37%	100%

Source: U.S. Census

It should be noted that this large percentage of rental housing units reflects the importance of this stock of housing to the State of Louisiana and New Orleans. Affordable rental housing is needed in the state of Louisiana and in New Orleans specifically due to the fact that incomes and home ownership rates here have lagged those of most other states and large cities.

The U.S. Census reports that the median income for households in Louisiana 2003-2005 was \$36,814 (in 2005 dollars).³ This is lower than the median household income for the U.S. as a whole which was \$46,098. Only four states, Montana, Arkansas, West Virginia and Mississippi had lower median household incomes.⁴ Additionally, in New Orleans over 60 percent of households in renter-occupied housing units paid 30 percent or more of their income towards housing.⁵ The U.S. Department of Housing and Urban Development (HUD) sets the 30 percent of income figure as the affordability limit. Finding affordable housing in New Orleans for large numbers of low income residents was a difficult task before Katrina and has challenged city officials and affordable housing advocates for decades. Katrina has exacerbated this problem to the extent that New Orleans is now facing a crisis of affordability.

Both the rental- and owner-occupied housing stock of New Orleans suffered severe damage as the result of Hurricane Katrina. In April of 2006 FEMA updated the summary data files of housing damage (Insured and Uninsured Loss Estimates by tenure). FEMA listed the results of their direct inspection survey (to determine eligibility for assistance) for New Orleans as follows:

Table 3.2
FEMA Damage Estimates⁶

FEMA 2006	Orleans Parish Total	Minor Damage Estimates *	Moderate Damage Estimates*	Severe Damage Estimates**	Percentage of New Orleans Housing with Severe Damage****	Percentage of New Orleans Housing with Some Damage
Owner occupied	87,589	13,135	9,434	44,040	50.28%	76.47%
Renter occupied	100,662	16,054	16,911	34,770	34.54%	67.29%
Total Occupied:	188,251	29,189	26,345	78,810	41.86%	71.36%

Source: FEMA, HUD, SBA

* Less than \$5,195.76 in personal property damage = Minor Damage

** \$5,195.76 to \$30,000 = Major Damage

*** Greater than \$30,000 = Severe Damage

**** Minor and Moderately damaged units and units with no damage also resulted in the displacement of occupants.

The impacts of Katrina on the housing stock of New Orleans are unlike anything ever experienced by a large city in the history of the United States. In addition to the Katrina damage to owner and renter occupied units there were 26,840 vacant and abandoned units in Orleans Parish in 2000.⁷ If the 26,840 vacant and abandoned units of housing are added to the FEMA figures for “Damaged Housing” a total of 74.93% of the housing stock is currently in need of repair or abandoned. This is an extremely large percentage requiring immediate and substantial measures of housing recovery support.

Housing Recovery Assessment: Breakdown by Tenure Types

To facilitate the analysis for this Citywide Housing Recovery Assessment the housing stock was divided into the following three broad categories:

- Private Housing Stock – Single Family Homes, Condos and Doubles
- Rental –Private Rental Sector Units, Multi-Family and Emergency Housing/Workforce
- Public Housing – 10 Large Conventional Developments, Scattered Sites, and Vouchers

The next three sections assess the recovery of the Private Housing Stock, the Rental Sector and Public Housing in New Orleans, respectively.

Private Housing Stock: Housing Sales Activity

Katrina devastated the private housing market in New Orleans. **Table 3.2** above shows that more than 76% of owner-occupied housing experienced some level of damage from Katrina with more than 50% (44,040) of the units citywide damaged severely (greater than \$30,000). These dollar damage estimates are massive and are more than any other single day losses of housing by natural disaster (or other means) in recorded history. By necessity the recovery of the private housing stock of New Orleans will rely on a variety of programs, policies and grants as well as private capital and market forces.

Market forces have played out with little government intervention to date. The slow pace of grant disbursements from the LRA and the Road Home program and limited SBA loan availability have accentuated the role and importance of private capital in the housing market up to this point in the recovery of New Orleans. **Tables 3.3** and **3.4** below summarize housing market conditions using sales data from pre- and post-Katrina as well as the results of the most recent market activity.

The impacts of Katrina on the New Orleans private housing market, compiled by the University of New Orleans, Real Estate Market Data Center are listed in **Table 3.3**:

Table 3.3

Pre-Post Katrina Market Sales

Pre-Katrina 2005			Post Katrina 2005			% Change
Jan – Aug 2005 Housing Sales			Sept - Dec 2005 Housing Sales			Pre vs. Post katrina
Average Price	Unit Sales	Gross Sales	Average Price	Unit Sales	Gross Sales	House Prices
\$230,540	2,183	\$503,268,432	\$289,166	307	\$88,773,854	+25.43%

Source: University of New Orleans, Real Estate Market Data Center

The laws of supply and demand were clearly in evidence in the immediate aftermath of Katrina as the devastating shock to the housing market resulted in severe shortages. This spike of more than +25% in average sales prices lasted through December of 2005.⁸ However, the increase in average sales prices soon began to decline as the market cooled rapidly in 2006.

A summary of the private housing market from January 2006 to the most recent private housing market sales data for New Orleans, compiled by the University of New Orleans, Real Estate Market Data Center, is contained in **Table 3.4**:

Table 3.4

Recent Private Housing Market Activity

1st Quarter 2006			2nd Quarter 2006			3rd Quarter 2006		
Jan - Mar 2006 Housing Sales			April - June 2006 Housing Sales			July - September 2006 Housing Sales		
Average Price	Unit Sales	Gross Sales	Average Price	Unit Sales	Gross Sales	Average Price	Unit Sales	Gross Sales
\$272,198	691	\$188,089,090	\$244,564	929	\$227,200,178	\$213,097	809	\$172,395,087

Source: University of New Orleans, Real Estate Market Data Center

Average sales prices have declined, quarter over quarter since the start of 2006. According to the University of New Orleans, Real Estate Market Data Center, the percentage change in average sales prices from September - December 2005 to January - March 2006 was -5.87%. The percentage change in the second quarter of 2006 over the first quarter was -10.15%. The percentage change in average sales prices in the third quarter of 2006 over the second quarter was -12.87%.⁹

It should also be noted that New Orleans is mirroring national downward trends in house prices and unit sales. The Commerce Department recently reported that the median price for a new home sold in September 2006 was \$217,100, a drop of 9.7 percent from September 2005. This is the first year-over-year, inflation-adjusted decrease in median home prices since the great depression. There is a substantial market correction occurring nationwide, the result of the housing “bubble”, (large double-digit home price increases during the past decade – including in New Orleans), deflating. Therefore the decreases in median house prices in New Orleans should be attributed both to Katrina damage in flooded areas and macro level market trends including increasing interest rates.

The “Katrina Index” published by the Brookings Institution supports this analysis of these real estate market trends. The most recent update to the Katrina Index, (Oct 11, 2006) states that “Home values continue to plummet in Orleans Parish... The average home sale price in Orleans Parish (except for Algiers) dropped 29 percent between June and August 2006 to \$175,126. This value is down sharply from one year ago when the typical home sold last August for \$244,793.”¹⁰ The Brookings report also includes a housing data analysis at the Zip-code level by Dr. Wade Ragas of Real Property Associates who states, “these parish-wide values in New Orleans mask stark disparities between strong home prices in unflooded areas and weaker home values in flooded neighborhoods.”¹¹

Non-Market Forces

It should be noted that we are currently entering a new phase of housing recovery in New Orleans. New massive capital infusions from non-market actors such as the federal government and the LRA's Road Home program in the form of grant disbursements for homeowner rebuilding are occurring now and accelerating. These activities will likely impact the housing market to a great extent and provide much incentive for those weighing their rebuilding options.

The LRA's main rebuilding program, The Road Home program, is being funded by large Federal Grants. Here is a breakdown of the funds, their source and their destinations.

Source:

- \$9.25 Billion for the Road Home Program Budget
- \$8.08 Billion from Community Development Block Grants (HUD)
- \$1.5 Billion from Hazard Mitigation Grant Program (FEMA)

Destination:

- \$6.350 Billion for Homeowner Assistance Program
- \$1.536 Billion for Workforce and Affordable Rental Housing
- \$32 Million for Developer Incentives and Code Enforcement
- \$18 Million for Start Up Housing Costs
- \$121 Million for State Administrative Costs

There are additional State of Louisiana programs to assist homeowners including grants for the owners of historic properties. These programs are covered in the historic preservation section of this recovery assessment.

The most recent data released by the Road Home program are as follows for the State of Louisiana and Orleans Parish are:

The Road Home Program Update: As of October 30, 2006.

State Wide:

- | | |
|--|----------------|
| • Total applications received to date: | 77,281 |
| • Applications recorded: | 61,544 |
| • Appointments held: | 16,370 |
| • Awards calculated: | 675 |
| • Amount of benefits calculated: | \$34.5 million |
| • Average award: | \$57,760 |

New Orleans

- | | |
|--|--------|
| • Orleans Parish number of applicants: | 24,404 |
| • Percentage of state total in Orleans parish: | 40% |

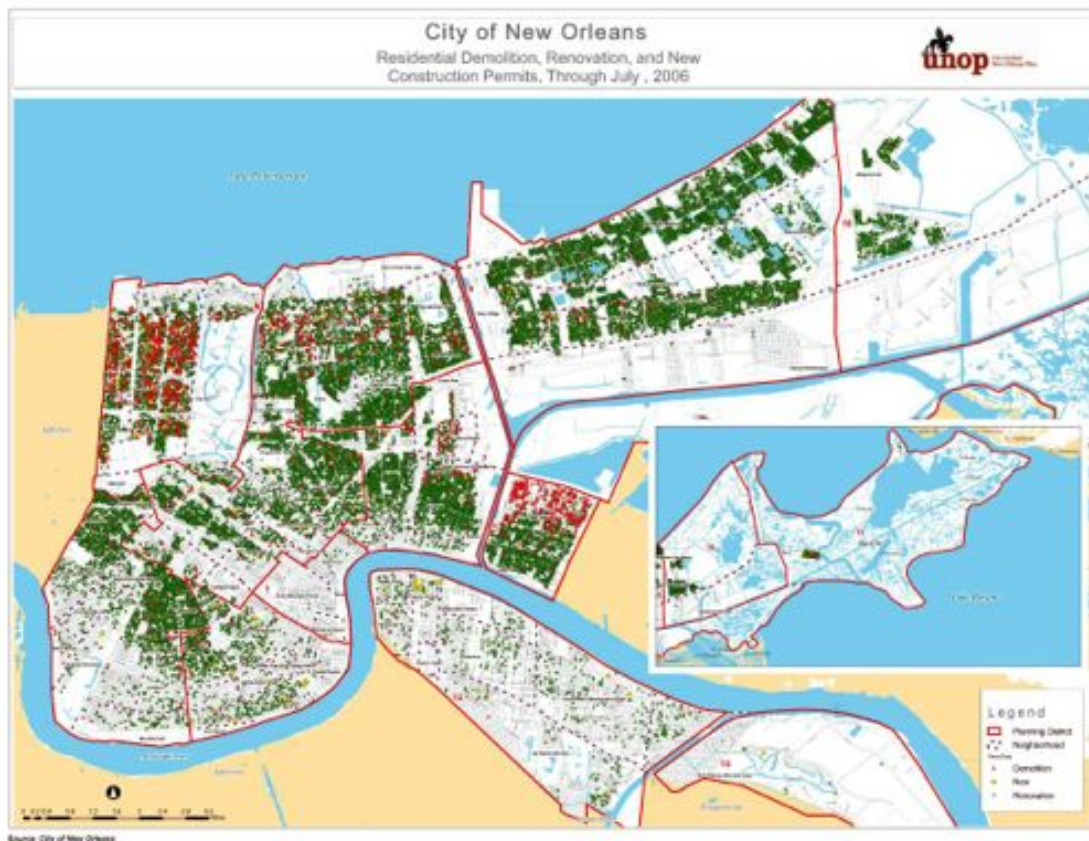
The number of applicants for the Road Home Program from Orleans Parish has increased substantially from even one month ago. Since October 6th 2006, the number of applicants from Orleans Parish has increased 91.87%, almost doubling to 24,404. The proportion of applicants from Orleans Parish has also increased to 40% from 36% in early October and the average award has increased to \$57,760 from less than \$50,000.¹² These trends bode well for Road Home Program grant utilization in Orleans Parish.

Building Permit Activity

Another assessment of the recovery of housing is available through an analysis of the issuance of the various types of permits by the City of New Orleans. These estimates of rebuilding activity take the form of Certificates of Occupancy, Renovations, Repairs, Demolitions and a number of other City of New Orleans housing-related permits. When mapped out by address they reveal a substantial array of rebuilding activities distributed in all parts of the city.

Map 3.1

City of New Orleans – All Permitting Activities



Source: GCR and Associates, City of New Orleans Department of Safety and Permits

The City of New Orleans, Department of Safety and Permits released information showing 67,609 permits for all types of residential building activities, 3,020 certificates of occupancy and 2,368 demolition certificates.¹³ Demolition permits currently comprise a total of 3.24% of total permit activity. Permit activity has increased from a low of 4,959 in the September-to-December 2005 period immediately after Katrina to levels more than 13 times as great. This increase in permit activity is spread throughout the whole of the City of New Orleans and is an impressive sign of housing recovery activity. **Table 3.5** quantifies the extent of this permitting activity by permit type.

Table 3.5
City of New Orleans Permits

2006 Residential Permits	Orleans Parish Total	Residential Building Total	Residential Certificate of Occupancy	Residential Electrical	Residential Mechanical	Residential Repairs	Residential Other*	Demolitions
Total Permits	72,997	67,609	3,020	27,641	5,821	27, 441	6,706	2,368

Source: City of new Orleans, Department of Safety and Permits, GCR and Associates.

* New Construction, Renovations (Structural and Non-Structural), Additions (Over/Under 50%), Single and Double Emergency Permits

Insurance

Katrina replaced Hurricane Andrew as the largest insurance loss from a natural disaster in U.S. history. Essentially all insurers writing any property coverage in the southeastern U.S. and most reinsurers across the globe will have losses stemming from Katrina.¹⁴ Some carriers are being impacted far more dramatically than others and this has thrown the New Orleans insurance market into great turmoil. Those trying to get homeowners insurance in New Orleans will find that many companies are no longer writing policies, and others will have to resort to the state's insurer of last resort and higher prices.

Finally, these insurance issues impact mortgage availability and lending activity in the private housing market. Increasing prices and limited availability of insurance are a problem throughout the region and the state as a whole. These issues will have to be addressed by the state before they create more formidable barriers to reconstruction than they already have.

Rental Housing Market

In New Orleans there currently exists a severe crisis of affordability in rental housing. This is negatively impacting the pace of the recovery of the city as individuals, families and workers find it increasingly difficult to find quality affordable housing in the city and region.

Table 3.6

U.S. Department of Housing and Urban Development, Fair Market Rents¹⁵

HUD 2006	Efficiency	1Bedroom	2Bedroom	3Bedroom	4Bedroom	Average Rental Unit \$ Price	% Increase Year to Year
Year							
2000	\$365	\$418	\$521	\$709	\$858	\$574	NA
2001	\$369	\$423	\$527	\$717	\$868	\$581	+ 1.15%
2002	\$446	\$512	\$637	\$867	\$1,050	\$702	+ 20.94%
2003	\$461	\$529	\$659	\$896	\$1,085	\$726	+ 3.36%
2004	\$463	\$531	\$661	\$899	\$1,089	\$729	+ 0.36%
2005	\$522	\$578	\$676	\$868	\$897	\$708	- 2.80%
2006	\$725	\$803	\$940	\$1,206	\$1,247	\$984	+ 38.97%
2007 *	\$755	\$836	\$978	\$1,256	\$1,298	\$1,025	+ 4.17%

Source: HUD, Fair Market Rents in New Orleans Metro, by Unit Bedrooms

* Effective October 1st 2006. Source: GNOCDC

http://www.gnocdc.org/reports/fair_market_rents.html (HUD user).

New Orleans did not experience the increases in rental housing prices experienced by many other major metropolitan areas in the U.S. through the early part of the decade (except in 2002 when rents rose more than 20% over 2001).¹⁶ In New Orleans in the three years prior to Katrina rental unit prices showed very little growth. Between 2004 and 2005 prices of rental units of all types declined by 2.80 percent. Since Katrina the massive rental-price increase of almost 39% in New Orleans can be directly attributed the destruction or closure of the majority of the affordable rental housing stock.

Additionally, anecdotal evidence suggests that many landlords with undamaged properties used the mass exodus of the population during Katrina to evict tenants and raise rents, exacerbating the affordability crises. It has also been suggested that thousands of former residents cannot move back to the city because of a metro-wide shortage of low-cost apartments.¹⁷

Recent research by The Times-Picayune shows that the advertised prices of rental units in the city have actually increased by 70% Post-Katrina, from slightly under \$800 to \$1,357 a month.¹⁸ This survey was based on the published rents of more than 1,400 properties and covered all unfurnished apartments with quoted rental rates in the newspaper's weekly real-estate tab from nine periods in 2005 and 2006.

Multi-Family Housing

The LRA expects to hand out \$1.6 billion in grants to help cover the cost of Katrina-related repairs in the apartment market, with some money flowing as soon as next month. Expanded numbers of Low Income Housing Tax Credits will also be available to increase the supply of affordable housing and offset the devastating losses in the rental housing market. However, it has been suggested that, "There is clearly going to be a timing gap," and that, "Right now, the need far outstrips the available supply. The market will reset itself, but it is going to take some time." LRA officials predict that the agency's Road Home program will spur the return of at least 42,000 apartment units in the New Orleans area.¹⁹ Clearly, renters and landlords will need assistance and should be provided with incentives when they make choices to return to and invest in New Orleans.

There are two major rental home programs within the LRA's Road Home: The Small Rental Property Repair Program and the CDGB and LIHTC "Piggyback" Program. These programs are not operational yet, although pre-registration for the Small Rental Property Repair Program is expected to begin in early 2007.

Emergency FEMA Housing

Providing some measure of relief to this crisis situation is the provision of emergency housing by FEMA and other governmental agencies and private sector workforce housing. Currently, the number of FEMA travel trailers and mobile homes operational (as measured by Sewer and Water Board connections) are 18,396.²⁰ The corresponding numbers for the state of Louisiana as a whole are 4,647 mobile homes and 68,673 operational travel trailers.²¹ These numbers are likely to diminish rapidly as the eighteen-month life spans of the travel trailers begin to expire in the late spring and summer of 2007.

Public Housing

The history of public housing in New Orleans reveals considerable investments of public recourses towards the creation of housing that has failed to meet the basic needs of public housing residents. Early public housing developments in New Orleans were built on sites cleared by urban renewal projects replacing neighborhoods of older, more diverse housing for the working classes. The large housing developments (circa 1950s) eventually would contribute to racial segregation and act to concentrate poverty. Therefore, despite New Orleans' history of being a city where classes and races lived in close proximity to each other, by the time of Katrina, its citizens had become substantially segregated by race and income. Even more importantly, pockets of extreme poverty and social exclusion had formed that have remained extremely difficult to remove.

HANO has long been recognized as a troubled agency. It is one of the worst public housing authorities in the country and had been in Federal receivership since 2002 when the Department of Housing and Urban Development (HUD) took control. Crime and drugs have plagued HANO housing developments. Many units were dilapidated, run down and vacant prior to Katrina. Despite these less-than-ideal conditions, HANO units housed more than twelve percent of the entire city, or 49,000 individuals. Just prior to Hurricane Katrina, between ninety-eight and one hundred percent of HANO residents were black (Brookings 2005). The majority of these residents lived in the ten large “traditional” housing developments (projects) situated in very poor, majority black neighborhoods. **Table 3.7** reveals the pre- and post-Katrina statistics for HANO unit occupancy.

Table 3.7

Numbers of HANO Units: Total	August 2005	October 06	%
Number of units in Large developments / occupied	7,379 / 5146	1,017	19.76%
Number of Scattered site units	773 / 540	115	21.30%
Number of Utilized Section 8 and Disaster Vouchers	8,981	206 (8288 Disaster)	94.58%
Total Number of Families / Individuals Housed	14,000 / 49,000	9626 / Unknown	68.76%

Sources: HUD and HANO²²

HANO began carrying out long-term plans to redevelop much of its deteriorating housing portfolio just prior to Katrina. The HOPE VI programs at Desire and St. Thomas, which had been poorly managed and long overdue for renovation, were nearing completion when Katrina struck. Additionally, HANO had started work on three of its other housing developments: Fischer, Florida and Guste. On those sites HANO hoped to develop over 3,000 mixed-income units, combining traditional public housing, Low-Income Housing Tax Credit units, market rate rentals and homeownership units.²³

Finally, HANO is relying more heavily on voucher programs. This is a national trend as public housing authorities in many cities divest themselves of their stocks of units in large traditional projects. This trend was accelerated by Katrina in New Orleans which is now offering a majority of housing through vouchers. Additionally, “To keep up with rising rents, the U.S. Department of Housing and Urban Development recently boosted the value of its housing vouchers by 35 percent in New Orleans. As a result, poor residents who qualify for a Section 8 voucher can now get \$1,447 in rental assistance for a three-bedroom apartment, versus \$1,073 before July 1.”²⁴ There can be little doubt that increasing numbers of vouchers in the New Orleans metropolitan area and the increased value of the vouchers are contributing to the rapid increase in rental rates.

Housing Recovery Assessment Conclusions

The data described indicate there is much housing-related activity occurring in all areas of New Orleans and within all types and tenures of housing.

The downturn in the overall private housing market is following closely that of national trends and can in no way be indicative of a Katrina-related slump. Increasing property values in un-flooded areas bear this conclusion.

Building permit activity and other indicators of housing recovery are showing substantial month over month increases as more residents return to reclaim their properties and undertake rebuilding.

Emergency housing provided by FEMA numbers in the tens of thousands and is allowing substantial numbers of residents to remain in the city as they rebuild.

Public housing is undergoing massive redevelopment with 69% of the former residents now being housed using emergency vouchers and currently open units in the large traditional development.

Additionally, the Road Home Program and other initiatives including grants and assistance to small landlords and the owners of historic properties, tax credits and other policies and programs are beginning to aid recovery.

Finally, the work of faith-based organizations, private developers and individual residents (the free market), are all beginning to make decisions that will facilitate the increased recovery of the housing stock of New Orleans.

Many of these current trends in the recovery of the housing of New Orleans are positive and progress is being made daily. However, it should be understood that there are significant challenges in relation to housing recovery and many unanswered questions. The main questions are:

- Insurance Rates and Availability Impacting on Home Mortgages.
- Final HUD/HANO Development Plans for Public Housing, Mixed Income Developments and Vouchers.

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Section 4: Hurricane/Flood Protection Recovery Assessment

Introduction

For the better part of three centuries, the City of New Orleans has endured numerous floods, epidemics and disastrous fires; but, it has continued to rebuild time after time in this tenuous location. We will rebuild again this time after Katrina. Before we rebuild we must devise a strategy that protects our citizens from the ravages of the floodwaters that ran over and through our defenses to destroy lives, homes and our faith in the flood protection system itself.

New Orleans' Hurricane Flood Protection System Pre-Katrina

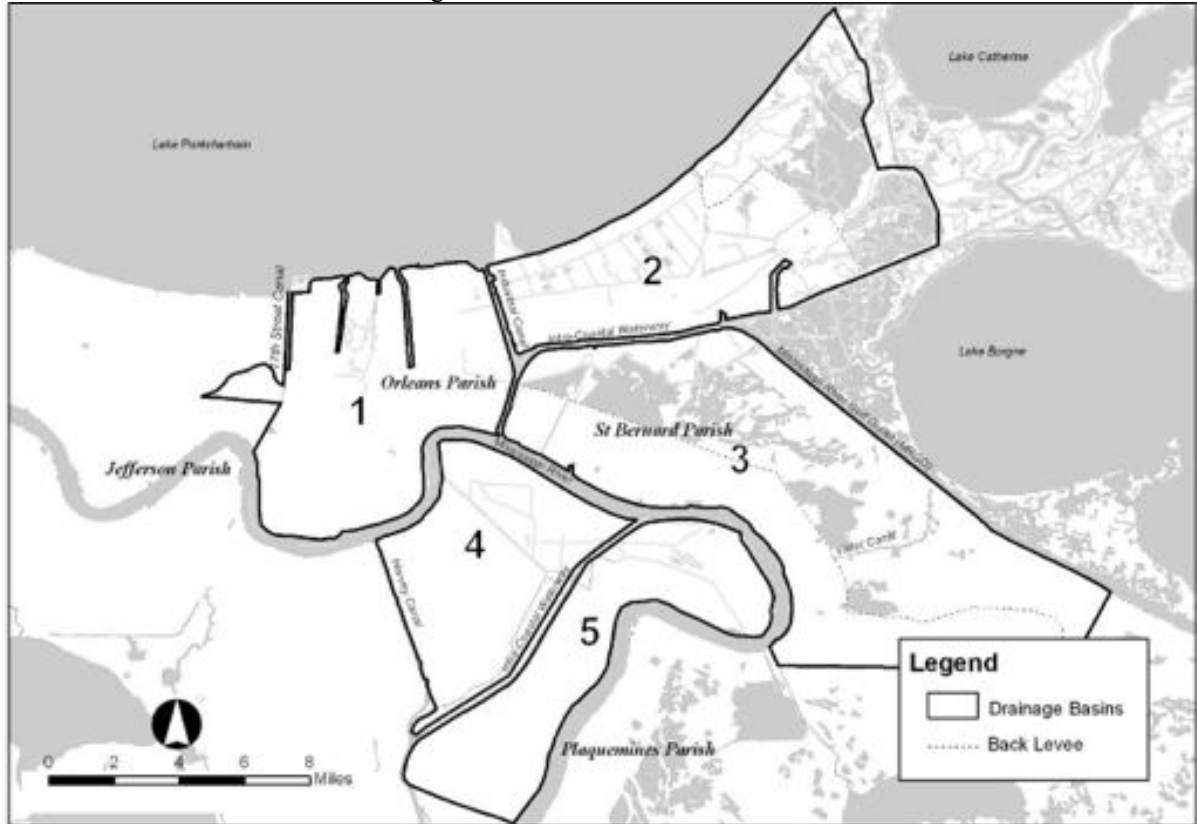
The City of New Orleans lies within the floodplain of the Mississippi River. To protect the City from seasonal flooding of the river, levees were built along its banks and down into the back swamp to protect the City's flanks. As the City grew closer to Lake Pontchartrain, additional levees had to be constructed along that shoreline to protect against storm surges from the Gulf of Mexico associated with tropical storms and hurricanes. Eventually, the two levee systems were connected, turning New Orleans into a walled city, like a medieval city. Only, New Orleans' walls were to defend the city against raging waters, not marauding armies.

New Orleans has often been described as a bowl, its rim delineated by man-made levees and its interior characterized as a gradient ranging from a few feet above sea level to as much as ten feet below sea level. In reality, the City of New Orleans is contained within five separate bowls, or drainage basins (See **Figure 4.1**). These drainage 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, which shares a large drainage basin with St. Bernard Parish
4. Upper Algiers, which shares a drainage basin with Gretna and Harvey
5. Lower Coast Algiers, which shares a drainage basin with Belle Chasse

There are other basins that protect Marrero and Westwego and St. Charles Parish. These drainage basins and their associated pumping stations are shown in Figure 1 on the following page. The basins are largely a creation of the Corps of Engineers, 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 Corps has employed.

Figure 4.1
New Orleans Area Levees and Drainage Basins



Source: Burk-Kleinpeter, Inc., 2006.

What Katrina showed us with devastating effect was that the hurricane- and flood-protection system for the New Orleans metropolitan area—which had been under construction for the past forty years—was inadequate in many respects. These inadequacies included:

- The standard project hurricane—what the system was designed to protect against—was outdated and far smaller than it should have been
- The designs, particularly of the outfall canal floodwalls, were flawed
- Construction of the entire system was not complete
- Completed sections were sinking below design standards

According to McQuaid and Schleifstein in their book, *Path of Destruction*, “The complex array of earthen levees, levee walls and drainage canals designed to protect the New Orleans metropolitan area from hurricane storm surge was a ‘system in name only’...Some levees were still not complete, more than forty years after construction on the system had begun. Others were not built to mandated heights or had sunk below authorized levels. Several levee walls were improperly designed and were

pushed over by Katrina's surge. Some levees were built with substandard materials and washed away."²

These failures resulted in the greatest natural disaster in the history of the United States, as a modern American city became for weeks an extension of an inland estuary, Lake Pontchartrain. The flood ruined virtually everything, not just homes and lives, but also the infrastructure systems we depend upon: electricity, potable water, sewage treatment, telephones, the internet, etc.

Today, fourteen months after the disaster, the hurricane flood protection system remains a "system in name only." While the Corps of Engineers has "spent more than \$352 million (through August 2005) to bring back levees, floodwalls and drainage systems in the New Orleans area to where they were before Hurricane Katrina hit, crucial improvements aimed at upgrading the system to the level long ago authorized by Congress are barely past the planning stages."³

The following assessment of the recovery status of the hurricane flood protection system examines what has been done in the past year and what is planned in the short-, mid- and long-term to improve the system. We will also look at the implications for planning that these improvements imply.

Assessment of Recovery Efforts

Immediately after the storm, after the City was "unwatered," the Corps set as its goal the restoration of the hurricane protection system to its pre-Katrina condition by June 1, 2006, the official start of the next year's hurricane season. Though Corps officials claimed they reached their goal by that date, in fact, work on the new floodgates at the 17th Street, London and Orleans Canals, as well as some levee work, had not been completed as late as September 2006. Still, the Corps repaired some 220 miles of damaged levees and floodwalls, completely replacing more than 25 miles.

These recovery, or restoration, projects were intended to do just that—simply to restore what was there before the hurricane. However, in some areas, improvements to the system were hurriedly added to the recovery projects primarily to get the City through the upcoming hurricane season, predicted to be a busy one. For example, in New Orleans East and along the MR-GO in St. Bernard, several additional feet were added to the top of the levees for two reasons: one, to attain current design standards and, two, to account for anticipated settlement and sinking of the levees. Also, better materials such as clay were used. In New Orleans the construction of floodgates at the ends of the outfall canals was intended to prevent future storm surges from entering the canals—the primary cause of the collapse of the floodwalls and a major contributor to the flooding of Orleans and Jefferson Parishes.

² John McQuaid and Mark Schleifstein. *Path of Destruction*. Little, Brown and Company, 2006.

³ Mark Schleifstein. "Flood protection plans lacking," *The Times-Picayune*, August 28, 2006.

However, these repairs should be considered little more than stop-gap measures. First, the levees are not armored with either rip-rap, geo-textile fabric, or even grass. Another storm like Katrina could easily overtop the levees and erode them. Regarding the floodgates at the outfall canals, while they will reduce the threat of flooding from storm surge, once they are closed for an approaching storm, the City will not be able to operate the mammoth pumping stations to remove any rainfall that accumulates in the bowl. Instead, temporary mobile pumps located near the floodgates with only a fraction of the pumping capacity of the pumping stations will have to do the job. Estimates of the portable pumps capacity range from 10% to 25% of the pumping stations at this time. This could leave the City vulnerable to flooding from a slow moving storm carrying a lot of rain.

The inadequacies that persist in the hurricane protection system are considered so serious that the American Society of Civil Engineers' External Review Panel released the following statement at an August 25, 2006 press conference:

There are serious deficiencies in the Southeast Louisiana hurricane protection system that must be corrected if the New Orleans area is to avoid a similar catastrophe when the next major hurricane strikes. There are flaws in the way the hurricane protection system was conceived, budgeted, funded, designed, constructed, managed, and operated.⁴

This statement should provide little comfort to anyone putting their faith in the repaired flood protection system. According to Ivor van Heerden, deputy director of the LSU Hurricane Center, "Right now, based on our computer modeling, the west and east banks of New Orleans have Category 2 hurricane protection. Larger storms would overtop the levees, and you'd have flooding from that overtopping. But another Katrina (a strong Category 3 hurricane when it hit the New Orleans area last year) has the possibility to chew up the Mississippi River-Gulf Outlet levees all over again, because they aren't armored yet."⁵

Another short term concern is whether parts of the levees and floodwalls that didn't fail during Katrina – and thus haven't yet been upgraded – could withstand a similar hurricane again. "We still have concerns about the existing hurricane protection system," van Heerden said.⁶

Planned Improvements

Following the horror of Katrina, the U.S. Congress issued specific orders to the Corps of Engineers:

- Design and construct a hurricane flood protection system to protect the New Orleans area from a "100-year hurricane" by the year 2010

⁴ "HURRICANE KATRINA: ONE YEAR LATER – What Must We Do Next?" A Statement by the American Society of Civil Engineers' Hurricane Katrina External Review Panel. August 2006.

⁵ Schleifstein. "Flood protection plans lacking."

⁶ Schleifstein.

- Submit to Congress by December 2007 alternative scenarios to protect New Orleans and the rest of the state's coast from even larger hurricanes

For the 2010 mandate, Congress approved \$5.7 billion for improvements. The first set of improvements may include the relocation of the pumping stations in New Orleans to the lakefront and the construction of floodgates in the Industrial Canal at the Seabrook Bridge, in the Intracoastal Waterway, and in the MR-GO. Experience indicates that these projects, each costly and with significant environmental issues, are likely to take longer to get from the drawing board to construction than the four years currently envisioned. The National Environmental Policy Act (NEPA) process itself is likely to take several years.

As for the long-range plan, called the Louisiana Coastal Protection and Restoration program, the plan “could combine construction of long-delayed coastal restoration projects with new, higher levees and gates blocking the entrances to Lake Pontchartrain to protect from stronger, but less frequent, hurricanes than the 100-year storms.”⁷ The similar Louisiana Coastal Area (LCA) Plan had a price tag of some \$14 billion. The long-range plan contains components that could take between 20 to 50 years to complete.

In summary, the Corps of Engineers is implementing its improvement program in phases. Phase I, the Recovery Phase, is restoring the hurricane flood protection system to its pre-Katrina status (i.e., Category 2 protection according to van Heerden). Phase II will upgrade the system to provide protection from a 100-year storm (which the Corps and others are currently trying to define.) Phase II is intended to be completed by the year 2010, but as indicated above, this ambitious goal is likely to slide backward due to factors out of the Corps' control. Phase III, which is currently not defined, is truly a long-term program, with implementation occurring in a time frame twenty to fifty years from now.

Implications for Planning

What does this mean for the recovery planning for the City of New Orleans? For starters, the people who live in New Orleans, St. Bernard, Plaquemines, and Jefferson Parishes did not have the level of flood protection that they believed they had before Katrina. Even with the protection system restored to its pre-Katrina condition, or better, there continue to be portions of the system that are substandard and may prove to be the failure points if another major storm should hit the area within the next few years.

It means that people living in New Orleans will have to live with greater risk until the actual improvements included in the Corps' 2010 plan are implemented. According to Robert B. Gilbert, P.E., a professor of civil, architectural, and environmental engineering at the University of Texas at Austin, “The level of risk residents of New Orleans experienced pre-Katrina was off the charts

⁷ Schleifstein.

relative to what people are generally willing to accept or tolerate.”⁸ And now, the people of New Orleans are being asked to put up with greater risks.

What can be done to reduce the risk to citizens living, or who want to live, in the City of New Orleans? The answer is, in the short term, not much more than to provide people information about the level of risk to which they are exposed. In the ASCE statement it is written that “The people of New Orleans—and all those who live in hurricane- and flood-prone communities around the country—must understand and acknowledge the risks under which they live. From this knowledge comes insight into what risks are acceptable for their communities and for the nation.”⁹

Along these lines, the USACE’s Interagency Performance Evaluation Task Force (IPET) has undertaken the critically important effort of quantifying the risks associated with the New Orleans hurricane protection system. Using sophisticated risk models, the IPET is analyzing the potential consequences from a range of storm scenarios. Among the variables considered are hurricane intensity, hurricane location and direction of approach, height and strength of levees, ability of pump stations to remove water, whether levee penetrations are closed, and the land elevation and its propensity for flooding.¹⁰

It should be noted that the level of risk changes over time, depending on changes in the natural and man-made environment. Therefore, the risk analysis needs to be updated as new information becomes available.¹¹

New Orleans cannot afford to rebuild infrastructure in areas of high flood risk, only to have another flood destroy those facilities again. The state and the nation would soon lose patience with such a policy. Consequently, the Recovery Plan for the City of New Orleans should recognize the following principles for guiding recovery planning and funding decisions:

1. All five drainage basins have differing levels of risk. The relative risk should be evaluated for each basin and this information given to the public. As a matter of public policy, investment in physical infrastructure in high risk areas should be avoided, or at least minimized.
2. This will change over time. As improvements are made to the hurricane protection system, risk should be reassessed for each basin and this information provided to the public and adjustments to public policy should also be made.

⁸ Robert L. Reid. “The Big Uneasy,” *Civil Engineering*, October 2006.

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The Greater New Orleans Metropolitan Area's East Gulf Portal: Protection, Restoration and Multiple-Use Planning

Introduction

The eastern perimeter of the Greater New Orleans Metropolitan Area (GNOMA) has become increasingly vulnerable to the devastating forces of nature. On August 29, 2005 Hurricane Katrina once again demonstrated that Lake Borgne and the eastern end of Lake Pontchartrain is an open portal to the Gulf of Mexico and that the GNOMA is exposed to killer storm surges through this portal. This lesson should have been learned after Hurricane Betsy in 1965, but it was not. There is now a renewed effort by all levels of government, concerned citizens and stakeholders to install “storm shutters” across this portal to protect against the devastating effects of future killer storms. These storm shutters include both structural and non-structural measures. Because of the massive nature of this effort, there is a need to prioritize the features with regard to urgency of implementation and time required for implementation (e.g., planning, design, environmental compliance, and construction.) There is a general consensus, including a Congressional directive, that a Category V level of storm protection is needed. Protective storm shutters are technically feasible and can be environmentally compatible; however, their design and implementation will require a regional and national effort, unrelenting and determined public will, major funding, and focused, unflagging leadership. The storm shutters constitute a very large public works project and will cost billions of dollars. Implementation of adequate storm surge and flood protection will alter the geographic landscape and hydrology of the region.

Coastwide Restoration and Protection Planning Efforts

The devastation caused by Hurricanes Katrina and Rita in 2005 resulted in the establishment of three coastwide restoration and protection planning efforts that are independent yet interrelated (Porthouse 2006). The U.S. Congress directed the U.S. Army Corps of Engineers (Corps), New Orleans District to prepare a Louisiana Coastal Protection and Restoration Project report (LACPR) that would provide a Category 5 level of protection and include a “full range of flood control, coastal restoration and hurricane protection measures” (Boston and Herr 2006:3). Funding for the study would come from Energy and Water Development Appropriations Act 2006 (P.L. 109-103) (\$8 million) and Department of Defense Appropriations Act, 2006 (P.L. 109-148) (\$12 million) (Boston and Herr 2006:3). The later funding would be made available once the State of Louisiana “...establishes a single state entity to act as local sponsor for construction, operation and maintenance of all the hurricane, storm damage reduction and flood control projects in the greater New Orleans and southeast Louisiana area” (Boston and Herr 2006:3). The Corps Preliminary Technical Report was due in July 2006 and the draft and final environmental impact statement and technical report is due in July 2007 and December 2007, respectively.

The State of Louisiana directed the Coastal Protection and Restoration Authority (CPRA) to develop a Comprehensive Master Plan with the guiding principles being: 1) integration of protection and restoration, 2) public and stakeholder involvement, 3) adaptive management and other processes, 4) recognition of constraints, and 5) land use (Porthouse 2006). The CPRA held a series of Stakeholder Meetings and Public Outreach between August and October 2006 and will have a Preliminary Plan and Public Meetings on that plan in November and December, 2007, respectively. A Draft Plan is due in January 2007 with Public Hearings in February 2007 and a Final Plan will be presented in April 2007.

The State of Louisiana established the Louisiana Recovery Authority (LRA) that endorsed a Louisiana Speaks initiative to formulate alternative redevelopment scenarios by October 2006. The later effort is “a multifaceted planning process...to develop a sustainable, long-term vision for South Louisiana in wake of destruction caused by Hurricanes Katrina and Rita” (Louisiana Speaks 2006). Stakeholder workshops were held in July and August 2006 and public meetings will be held on the scenarios generated through the workshops and other planning efforts in January 2007. A Final Report is due in March 2007. The stakeholder workshops generated several key findings relevant to redevelopment scenarios for the GNOMA and eastern perimeter (e.g., East Gulf Portal)(Louisiana Speaks 2006):

1. Combination of aggressive coastal restoration and strategic levee protection with regional coastal wetland restoration strategies that combine slower, more sustainable natural river diversions and water management with faster-acting pipeline conveyance of sediment to create new wetlands and barrier islands
2. Strategic levee alignments that concentrate protection around urban areas generally preferred
3. New Orleans’ recovery should be linked into a multi-modal regional transportation system
4. Big ideas for regional recovery and growth: regional rail, highway enhancements, new regional airport, closing MR-GO canal
5. Increased regional cooperation for economic development and equity issues
6. Building industries that leverage existing assets and needs (coastal science, new building technologies, energy sector, alternative fuels, biotechnology, film industry).

Restoration and Protection Planning in the GNOMA Region

Numerous investigations and restoration plans have been proposed over the past 30 years for the GNOMA and East Gulf Portal perimeter (Coastal Environments, Inc. 2006; Coastal Environments, Inc. 1973; Gagliano et al. 2006; Lee Wilson and Associates, Inc. and Coastal Environments, Inc. 2002; Lopez 2006; Louisiana Coastal Wetlands Conservation and Restoration Task Force and Wetlands Conservation Authority 1998, 1999; MRGO Environmental Sub-Committee 2000; Henry J. Rodriguez, Jr. and Sherwood M. Gagliano. 2005; US Army Corps of Engineers, New Orleans District 2004; Wicker et al. 1982). All of these plans include a combination of structural and non-

structural elements with a growing emphasis on long-term coastal landscape sustainability. Hurricane Katrina reinforced the urgency to develop a synergistic restoration and flood protection strategy for the GNOMA and perimeter. Table 1 is a composite of the various restoration and protection features, exclusive of the US Army Corps of Engineers Flood Protection Plans, proposed for implementation over a both a short-term and long-term time frame. One commonality among all of these proposed measures is the realization that coastal restoration and flood protection must be integrated. Denise Reed (2006:22) summarized the framework for coastal protection in stating “In the long term, hurricane protection for larger population centers, including the New Orleans region, can only be secured with a combination of levees and a sustainable coastal landscape.”

Both the Corps’ Louisiana Coastal Protection and Restoration Project and the State’s Comprehensive Master Plan, projected for completion in 2007, are anticipated to incorporate many of the measures of the restoration and protection projects identified in **Table 4.1**.

Table 4.1

Composite Listing of Proposed or Under Evaluation Restoration and Flood Protection Measures Involving GNOMA's East Gulf Portal Perimeter

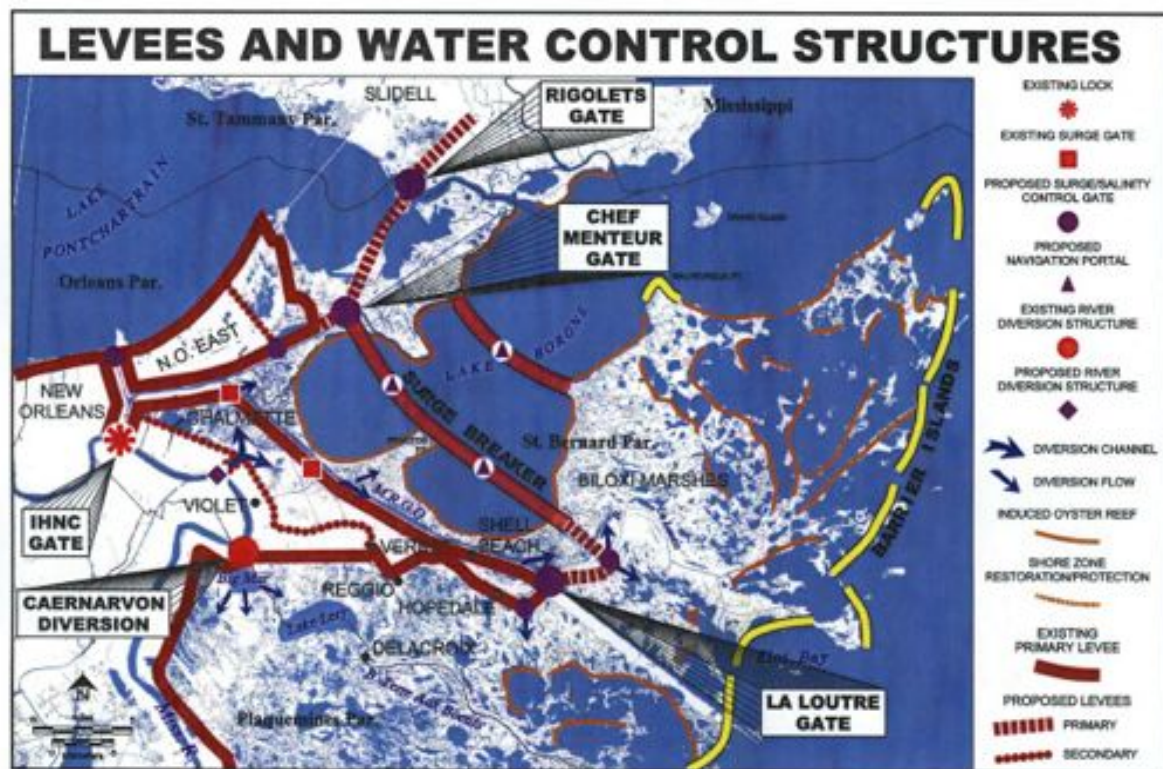
Project Measures (Plan source support for specific element noted in bracket)	Plan Source				
	1	2	3	4	5
MRGO Closure and Water Control Structure [1] (Restore Bayou la Loutre Ridge [1, 2, 3]-Constriction of MRGO to Intracoastal Waterway dimensions [2, 5])	X	X	X	X	X
Lake Borgne Surge Barrier & S Lake Borgne Containment Area [1] (Maintain the MRGO-Lake Borgne Landbridge [2, 3, 5])	X	X	X		X
Mississippi River-MRGO Conveyance Channel & Control Structure [1, 5] (Construct Violet Reintroduction to maintain target salinity in LA and MS [2, 3, 4, 5]) (new freshwater siphon [1])	X	X	X	X	X
Eloi Bay Barrier Islands and Induced Oyster Reefs	X				
Jean Louis Robin Barrier Islands and Induced Oyster Reefs	X		X		
Biloxi Marshes Barrier Islands and Induced Oyster Reefs [1] (maintain & restore Biloxi Marsh Landbridge [5] & Reefs-North and South [2, 3])	X	X	X		X
Barrier Island Restoration-Grand Gossier Island to Breton Island [1, 3] (Restore Chandeleur Barrier Islands [2, 5])	X	X	X		X
East New Orleans Landbridge Stabilization [1, 5] (Maintain critical marsh shorelines and ridges [2])	X	X		X	X
MRGO Open Water Channel Modification	X				
Central Wetlands Restoration [1, 5]	X				X
Maintain and Enhance Maurepas Landbridge with Maurepas Reintroduction (CWPPRA proposed project)		X			
Construct Jefferson Parish Fringe Marsh		X			
Maintain and Restore Breton Landbridge with Caernarvon and Marsh Creation [2, 5] (Caernarvon/Lake Lery Diversion Outfall Management [3, 4])		X	X	X	
Upgrade 40-Arpent Levee to MRGO Levee Standard			X		
Armour MRGO Levee			X		
Lake Borgne Storm Surge Barrier [1] and New Protection Levee			X		
Cypress "Islands" Project			X		
Freshwater Diversion at Bayou LaMoque (Rehabilitate structure to medium diversion capacity [4])			X	X	
Post Authorization Change for Diversion of Water Through Inner Harbor Navigation Canal for Enhanced Influence into Central Wetlands (St. Bernard Parish)				X	
Medium Diversion at White's Ditch & Fort St. Philip (Plaquemines Parish) & Bonnet Carre Spillway (St. Charles Parish)				X	
Medium-to-large Sediment Diversion at American/California Bay				X	
Sediment delivery via pipeline at American/California Bays, Fort St. Philip, and Quarantine Bay in Plaquemines, to Central Wetlands and Golden Triangle in Orleans and St. Bernard Parish				X	

1. Gagliano et al. (2006) – Mississippi River Gulf Outlet (MRGO) Channel Restoration and Mitigation Plan and Addendum
2. Lopez (2006) - Comprehensive Habitat Management Plan, Lake Pontchartrain Basin
3. Coastal Environments, Inc. et al. (2006) – Interim Recovery Planning, St. Bernard Parish
4. US Army Corps of Engineers 2004 – Louisiana Coastal Area (LCA), Louisiana Ecosystem Restoration Study, Vol. 1.
5. *US Army Corps of Engineers 2006a – Status of MRGO Deauthorization Analysis (Measure being evaluated in Deauthorization Study).

Figure 4.2 illustrates potential configurations of some of the measures of a comprehensive coastal restoration and protection plan that would benefit the GNOMA Region, especially the East Gulf Portal perimeter in the Eastern Lake Pontchartrain-Lake Borgne area.

Figure 4.2

Proposed Levees and Water Control Structures for the Eastern Gulf Portal



Source: Coastal Environments, Inc., 2006

The features include primary and secondary levees, surge breakwaters, floodgates, and a program of induced-reef and barrier-island building in the fringing wetlands. The figure also incorporates an old proposal, presently being reconsidered by the U.S. Army Corps of Engineers, to build a levee with floodgates across the eastern end of Lake Pontchartrain. The gates would be built across the Chef Menteur and Rigolets Passes and would be closed upon the approach of threatening tides and surge. It should be noted that flood protection in the GNOMA is a regional protection plan, the features of which are located in St. Tammany, Orleans, St. Bernard, Jefferson and Plaquemines Parishes.

Additional Breaux Act and State-derived restoration projects that are completed or pending for benefit of the East Gulf Portal perimeter include: Bayou Sauvage National Wildlife Refuge Hydrologic Restoration, Phase 1 and 2 (PO-16 & 18, 1996-97), MRGO Disposal Area Marsh Protection (PO-19, 1999), Bayou Chevee Shoreline Protection (PO-22, 2001), Hopedale Hydrologic Restoration (PO-24, 2004), Chandeleur Islands Marsh Restoration (PO-27, 2001), Lake Borgne Shoreline Protection (PO-30, 31, 32, pending), Violet Siphon (PO-01, 1992), Central Wetlands (PO-08, 1992), Crab Pond fences (PCWRP 1, 1991), Blind Lagoon fences (PCWRP 2, 2000), Bayou Bienvenue fences (PCWRP 3, 2001), MRGO-North Shore (Vegetation Planting, 1995), Bayou Bienvenue (Vegetation Planting, 1996), New Orleans GIWW (Vegetation planting, 2002), St. Bernard Wetlands Foundation (fiber mat planting demonstration, 2004), and MRGO Berm Mile -2 to -3 (Dredged material to feed Breton Island, 1999)(Gagliano et al. 2006).

With regard to the repair and restoration of the New Orleans Hurricane Protection System, the Corps (Hitchings 2006a, b) reports that Phase 1 repairs have been completed at a cost of \$800 million. Phase II and III of the hurricane protection system is beginning and the Design and Construction is estimated to cost \$4.9 billion.

An additional planning effort that affects flood protection and coastal restoration in the East Gulf Portal Area involves the Corps' current Congressional directive to develop a comprehensive plan to de-authorize deep draft navigation on the MRGO (U.S. Army Corps of Engineers 2006b). The Corps is in the process of investigating the various alternatives for and impacts of de-authorizing deep draft navigation. The Interim Report is scheduled for delivery to Congress on December 15, 2006 with the final plan to be incorporated into the Louisiana Coastal Protection and Restoration Report due in December 2007. Alternatives currently being evaluated include:

- Shallow draft navigation
 - Maintain the channel for shallow draft navigation
 - Maintain the channel for shallow draft navigation and build a structure across the channel with an opening for shallow draft vessels
 - Maintain the channel for shallow draft navigation and build a structure across the channel with a navigable gate
 - The gate would normally be closed but could open for shallow draft vessels
 - Maintain the channel for shallow draft navigation and build a structure across the channel with a navigable gate
 - The gate would normally be open but would be closed before and during storms

- Cease channel maintenance and build a closure structure across the channel
- Cease channel maintenance (US Army Corps of Engineers 2006b).

Multiple-Use Aspects of Protection and Restoration Measures

Ironically, the massive public works project needed to provide storm protection, upon which the recovery and economic viability of the GNOMA depends, provides unique opportunities for environmental enhancement, economic development and improved quality of life for residents of the region. Many of the flood protection measures are concentrated in the GNOMA's East Gulf Portal Area. A portal is defined as an entrance, a grand imposing gate to a city. The East Gulf Portal is a two-way passage. While the eastern lakes area is an entrance for storms, it is also the region's gateway to the fishing and recreational resources of the Gulf of Mexico. The eastern lakes area has long been an underutilized resource. The challenge is to provide a gate and barrier system (part of the "storm shutters" concept) in the portal that can provide protection against storm surge, but is passable under ordinary conditions. A comprehensive plan that accomplishes these objectives requires implementation of two concepts: 1) a plan for surge and storm protection and 2) a multi-use plan for environmental enhancement and economic development.

The previous discussion regarding storm protection and coastal restoration investigations in progress addresses components of these two concepts. A major contributing factor for the devastation caused by Hurricane Katrina has been attributed to the surge funnel effect present in the western end of Lake Borgne and the Chef Menteur Pass area that is the result of the natural configuration of the land and the navigation canals dredged in the area. Storm tides and surges from the southeast and east are pushed into the triangle between the Gulf Intracoastal Waterway (GIWW) and the Mississippi River Gulf Outlet into the Inner Harbor Navigation Canal (IHNC) where they are amplified and have resulted in lethal levee breaches during both Hurricane Katrina and Hurricane Betsy. The same processes drive storm tides and surge into Lake Pontchartrain through the Chef Menteur and Rigolets tidal passes that connect Lake Pontchartrain and Lake Borgne. All experts agree that levees in this zone of vulnerability must be increased in elevation and strength. There is also agreement that raising these levees will be difficult and slow because of the low load-bearing conditions of the soil and near-surface sediment in the area. Most experts also agree that restoration of natural features in the area, including marshes, natural ridges and barrier islands will also help reduce the elevation and intensity of the surge.

The design, construction, and installation of many of the flood protection and coastal restoration features being considered for the East Gulf Portal area provide multiple-use and economic development opportunities that would support the recovery and rebuilding effort in the GNOMA. Local residents who suffered the Katrina catastrophe should be given the opportunity to benefit from the economic opportunities resulting from protection and restoration activities. This opportunity can be realized through identification of job and career possibilities and initiation of the education process for the targeted labor force. For example, the local colleges, vo-tech schools, and even high school intern programs could provide training at a basic technical level for data collection or project

component implementation (i.e., wetland and barrier island restoration, freshwater diversion, induced oyster reefs) associated with project monitoring activities, fisheries grow-out programs, wetland plant growing and transplanting, or induced oyster reef manufactured components. Areas for new job growth related to flood protection and coastal restoration include: 1) primary construction and protective measures (fabrication yards and deployment vessels), 2) operation and maintenance (monitoring, safety, patrolling, repairs, operation of gates and water control structures), 3) fisheries (recreational fisheries and mariculture), and 4) ecotourism and heritage-oriented tourism.

A good example of multiple use of protection and restoration features involves the proposed tide and surge defense for Lake Borgne. As proposed, the artificial barriers or breakers are constructed across the surge zone, would function as “speed bumps” and thus, reduce elevation and energy level of the surge before it impacts the storm levee system. The barrier would be penetrable and allow navigation. Several designs for the surge barrier or breaker under consideration include sinking derelict ship hulls, installing massive wave breakers cast from concrete, and positioning submersible concrete barges. A positive aspect of this concept is that a surge barrier or breaker could be implemented in less time than would be required to raise the flood levees. It should be emphasized that the surge breaker is not proposed as a substitute for raising levees and floodwalls, but rather as an additional line of defense that would provide protection and could be implemented within a shorter time frame. The surge barrier would provide a hard surface for attachment of a variety of estuarine organisms, thus creating a zone of greater biodiversity and additional recreational fishing habitat. Should the barrier be constructed of submersible concrete barges, the barges could serve as grow-out areas for fish used to restock coastal waters.

The East Gulf Portal area also contains numerous water-oriented fisheries and recreational communities that already contribute to the area’s economy and could be promoted as ecotourism and heritage tourism destinations (Coastal Environments, Inc. 1995) (**Figure 4.3**). When these communities are viewed in the context of the components of the needed storm and restoration protection program, new opportunities for environmental enhancement and economic development emerge. These eastern perimeter communities lying outside the hard structure protection features (levees) should be storm hardened to both withstand and remain viable after future storms. The storm hardening could make these communities safe harbors for all but the severest category of storms and foster the recreational/fishing-oriented lifestyles of local residents. Programs to foster development of restaurants, boat/airboat tours, fishing charters, and art and tourism related activities would contribute to the economy of the GNOMA and help sustain the population that has called this area home for many generations.

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Section 5:

Public and Private Infrastructure and Utilities Recovery Assessment

The purpose of the Citywide Recovery Assessment of the City's infrastructure is to provide a current snapshot of the recovery. The assessment identifies the challenges to future recovery and the planning implications of those challenges to the recovery.

The Sewerage and Water Board of New Orleans (S&WB)

The S&WB provides and maintains the City's water supply, its sewerage collection and treatment system, and its major drainage infrastructure. These S&WB services rely on an underground labyrinth of infrastructure that represented state-of-the-art technologies at installation. However, large segments of the systems have been in the ground for up to 100 years. These systems were approaching or exceeding their design lives pre-Katrina. Hurricane Katrina seems to have exacerbated their deterioration and accelerated the need for system wide improvements.

Water Supply

Separate water supply systems serve the east and west banks of Orleans Parish. Both systems are part of the S&WB network. The combined network includes:

- Two water purification plants which with a combined total capacity of 272 million gallons per day (MGD).
- Average daily production of 141 MGD.
- Average metered consumption of 72 MGD.
- Five distribution pump stations which have capacities ranging from 4 to 50 MGD.
- Twelve ground storage tanks having a total capacity of 48 MGD.
- Two elevated storage tanks having a combined capacity of 4 MGD.
- Eight major distribution lines ranging for 20" to 50" in diameter.

Other features of the system:

- Over seventy percent of the water mains are less than or equal to 8" in diameter.
- Over sixty percent of the water mains are cast iron.
- Over thirty percent of the water mains are asbestos cement.
- Approximately one third of the water distribution system is approaching its 100 year life.
- Fifty percent of the water mains were installed prior to 1930.

Prior to Katrina, the East bank water treatment plan produced approximately 44 billion gallons of water per year. Approximately 49% of the production was not accounted for and it is likely that a substantial portion of the unaccounted for water represents system leaks. System components most susceptible to leakage include pipe joints, valves and fire hydrants. These leaks tend to undermine the bedding supporting pipes and this further accelerates the loss of integrity of system components.

Post Katrina, the S&WB struggled to restore water to the City. Initially the focus was on providing potable water throughout the East Bank service area. The S&WB indicates that as of October 9, 2006 all areas of the City now have access to potable water. A number of other issues relating to the current and future operations remain:

1. Water Supply for Fire Protection – Hurricane Katrina substantially damaged the City’s water distribution system, propagating leaks throughout the City. The work by contractors since Katrina further exacerbated the conditions with leaks. In September 2006, the S&WB indicated that the post Katrina leaks to the water distribution system had been reduced by 50%. Although the S&WB can now provide sufficient pressures to maintain the integrity of its potable water supply, the system has not been restored to pre-Katrina levels for purposes of fire protection.

The New Orleans Fire Department reports that fire flows have improved considerably over the last two months, but there are still intermittent events where flows are insufficient for fire protection. Decreased pressures can affect building occupancies protected by sprinkler systems and the Fire Department has experienced situations where fire hydrants cannot provide sufficient flows at fires.

The S&WB is proactively working with the Fire Department during fires, opening and closing system valves to route more water to fire locations. The Fire Department currently utilizes water tanker trucks and portable 3,000 gallon reservoirs as backup to the City water supply. Also, the Fire Department temporarily relies on two helicopters outfitted with equipment for fire protection.

The City of New Orleans has a fire insurance rating of Class II. The ratings are conducted by the Property Insurance Association of Louisiana (P.I.A.L.). Lower ratings typically result in the lowering of most commercial insurance premiums and some residential premiums. Because of Katrina the City of New Orleans has been given a two-year grace period to restore its Fire Department capabilities (equipment, equipment location and manpower) and its water supply integrity. At which time, the City will again be rated by the Property Insurance Association of Louisiana. Insurance rates may be adjusted in response to the findings of that rating. Integrity of the water supply system will be a component of the rating score.

2. Long-term system integrity, damage from exposure to salt water – The S&WB indicated in its Press Release of June 19, 2006 that:

“The extent of damage to the steel and iron portions of the water transmission and distribution systems due to extended contact with salt water are being studied, but the damage is thought to be extensive.”

The S&WB has not as yet released a report reflecting how its system may have been damaged by exposure to salt water.

3. Long term system integrity, aging Infrastructure - In 2003 the S&WB initiated a capital facilities planning process to analyze the need for system wide upgrades to its aging water supply system. The consultant recommendations included:
 - A Leakage Management Program.
 - A System wide Structural Rehabilitation Program of its aging distribution system.
 - Other investments in systems operations.

Total capital cost for that program in 2003 dollars was \$2.8 billion.

The S&WB also engaged Black and Veatch to consider the financial requirements for raising revenues in support a capital improvement program. The Report on Revenue Requirements, Costs of Service and Rates for Water Service was issued prior to Hurricane Katrina in April 2005, and a copy of the report is available on the S&WB website.

The report evaluated the 2005-2009 planning cycle. It suggested annual rate increases as follows:

Year 2005 – 21%
Year 2006 – 17%
Year 2007 – 5%
Year 2008 – 5%
Year 2009 – 4%

Compounded over the five-year period, these annual increases result in a 62.3% increase in water rates.

These rate increases generate a revenue stream that supports a \$155.6 million capital program, which is implemented within that five-year planning cycle. In comparison, the program of improvements supported by the Black and Veatch proposal represents only 5.5% of capital investments recommended in the earlier capital planning report.

All of this planning was undertaken pre-Katrina. The Board is now trying to integrate the affects of Hurricane Katrina into its operations, including the extent of the short-term damage to its systems, the

potential for increases to its operating and maintenance costs resulting from the event, and the disruption of its revenue stream.

To this end the S&WB has identified a listing of capital projects to address the post Katrina recovery. The complete listing of water, sewerage and drainage improvements is attached as Appendix 1. A summary of the of their recommended water supply and distribution system improvements follows:

- Repairs to the Carrollton Drinking Water Plant - \$77.4 million
- Algiers Drinking Water Plant, Diesel Storage - \$45,000
- Leak Detection Management Program – \$400,000
- Water Hydraulic Model - \$525,000
- Potable Water System Replacement Program – \$4 Billion

The total cost for these improvements is approximately \$4.1 billion.

Wastewater Collection System and Treatment Plants

Collection System Components - The New Orleans sewerage system can be divided into four components: gravity system, pump stations, force mains and treatment plants. The gravity collection system includes 1,450 miles of sewers of which over 75% are vitrified clay pipe. The system also includes 82 pumping and lift stations, over 100 miles of force mains and two treatment plants.

Sewer System Evaluation and Rehabilitation Program - Prior to hurricane Katrina, the Sewerage and Water Board of New Orleans (S&WB) was implementing a multi-year EPA-mandated program, the Sewer System Evaluation and Rehabilitation Program (SSERP), to identify and address structural and mechanical deficiencies in the wastewater collection system and to ensure that the system has adequate capacity. This program was in compliance with Section XV-Clean Water Act Remedial Measures: Comprehensive Collection System Remedial Program of the June 1998 Consent Decree between the S&WB, the City of New Orleans, the State of Louisiana, plaintiff interveners, and the United States of America. The goals of the SSERP are to minimize unauthorized discharges from the East Bank collection system and to ensure that the system has adequate capacity to convey peak flows to the East Bank Wastewater Treatment Plant (EBWWTP).

Funding for the SSERP comes from three sources: Federal funds via EPA grants; S&WB matching funds and S&WB operations and maintenance funds. Prior to Hurricane Katrina, the S&WB had received approximately \$40 million in federal grants in support of the program.

The SSERP includes rehabilitation of the collection system and remedial measures to ensure that the system has adequate capacity to convey peak flows to the EBWWTP. The projects are divided into nine basins with the following consent schedule.

Table 5.1
SSERP Consent Schedule

BASIN	BEGIN CONSTRUCTION	END CONSTRUCTION
Lakeview Rehab	December 1998	December 2001
CBD Rehab	January 2001	December 2005
Gentilly Rehab	January 2002	December 2004
Uptown Rehab	January 2003	December 2005
Mid-City Rehab	January 2004	December 2006
Lower Ninth Ward Rehab	January 2005	December 2007
Carrollton Rehab	January 2006	December 2008
New Orleans East Rehab	January 2007	December 2009
South Shore Rehab	January 2008	December 2010
Algiers Rehab	TBD	TBD
Capacity-All Basins E.B.	April 2003	December 2010
Capacity-West Bank	TBD	TBD

In July of 2005, the estimated cost of the SSERP was \$632 million and the cumulative encumbered SSERP capital cost projection through 2005 was \$345 million. The consent decree milestone for end of construction was December 2010. In July, there were approximately 20 construction projects ongoing in the SSERP.

Wastewater Collection System Post Katrina - Following the storm, most SSERP related activities were suspended. The S&WB is scheduled to meet with EPA in November of this year to present a revised plan and schedule. The details of this plan are currently not available.

The East Bank Wastewater Treatment Plant and a large number of sewage pumping stations were severely damaged during the storm. The S&WB continues to rehabilitate these facilities but details of status, cost and schedule are currently not available.

The S&WB also enacted projects to clean and close caption televise (CCTV) portions of the gravity sewer system following the storm. The first project to clean and CCTV cost approximately \$14 million and identified a number of needed repairs to the gravity sewer system. At this time, FEMA has not agreed to reimburse all of these costs or pay for the repairs. In November, the S&WB is preparing to start another clean and CCTV project estimated at approximately \$5.4 million.

The Board is now trying to integrate the affects of Hurricane Katrina into its operations; including the extent of the short-term damage to its systems, the potential for increases to its operating and maintenance costs resulting from the event, and the disruption of its revenue stream.

To this end, the S&WB has identified a listing of capital projects to address the post-Katrina recovery. A summary of their recommended improvements to the sewerage collection system and treatment plant follows:

- East Bank Wastewater Treatment Plant
 - Repairs - \$3.3 million
 - Mitigation – \$31.7 million
- Collection System Improvements - \$729.7 million

The total cost for these improvements is approximately \$765 million.

Drainage Infrastructure

Responsibility for maintenance of the City's drainage system infrastructure is shared between the S&WB and the City of New Orleans Department of Public Works (DPW). The stormwater system features a collection grid, typically integral with the roadway network, which is maintained by DPW (pipes having a diameter less than 36"). A system of larger drain pipes (36" or greater); box culverts; and, open canals carry large volumes of stormwater to the drainage pumping stations. Outfall canals carry the water from the pumps into Lake Pontchartrain. The S&WB maintains responsibility for this system.

Excluding areas flooded in eastern New Orleans and the Lower Ninth Ward, the catastrophic flooding experienced within New Orleans was caused by inadequacy and failure of sheet pile floodwalls abutting various outfall canals, and floodwalls built as part of the Inner Harbor Navigation Canal Hurricane Protection System. In response to the failures associated with the outfall canal floodwalls, the Corps of Engineers is constructing closure structures at Lake Pontchartrain at each of the outfall canals. Temporary pumps are located at the closure structures, but these pumps cannot match the capacity of the drainage pumping stations that empty City stormwater into the outfall canals. The Corps is also planning for replacement pump stations that will be located at Lake Pontchartrain.

Since Hurricane Katrina, DPW has spent \$34.5 million to clean drain lines and catch basins located throughout the east bank of New Orleans. Work on this process continues to date. DPW has requested funding from FEMA to cover the costs of these improvements.

Following the hurricane, the S&WB signed a \$60 million contract to provide repairs to its drainage pumping stations. The extent to which expenditures made under this contract will be covered by FEMA is not clear.

The S&WB indicates as of September 25, 2006 that 90% of the drainage pumping capacity has been restored. Only two stations in New Orleans East—the Elaine Street Station and Station No. 18—are not yet functioning. Other stations, although operational, have not been restored to their pre-Katrina condition.

An additional \$40 million has been appropriated by Congress for repairs to New Orleans drainage pumping stations. These funds are being administered by the Corps of Engineers and the funding does not require a local match. To date, the Corps has signed contracts obligating \$10.9 million of that appropriation.

Another response to Hurricane Katrina was the restoration of federal commitments to the Southeast Louisiana Flood Control Project (SELA). The program was initiated in response to the catastrophic flood of May 1995, which inundated much of the greater New Orleans area. Orleans Parish projects already completed, or approaching completion under the SELA program, include:

- The Broad Street Pump Station (PS 1) improvements
- The Napoleon Avenue culvert, Claiborne Avenue to Fontainebleau Drive
- The S. Claiborne Avenue culvert, Nashville Avenue to Louisiana Avenue
- The Hollygrove-Prichard Pump Station (Prichard Place at Monticello)
- Hollygrove-Railroad embankment culvert, Monticello to Eagle
- The Hollygrove-Eagle Street culvert, Forshey to Stroelitz
- The Hollygrove, Dublin Street culvert, Belfast to Forshey
- The Hollygrove, Forshey Street culvert, Dublin to Eagle
- The Dwyer Pump Station discharge tubes

The schedule for completion of the Dwyer Pump Station improvements was interrupted by Hurricane Katrina. Its current estimate for completion is December '07.

Post- Katrina, Congress appropriated \$224 million to fast track Orleans and Jefferson Parish SELA projects. Under this SELA appropriation, the local sponsor (in Orleans Parish, the S&WB) is not required to provide a match to these funds. Funded Orleans Parish projects currently under design include:

- The Dwyer Intake Canal, from St Charles canal to new pump station at Jourdan Road.
- The Florida Avenue canal improvements, from Pump Station 19 to Mazant
- The Florida Avenue canal improvements, from Mazant to Piety
- The Florida Avenue canal improvements, from Piety to St. Ferdinand

Five additional SELA projects have been authorized by Congress for construction, but have not as yet been funded through an appropriation. These include:

- Florida Avenue canal improvements, from St Ferdinand to PS "D, earliest possible construction – 2009
- Napoleon Avenue culvert, Constance to S. Claiborne Avenue; earliest possible construction start – 2009

- Louisiana Avenue culvert, Constance to S. Claiborne; earliest possible construction start – 2009
- Jefferson Avenue culvert, Constance to S. Claiborne; earliest possible construction start – 2009
- S. Claiborne culvert, Lowerline to Monticello; earliest possible construction start – 2009

The Corps is also studying two other Orleans Parish projects under SELA. The Algiers area improvements include consideration for improvements to a west bank drainage basin which is served by the General DeGaulle Canal, the Donner Canal, the Nolan Canal, and Pump Station 13. Conceptually, the project would involve improvements to the capacity of the canal network, upgrades to Pump Station 13 and improvements to several drainage laterals which bring stormwater into the General DeGaulle Canal. This study is underway.

Another study, currently on hold, would involve the Lakeview/Gentilly drainage area. Drainage features under consideration include the Orleans Avenue culvert, Pump Station 7 to Scott Street, a new Pump Station at Harrison Avenue and the 17th Street Canal, and a new Pump Station at Robert E. Lee and the Orleans Outfall Canal.

The SELA program in New Orleans is focused on upgrades to the overall capacity of the S&WB drainage network, rather than on Hurricane Protection.

The S&WB has also identified the following drainage projects as needs post-Katrina:

- Emergency Cooling Water at Pumping Stations - \$6 million.
- Drainage Station Emergency Power Supply - \$330,000.
- Lining of Open Canals in New Orleans East – \$20 million.

BellSouth Corp

BellSouth Corp. is the dominant local telephone provider in nine Southeastern states including Louisiana. Since the third quarter of 2005, the company has incurred roughly \$910 million in Hurricane Katrina related expenses. However, because of its broad geographic rate base and diversified portfolio of services, which include Cingular Wireless LLC and DSL, the company has remained profitable, reporting second quarter profits of \$887 million.

Focusing on New Orleans, BellSouth is currently servicing 100,000 fewer customers post Katrina. However, they have been able to provide service to 95% of those customers requesting service. The areas continuing to experience service disruptions are geographically dispersed throughout the City. BellSouth recently restored internet service to eastern New Orleans, which was the last area of the City remaining without service access.

BellSouth indicates that their recovery plan will provide 100% service coverage for New Orleans. The recovery effort is influenced by the following factors:

- BellSouth is focusing recovery efforts on areas where persons are requesting service.
- Their recovery plan considers efforts that provide network connectivity.

Cox Communications, New Orleans

Cox Communications is diversified geographically with a base of over more than 6.7 million total residential and commercial customers. Cox offers an array of communication services, including cable, advanced digital video programming services, local and long-distance telephone services, high-speed Internet access, and commercial voice and data services. This diversified service base has allowed Cox to maintain profitability, while restoring its network infrastructure in response to Hurricanes Katrina and Rita.

In August 2006, Cox reported that its New Orleans subscriber base has decreased from 270,000 customers pre-Katrina to 187,500 customers post-Katrina. Cox has been able to provide service to over 90% of those customers requesting service. Areas continuing to experience service disruptions are geographically dispersed throughout the City. Cox indicates that approximately \$550 million will be spent over the next five years to complete the restoration and upgrade of its New Orleans network. Also, as part of its commitment to New Orleans, in July 2006, Cox opened a new customer service center in New Orleans.

Entergy New Orleans

Entergy New Orleans was formed in the 1980s as an outgrowth of New Orleans Public Service, Inc. (NOPSI). Entergy New Orleans provides electricity and gas service. Unlike other private utilities serving New Orleans, (BellSouth Corp and Cox Communications) that operate within large geographic service bases, Entergy New Orleans is structured to provide its services only within the City of New Orleans.

Hurricane Katrina's effect on the Company was catastrophic. The electrical distribution grid incurred \$161 million in damages. The gas system restoration is estimated to be \$122 million. Also, because of the overall flood impacts to the gas distribution system, Entergy plans a system rebuild, which is estimated to cost \$355 million.

As measured by investment made in systems restoration, through the first quarter of '07, Entergy estimates that its electrical distribution system restoration will be 98.5% complete and that its gas system restoration will be 36% complete. Pending availability of funding, the work on the gas system rebuild involving the replacement of 844 miles of gas line is scheduled to occur through year 2017, with approximately 40-60 miles of line replaced each year. To date, Lake Catherine and portions of Lakeview and the lower 9th ward remain without gas service availability.

Unlike the other private utilities serving New Orleans, these required investments cannot be spread over a diverse geographic base. In addition to devastating the Entergy New Orleans service infrastructure, Hurricane Katrina has reduced the Entergy New Orleans customer base to approximately 85,000 customers, which represents 40% of the customers served pre-Katrina.

In response to Katrina affects, requirements for \$638 million of re-investment coupled with the cleavage of over 50% of its revenue base, Entergy New Orleans placed itself in Chapter 11 bankruptcy protection.

Published estimates indicate that rates charged to Entergy New Orleans customers could increase by 120% if the utility is forced to undertake these improvements without some form of assistance. Various actions are under consideration to mitigate the potential rate increases. At its October 12, 2006 meeting, the Louisiana Recovery Authority (LRA) reserved \$200 million of Community Development Block Grant (CDBG) funds for disbursement to Entergy New Orleans to mitigate potential rate increases to Entergy New Orleans customers.

Two other venues are also being considered. Folding Entergy New Orleans into the Entergy Louisiana would increase the customer base to approximately 730,000. This would spread the recovery costs over a much broader customer base and reduce the risk that New Orleans customers would ever again be placed in a situation where they would have to bear the total costs of restoring their electric and gas services. Under this scenario, the regulation of utility rates for electricity and gas services would then fall under the jurisdiction of the Louisiana Public Service Commission, rather than the New Orleans City Council.

Another action under consideration by the New Orleans City Council is a local buyout of Entergy New Orleans. It is unclear how this course of action would mitigate required increases in utility rates, and it would do nothing to diversify the geographic rate base.

In the interim, it is expected that Entergy New Orleans will pursue requests for rate increases. Unless other funding sources can be identified, rate increases will be necessary both to move the infrastructure recovery forward and to provide sufficient financial solvency to lift the Company out of bankruptcy.

Wi-Fi

The New Orleans City Council approved in May an ordinance to enable EarthLink, an Internet service provider (ISP), to build a Wi-Fi broadband network in New Orleans. The Wi-Fi mesh network provides high-speed Internet access for residents, businesses and visitors in New Orleans. EarthLink is providing a free service tier and a paid service tier. The free service will be offered for a limited time during the City's rebuilding efforts at speeds up to 300kbs. The ISP will also offer a higher speed paid service. The wireless service will cover a 20 square mile area that includes the Garden District, Central Business District, French Quarter and Algiers. The system is expected to be

in place by the years end. EarthLink will continue to build out the system if there is sufficient demand outside the original 20 square mile area.

The municipal Wi-Fi mesh network, installed to support businesses after the storm, will be taken down once the EarthLink system is operational. The City's network covers the Central Business District and parts of the French Quarter.

As part of its commitment to open access, EarthLink is enabling multiple, competing providers to offer their services to consumers and businesses over its network. EarthLink is deploying Wi-Fi routers on light poles throughout the service area allowing wireless data connectivity between consumers and the Internet.

Summary

Service Availability

Overall, service within Orleans Parish has been restored by all utilities. Exceptions include small pockets in Lakeview, the Lower Ninth Ward and New Orleans East. Residents in those areas should contact utilities to discuss their individual properties. Utility providers indicate that they are focusing recovery efforts on serving returning customers.

Private Utilities

The three major private utilities serving New Orleans pre-Katrina were BellSouth Corp, Cox Communications and Entergy New Orleans. The primary lesson learned from Hurricane Katrina is that large geographic customer bases diversify the risk to both investors and customers. BellSouth Corp and Cox Communications both experienced substantial recovery costs, but these costs have been spread over their large customer bases. Unfortunately, the customer base for Entergy New Orleans is limited to Orleans Parish. Even with a \$200 million funding commitment from the Louisiana Recovery Authority, it is not clear that Entergy New Orleans will be able to complete the required restoration of its infrastructure or return to financial solvency without substantial rate increases.

The Sewerage and Water Board

Drainage – The good news, and it is good news, is that the flooding risk to City residents has already been restored to pre-Katrina levels; and it will be much improved five years hence because of the federally funded investments being made to the City's drainage and flood protection infrastructure.

The drainage pumping stations are being repaired and upgraded under a \$40 million Corps of Engineers program. A reinvigorated SELA Program will continue to improve the performance of the internal drainage network by enhancing pumping capacity with upgrades to pumping stations, by the addition of new pumping stations and by capacity improvements to critical conveyance channels.

The S&WB has also identified an additional listing of projects totaling approximately \$26.3 million. Funding sources for these projects have not been identified.

Outfall channels are already protected from exposure during tropical weather events, and new Lakefront pumping stations will be constructed. The one drawback to this situation relates to the possible closure of the outfall canals during tropical weather events. Until the new lakefront pumping stations are constructed, there will be a risk of stormwater (not lake water) flooding due to the diminished pumping capacity available during tropical weather events. It should be noted that the largest pre-Katrina flood experienced in New Orleans was in May 1995 and that was not a tropical weather event.

Water Supply - The S&WB continues to face significant obstacles in the post Katrina recovery of its water distribution system. Fire flows have not been restored to post Katrina conditions, and there is a risk that fire insurance rates will be affected as a consequence. The aging distribution network was in need of substantial reinvestment prior to Katrina. Hurricane Katrina exacerbated system leaks and it unclear how the storm may have affected the life expectancy of network components. The S&WB has identified a listing of projects totaling approximately \$4.1 billion. Additionally the customer base has been substantially reduced. Funding from other than local sources, including FEMA and the Louisiana Recovery Authority, will be critical to recovery of the City's water supply.

Sewerage Collection and Treatment – Prior to Hurricane Katrina the S&WB was operating its sewerage system within the terms of a consent decree with EPA. The decree committed the S&WB to a 15 year program of upgrades estimated to cost over \$630 million. The Board is meeting with EPA in November to discuss its continued performance under the terms of the consent decree.

Post Katrina, The S&WB has undertaken a program to clean and document the need for Katrina related repairs to its gravity network. Force mains, pumps and their associated electrical systems were repaired after Hurricane Katrina, but many of these repairs are recognized by the Board as “temporary fixes”. Also, it is unclear how the storm may have affected the life expectancy of these components. Similarly, the East Bank Wastewater Treatment Plant was flooded by the storm, and components of the plant may be at risk to reduced operating life expectancy.

The S&WB has identified a listing of capital improvement projects totaling approximately \$765 million. With the S&WB customer base substantially reduced, funding from other than local sources, including FEMA and the Louisiana Recovery Authority, will be critical to recovery of the City's sewerage collection and treatment system.

Section 6: Transportation Assessment

Introduction

The following narrative is a description of the status of recovery efforts pertaining to the City's transportation system. The assessment is based on information provided and progress made effective October 2006.

Transit

Regional Transit Authority – The Regional Transit Authority (RTA) resumed service on October 2, 2005 and has steadily added routes since that time. Prior to Hurricane Katrina RTA was funded by the New Orleans hotel/motel sales tax. In the aftermath of Katrina, RTA was operating on FEMA grants, which have since expired in mid 2006. Presently, twenty-eight routes have been restored. Prior to Katrina RTA operated fifty-four routes.

Approximately one-fourth of RTA ridership is generated in the Uptown area. Due to extensive damage to the 100-year old overhead electrical system, the St. Charles Avenue streetcar line is not expected to be back in operation until the spring of 2007.

The major bus transfer locations are:

- Claiborne Avenue at Carrollton Avenue
- Carrollton Avenue at Tulane Avenue
- Elks Place at Tulane Avenue
- Due to heavy pedestrian traffic downtown, the segment of Canal Street from Claiborne Avenue to the Mississippi River is also considered a major transfer location from bus-to-bus and from bus-to-streetcar
- Westbank Expressway at Van Trump Street (Gretna, Jefferson Parish)

The RTA is using the pre-Katrina system as a guideline for the post-Katrina service network. In addition to funding limitations, RTA is experiencing a shortage of bus drivers and other staff personnel. The damage sustained by RTA from Hurricane Katrina was significant and is summarized below:

- 2 of 3 maintenance facilities lost
- Headquarters building lost
- 30 out of 66 streetcars lost (45%)
- 197 of 372 buses lost (53%)
- 24 of 36 lift vans lost (67%)
- 800 of 1350 employees lost (59%)
- Severe damage to St. Charles track and electrical system.

Table 6.1 illustrates current routes in service and post-Katrina ridership trends dating back to October, 2005. Ridership increased significantly at the beginning of 2006, peaked in June, then fell in October.

TABLE 6.1
RTA Ridership by Route

Service Line	Oct - 05	Feb - 06	June - 06	Oct - 06
2-Riverfront Streetcar	n/a	3,567	11,482	5,971
5-Marigny/Bywater	755	3,723	5,037	3,494
10-Tchoupitoulas	1,499	10,366	12,012	9,726
11-Magazine	3,846	39,821	51,377	47,019
12-St. Charles	12,316	99,968	137,307	107,990
14/91-Jackson/Esplanade	857	19,753	30,971	27,349
15-Freret	n/a	8,481	8,165	7,491
16-South Claiborne/Poydras	n/a	15,494	17,081	15,050
19-Nashville	n/a	n/a	1,168	815
27-Louisiana	1,764	11,790	15,968	12,739
28-Martin Luther King	n/a	4,779	9,998	7,180
32-Leonidas	325	2,298	2,682	2,508
39-Tulane	n/a	27,225	49,466	42,630
42-Canal Cemeteries	179	25,493	49,820	45,118
42-Canal Streetcar	n/a	16,128	61,925	44,516
52-St. Bernard / LC	n/a	7,629	12,543	12,451
55-Elysian Fields	n/a	10,163	18,104	20,616
57-Franklin	n/a	11,401	19,165	15,491
60-Hayne	n/a	564	1,576	1,935
64-Lake Forest Express	n/a	n/a	2,281	3,071
84-Galvez	n/a	2,992	3,809	3,284
88-St. Claude/Jackson Barracks	152	27,955	42,344	42,523
94-Broad	n/a	13,513	20,458	24,339
101-Algiers Loop	517	6,973	10,066	7,461
102-General Meyer/Whitney	2,142	15,148	20,034	17,484
107-General DeGaulle	3,419	25,212	34,816	26,506
108-Algiers Local	2,518	11,213	10,934	6,835
201-Kenner Loop	5,274	9,275	13,379	13,742
TOTALS	35,563	430,924	673,968	575,334

LA Swift Bus Service – LA Swift is a free bus service that transports displaced residents from the New Orleans area between Baton Rouge and New Orleans. Since its inaugural run on October 31, 2005, the daily number of LA Swift passengers has grown consistently and now averages 750 riders every weekday.

LA Swift provides nineteen daily departures Monday through Friday and twelve daily departures Saturday and Sunday. The first buses run at regular intervals from 4:30am to 8:20pm. Between Baton Rouge and New Orleans, LA Swift makes stops in Sorrento and Laplace. Local shuttles circulate through the Sorrento and Laplace areas to pick up passengers and bring them to the transfer locations.

LA Swift functions as a connecting service between the Capitol Area Transit System (CATS) Florida Avenue terminal and the Regional Transit Authority (RTA) major bus transfer location of Elks Place at Canal Street. The FEMA funded service, coordinated by the Louisiana Department of Transportation and Development (DOTD) and the Louisiana Department of Labor (DOL), will continue operation through the 2006 hurricane season. Efforts are currently underway by DOTD to procure a new service provider when the FEMA funding ends on November 30, 2006.

Future expansion of the LA Swift program is under consideration to provide service from New Orleans to both the Covington/Mandeville and Slidell areas of St. Tammany Parish

LA Rail – Upon receipt of funding, DOTD is planning to implement LA Rail, an intercity passenger service between Baton Rouge and New Orleans using existing Kansas City Southern tracks. The expected benefits of LA Rail include:

- Provide reliable transportation for workers and families to rebuild New Orleans
- Stimulate economic development by expanding the business employment pool
- Provide opportunity for transit-oriented development (affordable housing)
- Mitigate highway congestion on the I-10 corridor
- Link Capitol Area Transit, Regional Transit Authority, and rural transportation providers and sustain the viability of these systems
- Provide hurricane evacuation capability

Operation of LA Rail is to be provided by Amtrak. Two train sets, carrying 300+ passengers per train, would make four weekday round trips and three weekend round trips. Travel time is estimated at two hours.

The proposed fare structure for one-way travel ranges from \$5 to \$11. Total project cost over a three-year period including start-up, operations, and marketing is projected to be \$91 million.

Six passenger stations/stops are proposed:

1. Baton Rouge (KCS Yard) – adjacent to DOTD Headquarters off I-110
2. South Baton Rouge – near the Mall of Louisiana (Bluebonnet Road at I-10)
3. Gonzales – near US 61 and N. Burnside Avenue
4. LaPlace – near US 61 and Belle Terre Boulevard
5. Kenner – Williams Boulevard at Kenner Avenue
6. New Orleans – Union Passenger Terminal

Gulf Coast High Speed Rail Corridor – A longer-range future link of the LA Rail program is the extension of service from New Orleans to Mobile, AL. This would provide regional service to the three states (LA, AL, MS) that are represented on the Southern Rapid Rail Transit Commission. Of the 145 track miles between Mobile Station and the New Orleans Union Passenger Terminal (NOUPT), approximately 137 miles belong to and are operated by the CSXT railroad, 3.6 miles belong to and are operated by the Norfolk Southern Railroad and 3.9 miles belong to the NOUPT and are operated by Amtrak.

A detailed analysis of the New Orleans to Mobile High-Speed Rail Corridor was prepared by Burk-Kleinpeter, Inc. prior to Hurricane Katrina. Although significant damage to the railroad line was inflicted by the hurricane, spot inspections in the field indicated that the railroad had been brought to a “state of good repair”. It could be argued that current track conditions are better than pre-Katrina conditions given the installation of newer, more modern hardware.

The service goals of this project are to introduce intercity passenger service to the corridor as soon as possible on a limited basis and to grow that service over the next twenty years, while maintaining the current excess capacity in the corridor to support increased freight traffic. All operators and sponsors—intercity passenger and freight—intend the services on the New Orleans-Mobile Corridor in the planning year, 2025, to be more reliable than those operating on the Corridor at present. It should be noted that the *Sunset Limited* long distance service between Orlando and Los Angeles has been suspended by Amtrak east of New Orleans. When, or whether, this service will be reinstated is not known at this time.

The cost estimate for improvements to rail facilities to support the initial service is \$260 million. Estimated cost for all other improvements to support full service is \$470 million. These costs are exclusive of rolling stock requirement and items not estimated in the corridor study.

Roadway Network

The City of New Orleans Department of Public Works has determined that all flooded streets are in need of resurfacing and/or reconstruction to some degree. Damage inventory reports are currently being prepared to assess pavement conditions on city streets. Limited funding is available to the New Orleans region and segments of the following corridors have committed funding for improvements totaling approximately \$50 million.

Table 6.2

Roadway Corridors with Committed Funding for Improvements

Robert E. Lee Boulevard	Whitney Avenue
Fleur de Lis Boulevard	Berkley Drive
Canal Boulevard	Earhart Boulevard
St. Charles Avenue	Woodland Drive
Wisner Boulevard	Magazine Street
Tchoupitoulas Street	

While it is anticipated that monetary needs will far exceed available funding, any additional monies that become available are expected to be directed towards segments of the following corridors, for which repairs have been estimated at \$150 million.

Table 6.3

Roadway Corridors Identified as High Priorities Upon Funding Availability

Pontchartrain Boulevard	Harrison Avenue	Canal Boulevard
Marconi Boulevard	Leon C. Simon	Robert E. Lee Boulevard
St. Bernard Avenue	Paris Avenue	Elysian Fields Avenue
Franklin Avenue	Carrollton Avenue	Orleans Avenue
Miro Street	Galvez Street	St. Charles Avenue
Magazine Street	Napoleon Avenue	Louisiana Avenue
Poydras Street	LaSalle Street	Gravier Street
Common Street	Girod Street	Camp Street
Carondelet Street	Press Drive	Downman Road

Traffic Signals

Much of the traffic signal equipment at signalized intersections in New Orleans sustained damage as a result of Hurricane Katrina. The following is a summary assessment of damages identified by the City of New Orleans Department of Public Works, Traffic Engineering Division.

- 221 of 458 traffic signals (48%) in Orleans Parish had water damage in controller cabinet
- 51 of 248 signals with mast arms (21%) had wind damage
- 366 of 458 signals (80%) had one or more signal heads with wind/structural damage
- 110 of 458 signals (24%) had one or more poles knocked down
- 28 of 458 signals (6%) had controller cabinet knocked down

- 9 of 458 signals (2%) had mast arms knocked down
- 5 of 458 signals (1%) had span wire structures knocked down

The signalization equipment at the intersections listed in **Table 6.4** sustained significant damage and has not been restored to operating conditions as of October 2006:

Table 6.4
Traffic Signals Not in Operation

Almonaster at Galvez	Clara at Napoleon
Almonaster at I-510 Northbound	Crowder at Morrison
Almonaster at I-510 Southbound	Felicity at Magnolia
Almonaster at Old Gentilly	Forstall at St. Claude
Banks at Jefferson Davis Parkway	Franklin Avenue at Galvez
Bienville at Broad Street	Franklin Avenue at Mirabeau
Bienville at City Park	Gentilly at Lafaye
Bienville at Galvez	Jackson Avenue at Magnolia
Bienville at Jefferson Davis Parkway	Jefferson Davis/Moss at Orleans Avenue
Bullard at I-10 Service Road South	Louisiana Avenue at Magnolia
Caffin at Claiborne	Magazine Street at Melpomene
Caffin at Galvez	Magnolia at Napoleon
Caffin at St. Claude	Magnolia at Washington Avenue
Claiborne at Forstall	McAlister at Willow Street
Claiborne at Jackson Barracks	Miro Street at Ursulines
Claiborne at Tennessee	St. Claude Avenue at Tupelo
Claiborne at Tupelo	

PORT OF NEW ORLEANS

The Port of New Orleans has regained one hundred percent of cargo ship calls as of mid-February 2006, well ahead of its six-month goal to attain between seventy and eighty percent of activity six months after Hurricane Katrina. Total general cargo figures for the first eight months of 2006 are up 9.5 percent overall, boosted by a nearly thirty-eight percent gain in traditional break-bulk cargo imports such as iron, steel, natural rubber, forestry products, and non-ferrous materials. Additionally, the 2006 figures are 9.5 percent ahead of the Port's five-year average for the period.

This is a significant accomplishment considering the Port sustained \$164,236,000 in damages to its facilities and lost critical deep-draft access to about twenty-five percent of its terminal operations on the Inner Harbor Navigation Canal (IHNC) and Mississippi River – Gulf Outlet (MR-GO). One example is New Orleans Cold Storage, a frozen poultry exporter who moved 310,000 tons in 2005, supported 718 direct and indirect jobs, and had a \$35.6 million impact on the state economy annually. Only forty percent of the company's ships can access its facilities due to the lack of deep-draft access. The other seventy-five percent of the Port's facilities on the Mississippi River did not flood and received only wind damage to sheds and warehouses.

The Port is working to secure funding to mitigate the businesses along the MR-GO, which invested millions of dollars on the promise of deep-water access. Approximately 9,000 jobs with a \$2.29 billion economic impact were located there.

The MR-GO has an authorized project depth of thirty-six feet, but silted to twenty-one feet following Hurricane Katrina. Congress has asked the U.S. Army Corps of Engineers to study closing the waterway to deep-draft traffic. The Port is seeking federal funding to relocate or subsidize deep-draft shipping that can no longer use the MR-GO. Tenants would be relocated to other Port of New Orleans sites along the Mississippi River.

Another encouraging sign for the Port and the New Orleans tourism industry is the upcoming return of the cruise industry. Norwegian Cruise Line will begin sailing the *Norwegian Sun* out of New Orleans in mid-October 2006 followed by Carnival Cruise Line's *Fantasy*. Royal Caribbean returns its' *Grandeur of the Seas* in December 2006 and Carnival will also start sailing the *Carnival Triumph* from New Orleans in August 2007. In addition, Princess Cruise Lines, will test the New Orleans market with three cruises out of New Orleans on its *Golden Princess* in December 2006.

The Port's new state-of-the-art Erato Street Cruise Terminal, a \$37 million project, will open in the fall of 2006. The project includes a 90,000 square foot terminal and a 1,000 vehicle parking garage. Upon completion the Port will make new investments in the Julia Street terminals and will continue to move forward with the project to convert the Poland Avenue cargo shed into a cruise terminal.

NEW ORLEANS INTERNATIONAL AIRPORT

Louis Armstrong New Orleans International Airport (LANOIA) has experienced a significant reduction in overall flights and passengers. Perhaps the most significant impact to flight and passenger numbers was caused by the reduced service of Southwest Airlines. Although Southwest remains the largest airline operating out of New Orleans, daily flights were reduced from 55 to 24, a reduction of 57%.

Prior to Hurricane Katrina approximately 6.8 million passengers enplaned and deplaned in New Orleans during 2005. For the same time period in 2006 only 3.9 million passengers passed through LANOIA.

Table 6.5 illustrates a comparison of pre- and post-Katrina aircraft operations as of August 31, 2006.

Table 6.5
Year-to-Date Comparison of Aircraft Operations

Arrivals	2005	2006	% Change
Domestic Passenger	37,555	21,831	-41.9
International Passenger	387	0	-100.0
Domestic Charter	46	24	-47.8
International Charter	67	36	-46.3
Cargo	1,461	1,008	-31.0
TOTAL ARRIVALS	39,516	22,899	-42.1
Departures	2005	2006	% Change
Domestic Passenger	37,547	21,818	-49.9
International Passenger	377	0	-100.0
Domestic Charter	52	25	-51.9
International Charter	48	31	-35.4
Cargo	1,464	1,005	-31.4
TOTAL DEPARTURES	39,488	22,879	-42.1

Other statistical data pertaining to reduced flight activity includes:

- LANOIA operated 162 flights per day pre-Katrina, today there are 105 flights per day.
- LANOIA offered service to 42 cities pre-Katrina, today 32 cities are served.

Upcoming capital improvement projects include a new Aircraft Rescue and Firefighting Station, new aircraft loading bridges, improvements to the aviation communication security system, and terminal interior and exterior improvements.

Although these capital improvements are necessary for the day-to-day operations of the airport, the greatest need of LANOIA is increased air service. There are no capital or infrastructure projects planned to attract new flights. With reduced aircraft operations, the airport is operating at a deficit. Other than an increase in flights, the next highest priority is monetary subsidies to offset operating shortfalls. Since Katrina, LANOIA has lost approximately \$40 million in revenue. Currently LANOIA is offering economic incentives (such as reduced-landing fees) to entice the airline carriers to add more flights.

Ferryboats

Ferryboat operations have been restored to three locations in the New Orleans area. Presently, one ferryboat is serving each of the following locations at thirty-minute intervals:

- Canal Street to Algiers Point
- Chalmette to Lower Algiers
- Jackson Avenue to Gretna Courthouse

Prior to Hurricane Katrina, the ferryboats operated eighteen hours a day from 6 a.m. to 12 a.m. Post-Katrina operations have been reduced to fifteen hours a day from 6 a.m. to 9 p.m. The Canal Street-to-Algiers Point location was serviced by two boats during peak hour periods prior to Katrina. Today only one boat is in operation at that location.

Section 7:

Community Services Assessment

Part 1:

Law Enforcement and the Criminal Justice System

A major component to the recovery of the City of New Orleans is a functioning and effective criminal justice system where law enforcement, incarceration, and judicial disposition are coordinated to keep criminals off the streets. There is ample evidence that the mere perception that the City is unsafe will have a tremendous negative impact on the decision of many displaced citizens to return to New Orleans.

This assessment focuses mainly on the NOPD physical infrastructure, such as facilities and equipment, and the department's capacity to undertake its mission to protect citizens. Specifically, is the department adequately staffed and funded, what is the status of the facilities and physical infrastructure, and what is the time frame for bringing the service capacity back to pre-Katrina levels. The NOPD is the main point of contact between citizens and law breakers. However, a general assessment of the Justice System in total is provided to give context to the reality that the crime problems in New Orleans are more than simply the problems of the NOPD. In reality crime is a function of the operational deficiencies of the entire Criminal Justice System.

General Assessment of Law Enforcement and the Criminal Justice System¹²

What was considered a fragile criminal justice system prior to Katrina became more stressed after Katrina. Interviews with top Federal Bureau of Investigation officials, noted experts on the local Criminal Justice System, and a review of studies done pre-Katrina all lead to one conclusion: the criminal justice system, as it is now and as it was pre-Katrina, is broken. Dysfunctional is more apt according to the experts. Fixing the system will require much more than simply facility renovation and repair.

The Metropolitan Crime Commission released a study in August 2005 titled Performance of the New Orleans Criminal Justice System 2003-2004. It paints a picture of a criminal justice system that failed

¹² Much of the information from this section comes from interviews with high ranking officials of the local Federal Bureau of Investigation and leading Criminologists. While general in scope and not entirely related to infrastructure, this information helps provide a overview of criminal activity against which recovery will take place.

to keep violent repeat offenders off of the streets, resulting in escalating violence they characterize as “spiraling out of control”.

As the population returns post-Katrina, these problems have only been exacerbated because of the extent of physical damage to enforcement, investigative, evidentiary, and judicial facilities and equipment that have made apprehension, incarceration, and prosecution of many violent offenders extremely difficult. In their assessment of law enforcement and the criminal justice system the Bring New Orleans Back Commission identified the severe challenges facing the entire system resulting from Hurricanes Katrina and Rita:

- Our courts, jails, prosecutors’ offices, police stations, rooms, and crime labs were flooded.
- 9-1-1 call centers and most police vehicles were wrecked.
- Witnesses and suspects were dispersed.
- Employees’ homes were rendered uninhabitable.
- Operating budgets evaporated.

Some of these have been addressed.

- There is now 9-1-1 service in New Orleans
- Some police vehicles and equipment have been replaced
- Courts and the District Attorney are now functioning in some capacity
- The Criminal Sheriff’s office has about 1,700 out of 7,200 beds available
- The University of New Orleans is providing space for a 7,000 square-foot state-of-the-art crime lab in its Research and Technology Park

Current Crime Trends in Orleans Parish

The following information provided by the FBI is a review of known levels of criminal behavior in Orleans Parish post Katrina.

- As of 10/12/06 there have been 125 homicides in Orleans Parish, of which 117 have been classified as murder.¹³
- Homicides continue to escalate, with 23 recorded in July 2006.
- Through 8/15/06 the 6th District has the highest total number of homicides—18.
- Narcotics trafficking remains the dominant precipitating factor of New Orleans homicide.
- Gang activity in Orleans Parish is on the rise as members who evacuated continue to return and operate in areas least affected by Katrina—2nd, 4th, and 6th NOPD Districts.
- Returning evacuees have established new illicit drug sources in Texas.

¹³ Homicides include all killings, including those considered justifiable for whatever reason, such as self-defense, etc.; while, murders include only those killings for which there is no known justification.

- The FBI and ATF have identified eleven cases where one weapon was employed in several homicides.
- Intelligence indicates that local gang members continue to acquire firearms via street purchases and burglaries, but also via local gun shows.

As a result of this increased level of violent criminal activity, the Louisiana National Guard is deployed in some of the hardest hit areas of Orleans Parish as a deterrent to criminal behavior in general, such as looting.

Some of the problems with the existing law enforcement and criminal justice system were noted by the FBI and professionals in the criminal justice evaluation field and are included below:

- Orleans Parish lacks a coordinated criminal intelligence database, like that of Jefferson Parish. Nor is there existing infrastructure for such a system.
- There is no regional clearinghouse for crime-related data.
- Much of the criminal justice system suffers from incoherent management, often pushing problems off to other agencies within the system.
- Public prosecutors are often outgunned by hired defense attorneys (there are too many young and inexperienced ADAs).

Physical Assessment of Damages

Where possible, information is provided to identify the extent of physical damages to facilities and equipment, staffing levels, and service levels for the components of law enforcement and the criminal justice system. Some agencies have been extremely helpful, while others, despite repeated contacts, have been non-responsive. For those non-responsive agencies, data from the City of New Orleans is provided regarding facility damage, and other information gathered from third parties where relevant.

New Orleans Police Department

Besides the problems noted above the NOPD suffered extensive damage to facilities and equipment. Personnel throughout the entire department also suffered extensive personal losses to family and property. **Table 7.1** identifies the NOPD facilities damaged by Katrina, the estimated damage by FEMA if available, and the City's repair estimate.

Table 7.1
NOPD Facility Damage Overview and Repair Estimate

Police District	Use	Location	Status	FEMA Value	Comments/Status	Repair Estimate
NOPD	Headquarters/ Administration. Bldg.	715 S. Broad	Closed	\$1,220,450	Repairs to begin soon, expect occupancy in March or April '07	\$10,262,000
NOPD	Police Auto Garage	2761 Gravier St.	Closed	Pending	Destroyed	\$211,400
NOPD	Public Integrity Division	118 N. Rocheblave St.		Pending	Building is renovated and occupied, but future plans are uncertain	\$472,500
NOPD	Crime Prevention	801 Rosedale		Pending		
NOPD	Crime Lab	2932 Tulane Ave.	Closed	Pending	NOPD reports temporary (3yr) crime lab in UNO Research and Technology Park	\$3,021,700
NOPD	Police Stables	6030 Marconi Dr.	Open	Pending	Operational but some repairs still needed	\$846,800
NOPD	NOPD Logistical Support	Not Provided	Closed	Pending	Building destroyed	\$704,900
NOPD 1 st	1st District	501 N. Rampart	Open	Pending	Roof Damage	\$254,700
NOPD 2 nd	2nd District	4317 Magazine St.	Open	Pending		\$266,900
NOPD 3 rd	3rd District	1700 Moss St	Closed	\$112,430	State will make repairs once lease is signed. Trailers on site	\$1,708,400
NOPD 3 rd	NOPD Special Operations	1700 Moss St	Closed	Pending		\$4,313,600
NOPD 4 th	4th District	1348 Richland St	Open	Pending		\$282,600
NOPD 5 th	5th District	3900 N. Claiborne Ave.	Closed	Pending	Destroyed – trailers on site	\$1,892,800
NOPD 5 th	5 th Police Substation	1616 Caffin Ave.	Closed	Pending	State and Fed will Repair	
NOPD 6 th	6th District	1930 MLK Blvd.	Open	Pending		\$70,300
NOPD 7 th	7th District	10101 Dwyer Rd.	Closed	Pending	Destroyed – trailers off site	\$1,961,100
Total				\$1,842,147		\$26,269,700

Source: City of New Orleans Chief Administrator's Office

NOPD Non-Facility Damages

Pending receipt of detailed information from NOPD.

NOPD Uniformed and Civilian Personnel Strength Pre- and Post-Katrina

In August of 2005, NOPD reported a total force of 2,146 police (1,741) and civilian (405) employees. Excluding recruits and personnel on extended leave of various types (personal, administrative, etc.) there were 1,453 police and civilian employees actively on the job in August '05.

The most recent numbers report a total of 1,425 uniformed officers and 227 civilian employees for a total employment of 1,652. Excluding recruits and personnel on extended leave, there are a total of 1,290 uniformed and civilian employees in the NOPD.

As reported, total NOPD employee strength is at 77% of the pre-Katrina level, with uniformed officers at 82% and civilian employees at only 56%.

Priorities for Reopening Closed Facilities

Top officials in the NOPD along with city officials have developed five main priorities for reopening facilities. They are:

1. Reopen Headquarters at 715 N. Broad
The NOPD reports that work will begin shortly to repair damages and they expect the Headquarters building to be available in March or April of 2007.
2. Reopen the Crime Lab
A 3-year lease is being taken on space in the UNO Research and Technology Park for a temporary NOPD Crime Lab.
3. Reopen the Closed District Stations
No timetable has been established for reopening District Stations. Officers are working out of trailers on the site of destroyed District stations with the exception of the 7th District, where the trailers are located in another location.
4. Reopen Supporting Units
This includes the radio shop, facilities support, and District Substations
5. Reopen the Special Operations Complex

Implications for Planning in New Orleans

Clearly, the City needs a functioning law enforcement and criminal justice system to survive. As stated, many think the current systems are flawed for a myriad of reasons that are beyond the scope of

this planning process. However, to the extent that problems in the system are related to damaged or destroyed facilities and equipment, or stem from displaced employees, the UNOP plan can provide help. Below is a list of items related to law enforcement and the criminal justice system that will possibly impact future planning:

- Perception that law enforcement and criminal justice agencies cannot contain crime and/or keep criminals off of the streets will dampen enthusiasm of many displaced residents to return
- This perception can also create negative national publicity possibly impacting tourism and other areas of economic development
- Consistently high levels of violent crime and the perception that the system cannot deal effectively with it could prompt some returned residents to leave
- High levels of crime will make it difficult for some neighborhoods to be redeveloped

Part 2: Fire Protection and Emergency Medical Services

Fire Protection and Emergency Medical Services are two components of the community facilities and services impacted by Hurricane Katrina. The purpose of this section is to assess the status of the assets of the New Orleans Fire Department (NOFD) and the Emergency Medical Services (EMS) in the fall of 2006 over one year since the Hurricane. Captain Terry Hardy, Public Fire Education Coordinator, for the NOFD and Mr. Cedric Palmisano, Emergency Operations Center Liaison, served as the primary contacts for the collection of data for this report.

New Orleans Fire Department

Facilities

Prior to Hurricane Katrina, the NOFD was comprised of six fire districts – Second, Third, Fourth, Fifth, Sixth, and Eighth -- which included thirty-three engine houses with living quarters and various support facilities composed of a Supply Shop, Supply Warehouse, Supply Annex, Fire Museum, Communications Division and a Training Academy with two locations.

Hurricane Katrina caused significant and/or catastrophic damage to the NOFD facilities. Twenty-three of the thirty-three engine houses were flooded and/or damaged by the hurricane. Currently, there are thirty-one engine houses. Of these, seventeen are operational with habitable living quarters (see **Table 7.2**). Eleven engine houses are operational with uninhabitable living quarters; firefighters are housed in trailers on site (see **Table 7.3**). The remaining engine houses are closed with firefighters housed in trailers at alternate staging areas (see **Table 7.4**). The Supply Shop, Supply Warehouse, Fire Museum and both locations of the Training School are operational at the original sites; the Supply Annex is uninhabitable at this time (see **Table 7.5**). The Communications Division is operational but has been relocated to another site.

Plans to repair or rebuild damaged facilities are yet to be determined pending reimbursement from FEMA. Information on prioritization for reopening facilities was not available at the time of this report.

Apparatus

The following is a listing of NOFD fire-fighting apparatus located among the thirty-three engine houses prior to Katrina. This list is not meant to represent a complete inventory of the facilities' contents: Thirty-two engines, ten ladders, four spare engines, two spare ladders, two heavy rescue units, and one Haz-Mat unit. A post-Katrina assessment of the same apparatus is as follows: Twenty-eight engines, ten ladders, zero spare engines, zero spare ladders, two heavy rescue units, and one Haz-Mat unit.

Efforts for replacement of a decimated fleet compromised by saltwater intrusion are being addressed. Since Katrina, the NOFD has purchased three water tenders, ordered eighteen replacement apparatuses, refurbished sixteen apparatuses, and purchased high access vehicles for rescue and firefighting issues. Funds for these purchases were provided by FEMA. The NOFD has also received monetary, equipment, and in-kind donations from international, national and local corporations, organizations, foundations, and individuals. Examples of these donations include, but are not limited to the following: fifteen water craft by the Leary Firefighters Foundation; rehabilitation of four firehouses and purchase of uniforms by BNP Paribas; fundraisers for restoration of two firehouses by the Lakeview Civic Improvement Association.

Preliminary damage assessments for all facilities have either been performed or are in that process by FEMA and the City. These assessments are provided by facility name and location in **Tables 7.2, 7.3, 7.4, and 7.5** of this section. The preliminary range of damage estimates for the NOFD facilities is \$3.8 million to \$23.8 million. Damage estimate information contained in the following tables was obtained from a report provided by the Office of the City of New Orleans' Chief Administrative Officer dated September 8, 2006.

Table 7.2
Operational Facilities and Living Quarters

Facility	Status	Damage Estimate
Engine 1 2920 Magazine St.	Operational Engine House Firefighters in living quarters	\$6,089 - 7,600
Engine 4 6900 Downman Rd.	Operational Engine House Firefighters in living quarters	\$51,525 – 969,700
Engine 6 & Ladder 3 4500 Old Gentilly Rd.	Operational Engine House Firefighters in living quarters	\$20,441 – 42,000
Engine 9 440 Esplanade St.	Operational Engine House Firefighters in living quarters	pending
Engine 10 4069 Morrison Rd.	Operational Engine House Firefighters in living quarters	unavailable
Engine 16 & Ladder 8 2000 Martin Luther King Blvd.	Operational Engine House Firefighters in living quarters	\$3,457 - 64,000
Engine 17 4115 Woodland Dr.	Operational Engine House Firefighters in living quarters	\$2,830 - 64,100
Engine 20 425 Opelousas St.	Operational Engine House Firefighters in living quarters	\$2,807 - 0
Engine 24 1040 Poland Ave.	Operational Engine House Firefighters in living quarters	\$108,233 – 1,170,900
Engine 26 & Ladder 9 436 S. Jefferson Davis Pkwy.	Operational Engine House Firefighters in living quarters	\$114,550 - 506,000

Engine 27 2118 Elysian Fields Ave.	Operational Engine House Firefighters in living quarters	\$248,939 – 1,127,900
Engine 29 & NOFD HQ 317 Decatur St.	Operational Engine House Firefighters in living quarters	\$1,493 - 47,500
Engine 33 & Ladder 6 3340 General Meyer Blvd.	Operational Engine House Firefighters in living quarters	\$3,204 - 5,000
Engine 35 964 N Carrollton Ave.	Operational Engine House Firefighters in living quarters	\$13,306 - 474,200
Engine 37 13400 Chef Menteur Hwy.	Operational Engine House Firefighters in living quarters	\$3,326 - 0
Engine 40 2500 General DeGaulle Blvd.	Operational Engine House Firefighters in living quarters	\$11,648 - 173,400
Flying Squad 801 Girod St.	Operational Engine House Firefighters in living quarters	\$188 - 4,000

Table 7.3
Operational Facilities with Uninhabitable Living Quarters

Facility	Status	Damage Estimate
Engine 7, Haz Mat Unit, Rescue Squad 1441 St. Peter St.	Operational Engine House Firefighters in trailers on site	\$327,933 - 1,866,400
Engine 8 3330 Florida Ave.	Operational Engine House Firefighters in trailers on site	\$123,537 – 1,540,500
Engine 11 2312 Louisiana Ave.	Operational Engine House Firefighters in trailers on site	\$98,613 - 1,176,400
Engine 12 5600 Franklin Ave.	Operational Engine House Firefighters in trailers on site	\$109,723 - 984,400
Engine 13 & Ladder 12 987 Robert E. Lee Blvd.	Operational Engine House Firefighters in trailers on site	\$50,333 - 1,201,900
Engine 14 & Ladder 2 200 S. Robertson St.	Operational Engine House Firefighters in trailers on site	\$109,227 - 1,151,300
Engine 18 773 Harrison Ave.	Operational Engine House Firefighters in trailers on site	\$172,395 - 779,900
Engine 21 3940 Paris Ave.	Operational Engine House Firefighters in trailers on site	\$56,906 - 1,331,500
Engine 25 & Ladder 7 2430 S. Carrollton Ave.	Operational Engine House Firefighters in trailers on site	\$46,834 - 1,233,800
Engine 36 5403 Read Blvd.	Operational Engine House Firefighters in trailers on site	\$569,203 – 2,166,100
Engine 38 4940 Clara St.	Operational Engine House Firefighters in trailers on site	\$132,324 - 1,118,500

Table 7.4
Closed Facilities

Facility	Status	Damage Estimate
Engine 3 1400 S. Broad St.	Engine House Closed	\$100,398 - 873,600
Engine 15 & Ladder 5 1211 Arabella St.	Engine House Closed Firefighters dispatched from trailer site at Children's Hospital	\$5,675 – 134,000
Engine 22 2041 Egan St (consolidated with Engine 39)	Engine House Closed Firefighters dispatched from trailer site at Caffin & Claiborne	\$583,938- 1,304,100
Engine 31 4300 Alba Rd.	Engine House Closed Firefighters dispatched from trailer on site	\$429,446 – 800,000
Engine 39 6030 St. Charles Ave. (consolidated with Engine 22)	Engine House Closed Firefighters dispatched from trailer site at Caffin & Claiborne	\$192,848 – 893,800

Table 7.5
Other Facilities

Facility	Status	Damage Estimate
Supply Shop 821 Magazine St.	Operational	\$29,857 - 78,600
Supply Warehouse 2841 Tchoupitoulas St.	Operational	unavailable
Supply Annex 4330 St. Claude Ave.	Uninhabitable	Pending - \$433,400
Training School 401 City Park Ave.	Operational	unavailable
Training School-E4 13400 Old Gentilly Rd.	Operational	unavailable
Fire Museum 1135 Washington Ave,	Operational	\$466 - 43,300

Note: Captain Terry Hardy, Director of Public Education for the NOFD, and Mr. Cedric Palmisano, Emergency Operations Center Liaison, served as the primary contacts for the collection of data for this report. Additional information was obtained from the NOFD website www.cityofno.com.

Note: Damage estimates from the storm are provided where they have been made available. Often there is a great range of estimates between what FEMA believes are eligible damages and what independent investigators or public facility staff believe are storm related damage. Where this information was available a range was given. Also the reader should be aware that the facility damage lists are constantly undergoing revision thus figures tend to change frequently.

Personnel

Prior to the hurricane, the Department operated with three platoons on a 24/48 hour schedule. There were eight hundred twenty-five budgeted NOFD positions for 2005. In the aftermath of the storm, the three platoon system and 24/48 hour schedule remain the same. However, the number of budgeted positions has been reduced to six hundred and ninety-five, with eleven members employed in the Administration Division, and six hundred and eighty-four members employed in the Fire Suppression Division.

The NOFD and its members have continue to face significant challenges since Katrina. Lack of manpower on a daily basis was cited as the biggest problem faced by the Department. This lack of manpower (approximately 30-60 members daily) results in three to eight companies being out of service daily and each company's staffing reduced from four to three firefighters. Further challenges rise in light of the fact that eighty percent of firefighters lost homes and possessions in the storm, have families displaced, and are still in need of temporary shelter. A recent report by the CDC stated 89 of 133 members surveyed showed signs of depression and 110 of 492 members surveyed showed symptoms of post traumatic stress.

Emergency Medical Services (EMS)

Prior to Hurricane Katrina, Emergency Medical Services (EMS) was based at 1700 Moss Street. Area hospitals with Emergency Departments included University Hospital, Charity Hospital, Lindy Boggs Hospital, and Memorial Hospital. Hurricane Katrina caused significant damage to the 1700 Moss Street location. It will not be reopened as an EMS facility. University Hospital, Charity Hospital, Lindy Boggs Hospital, and Memorial Hospital all remain closed since the storm as well.

Since Katrina, EMS staff have been working from a trailer site at a Convention Center parking lot with plans currently underway to move to a location at St. Claude and Esplanade Avenues. Prior to the storm, the agency operated with one hundred fifteen staff positions. That number has been reduced to ninety-eight since the storm. Losses incurred by the agency at the Moss Street address included \$906,528.70 in equipment and medical supplies and \$305,995.00 in EMS vehicles.

There are also a number of private companies that provide EMS in New Orleans and the surrounding region. These include East and West Jefferson Ambulance service, A-Med, Acadian, Care and Lifeguard. Efforts were made to contact each company to assess their damage. The only company to respond was Lifeguard. They sustained a half million in equipment damage and four (4) million in loss of revenue. Prior to the hurricane, they had fifty (50) employees but only twenty (20) employees at the writing of this report.

Part 3: Sanitation Services

The Department of Sanitation incurred significant losses as a result of Katrina. Most of the office's fleet of vehicles was lost, the operating budget was reduced by roughly 50% and the staff was cut from 89 to 14. Immediately post-Katrina, initial clean-up activities were undertaken by the National Guard troops as access to the City was restricted. FEMA contractors were also deployed to geographic specific areas for storm clean-up tasks by category: street clearance (push-aside); vegetation removal; construction debris, tree removal (leaners and hangers); white goods; household goods; etc. The general populace contributed to related activities in specific neighborhoods. "Normal" trash pick-up resumed based upon storm damage, repopulation, and the availability of resources (equipment and manpower).

To augment these limited resources, the City has actively supported citizen-based volunteer clean-up initiatives. To further assist the overall post-Katrina clean-up activity, the City established the Tactical Trash Force in July to address trash not specifically identified as either the responsibility of the city's contract provider nor the USACOE.

Recently, the Nagin Administration has made sanitation a priority issue in its second term. In newly awarded contracts, the City will provide automated garbage collection citywide with twice-weekly trash pick-up to resume January 2, 2007. New trash receptacles will also be made available (30, 60, or 95 gallon capacity) to the public for free. In the French Quarter, a pending contract stipulates that crews work 16 hours per day, seven days a week with trash pickup twice daily. Additional contract services for CBD trash pickup and street / sidewalk cleaning are being developed in conjunction with the Downtown Development District.

Department of Sanitation

The City of New Orleans Department of Sanitation, under contract services, currently provides 1 day per week household garbage pickup limited to two 32-gallon containers or eight trash bags at curbside locations within the public right-of-way: i.e. space between the street and the sidewalk. Garbage and trash should be placed out for collection no earlier than 4 p.m. prior to the collection day. Current rates are \$12.00 per month.

The weekly pickup schedule is based upon specific geographic service areas. See **Figure 7.1** below.

Figure 7.1

GARBAGE COLLECTION DAYS BY AREA IN ORLEANS PARISH



- Monday: West Bank and Algiers
- Tuesday: French Quarter, Garden District, Marigny, Bywater: The area bounded by South Claiborne / I-10 on the north, the Mississippi River on the south, Louisiana Avenue on the west and the Industrial Canal on the east.
- Wednesday: Uptown: The area bounded by the Orleans-Jefferson parish line on the north, the Mississippi River on the south and west, and Palmetto St./Washington Ave. on the south.
- Thursday: City Park: The area bounded by I-610 on the north, the Orleans-Jefferson parish line on the west, South Claiborne / I-10 on the east and Palmetto St./Washington Ave. on the south.
- Friday: Lakeview and Gentilly: The area bounded by Lake Pontchartrain on the north, I-10 on the south, the Industrial Canal on the east and the Orleans-Jefferson Parish line on the west.
- Saturday: New Orleans East: The area bounded by Chef Menteur Hwy., Willowbrook, Haynes Blvd., Paris Road and Crowder Blvd.

Do not locate trash on hydrants, utility boxes, or water meters. Do not dump garbage on neutral grounds, vacant areas or neighbor's property. Household trash should be separated from Katrina debris.

Recycling Services

Prior to Katrina, the City provided once-a-week recycling pickup for newspapers, aluminum cans, glass and plastic. Currently, there are no curbside recycling services available within the City. Residents can drop-off particular recyclables at specific locations throughout the city (see <http://louisiana.sierraclub.org/wasterecycling.asp> for participating recycling services).

The City also offers free collection sites which are open to the public 7 days per week:

2829 Elysian Fields	7AM-6PM
2301 Hendee Court (Algiers)	7AM-6PM
I-10 Service Road @ Crowder	7AM-6:30PM

Residents must be in possession of a valid Orleans Brake Tag or Driver's License in order to dispose of trash at these locations.

Storm Debris (Household)

In flood-damaged areas, the US Army Corps of Engineers (USACE) continues to remove debris. Currently, FEMA has agreed to provide 100% funding for storm related debris thru the end of 2006. Should this deadline not be extended, funding would revert to a 90% federal / 10% local formula. The amount of hurricane / flood debris estimated for removal post-2006 is roughly 20M cubic yards. To date, the USACE has collected 13.17 million cubic yards of curbside debris while the city and the Tactical Trash Force (TTF) have collected 756,250 cubic yards of commingled waste. Excluding demolition and reconstruction debris, the storm-related clean-up mission is 82% complete, according to the City of New Orleans. Under the present program, homeowners are advised to separate the materials into categories for pick-up:

- Construction Debris: building materials, drywall, lumber, carpet, furniture, bedding, plumbing fixtures
- Vegetation: tree branches, leaves, logs
- Hazardous Waste: oil, batteries, pesticides, paints, cleaning supplies, compressed gas
- “White Goods” : refrigerators, washers, dryers, freezers, air conditioners, stoves, water heaters, dishwashers
- Electronics: televisions, computers, radios, stereos, dvd players, telephones

Starting November 1, 2006 the USACE will stop collecting debris in those portions of the City that experienced minor degrees of flooding (Zip Codes 70112, 70113, 70114, 70115, 70116, 70130, and 70131). When contractors demolish a house, they are responsible for debris disposal in a permanent landfill.

Significant efforts have been expended to date by volunteers (religious-based, citizen activists, neighborhood organizations) to aid in the general post-Katrina clean-up. The Katrina Krewe estimates their members have bagged over 250,000 tons of trash thru August 2006. The importance of these activities over the last year is apparent in all areas of the City.

Part 4: Health Care Services

This assessment presents information on the availability of health care services in New Orleans; damage estimates for the Medical Center of Louisiana at New Orleans (MCLNO), which consists of Charity and University Hospitals; and, a summary of major plans for the reconstruction of the MCLNO.

Note: The Louisiana Health Care Redesign Collaborative is scheduled to complete their plan for the recovery and rebuilding of the health care system in hurricane-affected areas of the state by October 20, 2006.

Post-Katrina Availability of Health Care Services

Acute Care Hospitals

Of the 9 acute care hospitals in operation prior to Katrina, only three have reopened—Children’s Hospital, Touro Infirmary, and the Tulane University Hospital and Clinic. As of October 14, 2006, these facilities were operating 515 staffed beds, less than a quarter of the City’s pre-Katrina capacity (**Table 7.6**).

The Medical Center of Louisiana at New Orleans (MCLNO) suffered extensive damage and remains closed. To temporarily replace the region’s only Level 1 trauma facility destroyed at Charity Hospital, MCLNO has opened a twenty-four hour trauma care facility at the Elmwood Medical Center. Additionally, MCLNO is operating a twenty-four hour emergency services unit in the first floor of the former Lord and Taylor building in the New Orleans Centre.

University Hospital is scheduled to reopen on a limited basis in November 2006. LSU officials had planned on a capacity of 150 beds in the initial phase of reconstruction. However, they have only been able to recruit staff for 60 beds.¹⁴ Staffing shortages are one of the key impediments to the rebuilding of the city’s healthcare infrastructure. Due to Katrina, Orleans Parish lost 77 percent of its primary-care doctors, 70 percent of its dentists and 89 percent of its psychiatrists.¹⁵ The region also faces a lack of nurses, technicians and other support personnel.

The VA Medical Center and Memorial Medical Center have been operating on an outpatient-only basis since December 2005. The New Orleans Heart and Surgery Institute, part of the Memorial

¹⁴ Moller, Jan. 2006. “Staff to reopen hospital scarce; University also faces construction delays.” *Times Picayune*. September 22, 2006, National, p.2.

¹⁵ Pope, John. 2006. “N.O. is short on doctors, dentists; City becomes eligible for recruitment help.” *Times Picayune*. April 26, 2006. Metro, p. 1.

Medical Center reopened in September 2006.¹⁶ The Lindy Boggs Medical Center and Methodist Hospital remain closed.

Table 7.6

Number of Staffed Beds at Acute Care Facilities in Orleans Parish

Acute Care Facilities in Orleans Parish	Pre-Katrina Staffed Beds	Staffed beds as of Oct. 14, 2006*
Children's Hospital	175	143
Lindy Boggs Medical Center	168	Closed
Medical Center of Louisiana at New Orleans (MCLNO) (Charity & University Hospitals)	500	Closed
Memorial Medical Center	252	Closed
Methodist Hospital	261	Closed
New Orleans VA Medical Center	206	Closed
Touro Infirmary	345	260
Tulane University Hospital and Clinic	362	112
Total	2269	515

Sources: Pre-Katrina data from GAO (2006); Post-Katrina data from the GNOEMS online Internet hospital reporting system (www.gnoems.com)

Medical Clinics

Prior to Katrina there were 90 safety net clinics in the New Orleans area.¹⁷ According to the Louisiana Public Health Institute (LPHI), there were twenty clinics operating in New Orleans in September 2006.¹⁸

Damage to MCLNO Facilities

Charity and University Hospitals suffered severe damage from Hurricane Katrina and are eligible for federal aid under the Public Assistance program managed by FEMA. The FEMA repair estimates of \$12.4 million for University Hospital and \$23.9 million for Charity Hospital include only those

¹⁶ The Tenet Healthcare Corporation sold the Memorial complex to Oschner Health System and has been renamed Ochsner Baptist Medical Center.

¹⁷ GAO. 2006. Status of the Health Care System in New Orleans. GAO-06-576R. March 28, p. 5.

¹⁸ Louisiana Public Health Institute. 2006. Medical Health Services Listing (Clinics & Health Centers) (as of September 12). Accessed from: www.noladashboard.org.

repairs required to return the facilities to their pre-Katrina condition.¹⁹ The LSU repair estimates, which include correcting some pre-Katrina deficiencies, were significantly higher—\$117.4 million for University Hospital and \$257.7 million for Charity Hospital.²⁰ In efforts to boost FEMA estimates and ultimately increase the level of federal funds LSU receives, LSU has retained a design firm to estimate the cost of repairing these facilities to their pre-Katrina state.²¹

Plans for MCLNO

Based on the damage Charity and University Hospitals sustained during Hurricane Katrina and its aftermath, and the fact that they were in poor physical condition and needed significant repairs prior to the storm, LSU is seeking to build a modern replacement facility in downtown New Orleans. Currently LSU has no re-use plan for Charity Hospital.

In June of 2006 LSU announced plans for a \$1.2 billion medical complex to be run jointly by LSU and the federal Department of Veterans Affairs.²² The federal share of the complex, about \$625 million, has already been appropriated and Governor Blanco has endorsed the project. The estimated cost of the LSU portion of the facility is roughly \$650 million dollars.²³ In addition to the reimbursement LSU is expecting from FEMA, it has asked the LRA for \$300 million dollars in CDBG funds for the project. The Louisiana Recovery Authority's infrastructure-transportation task force, however, has criticized LSU for their lack of a business plan for the project²⁴ while the Bush administration has questioned the need for a new LSU teaching hospital to replace Charity Hospital.²⁵

¹⁹ GAO. 2006. P. 3.

²⁰ Ibid., p. 3.

²¹ Jones, Jerry, Director, LA Facility Planning and Control. Comments at the LRA Infrastructure Task Force and Healthcare Committee Hold Joint Meeting. October 5, 2006. Baton Rouge.

²² Pope, John and Jan Moller. 2006. "State, VA map plan for medical complex; But Louisiana hasn't put money on table." *Times Picayune*, June 20, 2006. National, p. 1.

²³ Smithburg, Don, LSU hospital system chief. Comments at the LRA Infrastructure Task Force and Healthcare Committee Hold Joint Meeting. October 5, 2006. Baton Rouge.

²⁴ Shuler, Marsha. 2006. "Panel hits LSU on VA venture; Hospital plan late, unclear, officials told." *Capital City Press*, October 6, B1.

²⁵ Moller, Jan. 2006. "LSU hospital plan challenged; Federal, state officials' priorities are at odds." *Times Picayune*, October 13, National, 1.

Part 5: Educational Services

The public schools in New Orleans face numerous challenges to recover from hurricanes Katrina and Rita including rebuilding school facilities, staffing, supplies, and determining what schools to open based on projected demand. The recovery is further complicated because the school districts are simultaneously restructuring and improving the school system. This assessment focuses on the public school recovery in the fall 2006, but also includes limited information about schools operated by the Archdiocese of New Orleans.

Structure and Enrollment

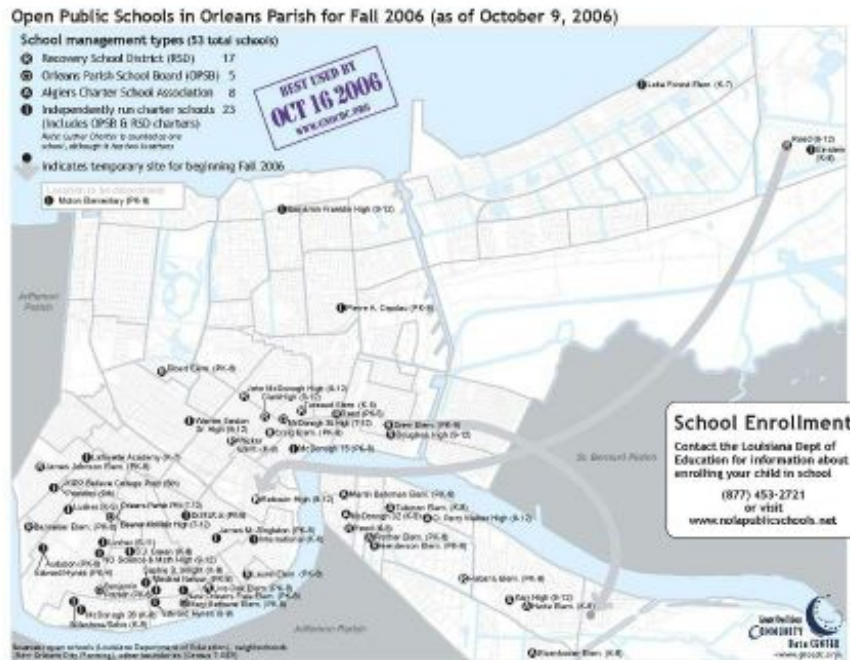
In September 2006, fifty-three public schools opened in two public school districts run by the Recovery School District and the Orleans Parish School Board. Seventeen Recovery School District schools and five Orleans Parish schools opened for the 2006-2007 school year. Charter schools have become an important part of the public school system, and both districts grant charters. Thirty-one charter schools are open, and the Algiers Charter School Association runs eight of the schools. The deadline for applications to the state Department of Education for groups that want to operate charter schools for the 2007-2008 year is December 1, 2006.²⁶ See **Figure 7.2**.

The complexity of the recovery is compounded because two school districts run the public schools. In 2003 the Louisiana legislature passed legislation that allowed for the takeover of schools that “failed” under the school and district accountability program, and authorized the State Department of Education to operate the Recovery School District. “Failed” was defined as “academically unacceptable” for at least four years. In the November 2005 legislative Special Session, the legislature expanded the definition of a “failed school” to include schools scoring below the state average in school systems declared to be in “academic crisis” with at least one school labeled as failing for four or more years. In the 2003-2004 school year, 47% of Orleans Parish public schools were rated “academically unacceptable” with another 26.5% rated as “academic warning.”²⁷ The Recovery School District took control of 107 of the 128 Orleans Parish public schools, and it will retain jurisdiction for a minimum of five years. The schools scoring at or above the state average continue to operate under the Orleans Parish School Board.

²⁶ www.louisianaschools.net; Steve Ritea, “School notes,” *Times-Picayune*, 10/13/06, p. B-2

²⁷ Greater New Orleans Community Data Center, <http://www.gnocdc.org/orleans/education.html>, accessed 10/13/06

Figure 7.2
Open Public Schools in Orleans Parish for Fall 2006



Source: Greater New Orleans Community Data Center

[<http://www.gnocdc.org/orleans/education.html>, accessed 10/13/6006]

Since the beginning of the school year, school attendance has fluctuated and is expected to increase as more people return to the city. As of September 21, 2006, 21,610 students were attending public schools. 5,547 students were attending Recovery School District schools, 2,690 were attending New Orleans public schools, 4,060 students were in schools operated by the Algiers Charter Schools Association, and other charter schools had 9,313 attendees.²⁸ On October 4, 24,870 students were enrolled.²⁹ For comparison, in the 2003–2004 school year, there were 67,922 students enrolled in Orleans Parish public schools. Pre-Katrina, 93.5% public school students were African-American, and 4% were white.³⁰

In 2000, 18.1% of students were enrolled in private schools, most of which are Catholic schools operated by the Archdiocese of New Orleans.³¹ In September, the Archdiocese reported that approximately 16,000 students were enrolled in its New Orleans schools, down from a pre-Katrina

²⁸ New Orleans Public Schools Information Planning Packet, September 2006, Draft Report

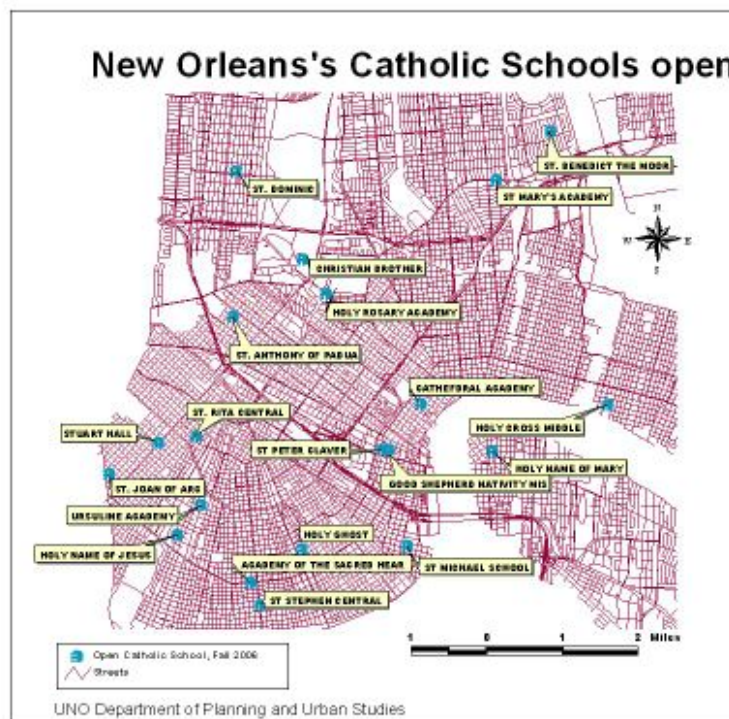
²⁹ Recovery School Update October 4, 2006, <http://www.nolapublicschools.net/rsdupdate.aspx?RSDU=787>, accessed 10/16/06

³⁰ Greater New Orleans Community Data Center, <http://www.gnocdc.org/orleans/education.html>, accessed 10/13/06

³¹ Greater New Orleans Community Data Center, www.gnocdc.org/orleans/edattainment.html, accessed 10/4/06

enrollment figure of almost 19,000. In the New Orleans metropolitan area, 42,000 students are enrolled, down from 50,000 pre-Katrina, and 88 of the 106 schools in the archdiocese opened for the 2006-2007 school year. In Orleans Parish, twenty-five elementary and fourteen high schools are open. **Figure 7.3** shows the open Catholic schools in Orleans Parish.³²

Figure 7.3
New Orleans Catholic Schools Open



Source: Clarion Herald, July 22, 2006 [<http://www.catholic.org/clarionherald/issue/20060722/>, accessed 10/4/06]

Facilities and Operating Costs

In June 2006, the estimated cost of physical damages to school facilities and infrastructure was \$800 million. Assuming all facilities are rebuilt, the FEMA match requirements would cost the Orleans Parish School Board \$55 million. There is also a backlog of deferred maintenance issues. The

³² No author, "Listing of elementary, secondary schools in archdiocese," *Clarion Herald*, New Orleans, July 22, 2006, [<http://www.catholic.org/clarionherald/issue/20060722/>, accessed 10/4/06]; enrollment estimates from Sarah Comiskey, Archdiocese of New Orleans; Steve Ritea, "System has ½ its pre-storm students," *Times Picayune*, 9/21/06, p. 1

estimated costs of bringing the building up to pre-Hurricane Katrina building codes is \$52 million, which does not include costs of maintenance items that were not related to building code violations but necessary for desirable educational environments. Additionally, the facilities were underinsured, requiring the Orleans Parish School Board to pay \$165 million in penalties.³³

Of the 126 public schools in New Orleans, 16 had estimated damage assessments higher than 51%, 31 buildings had damaged assessed between 25-50%, 72 buildings had 1-24% damage, and only seven buildings suffered no damage.³⁴ **Figure 7.4** shows relative damage to facilities. Each school district and the charter schools are responsible for securing and repairing or rebuilding their facilities. The Orleans Parish School Board controls 42 properties that include both school and administrative facilities, three of which are currently for sale, and whole or partial ownership of four Section 16 parcels. The Recovery School District controls 105 properties.³⁵ The Recovery School District has the authority to lease property and to rebuild and renovate the school buildings, although is not authorized to sell properties without the Orleans Parish School Board's consent except in limited circumstances. Each charter school is responsible for its physical facilities, and some Recovery School District and Orleans Parish School Board charter schools lease properties from the Recovery School District.

Permanent schools are classified as Category E projects and are eligible for consideration under the FEMA Alternative Arrangements program. It allows action without following the Environmental Impact Statement process. Instead, it develops alternative arrangements that comply with the National Environmental Policy Act. Thirty-five Orleans Parish schools were considered for alternative arrangements.³⁶

Because many facilities sustained damage, schools have been sharing buildings until repairs are complete. This has necessitated some schools to have two " platoons" to accommodate two schools in one facility and for students to be bused to sites far from their home campuses. For the high schools platoon 1 ran from 7 a.m. to 1:15 p.m., and platoon 2 began at 1:45 p.m. and ended at 7:30 p.m. Some schools that opened away from their home campus, such as Drew Elementary and Reed's sixth to eighth graders and high school students, have returned to their home campuses, but others including Reed's lower grades will attend class away from their home campuses for the duration of the semester.³⁷

³³ Recovery School District Legislatively Required Plan, June 7, 2006, <http://www.louisianaschools.net/lde/uploads/8932.doc>, accessed 10/6/06

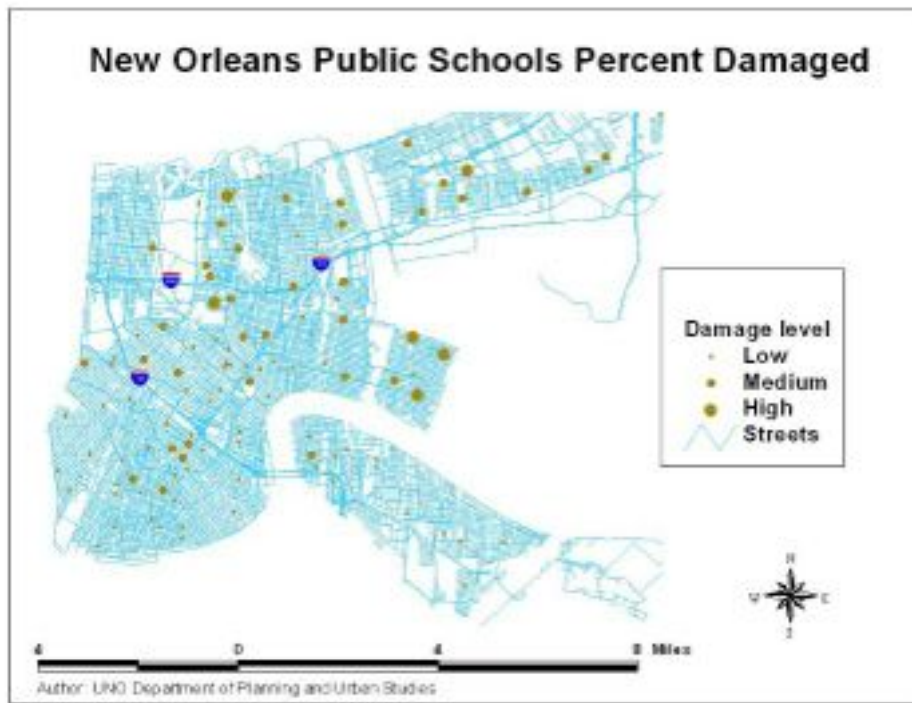
³⁴ New Orleans Public Schools Information Planning Packet, September 2006, Draft Report

³⁵ New Orleans Public Schools Information Planning Packet, September 2006, Draft Report

³⁶ Public Assistance Projects in NOMA under Alternative Arrangements as of July 10, 2006, <http://www.fema.gov/xls/plan/ehp/noma/aa-schools-0710.xls>, accessed 10/1/06

³⁷ Information Planning Packet, September 2006, Draft Report; Steve Ritea, "Schools notes," *Times-Picayune*, 10/13/06, p. B-2

Figure 7.4
New Orleans Public Schools, Percent Damaged



Source: New Orleans Public Schools Information Planning Packet, September 2006

In addition to school facility repairs, the schools face many interrelated challenges. As of October, the Recovery School District was still short on teachers and substitute teachers, and some classes are overcrowded. Textbooks, equipment, chalk, erasers, paper, markers and other supplies are lacking, although supplies had begun arriving in October. Sixty percent of the schools do not offer after-school programs; whereas, before Katrina, almost every school had some form of after school program. **Figure 7.5** shows open after school programs. The school district has received donations of curriculum materials, electrical products, and labor to construct playgrounds.³⁸

³⁸ Steve Ritea and Rob Nelson, "Problems plague N.O. school recovery," *The Times Picayune*, 10/9/06, p. 1; Steve Ritea, "Schools notes," *Times-Picayune*, 10/13/06, p. B-2; Recovery School Update October 4, 2006, <http://www.nolapublicschools.net/rsdupdate.aspx?RSDU=787>, accessed 10/16/06

Figure 7.5
After-school Programs in Orleans Parish



Source: Greater New Orleans Community Data Center [<http://www.gnocdc.org/orleans/education.html>, accessed 10/13/6006]

Considerations for Planning

Numerous factors inform the school districts' decisions about which schools to reopen. Real costs of repairing schools: In addition to the damage inflicted by the storms, maintenance on many school facilities had been deferred, and the buildings need more than storm repairs to make them functional. It has been difficult to accurately assess the costs of repairing individual buildings because new

structural problems have been identified during repairs, increasing costs during construction. The Recovery School District is in the process of assessing the full costs of rebuilding the schools.³⁹

Expected demand: The Recovery School District will make decisions about which school sites to open based on several factors including population projections, the actual rate of return and demand, and the repairs required to the school facilities. The situation is further complicated because parents can enroll students in any school, and the Recovery School District expects more charter schools in the upcoming years.⁴⁰

Schools as community centers: School facilities have multiple functions. Although parents will choose to enroll their children in a school that best suits the children's interests and parents' preferences, local school facilities can serve as community centers and playgrounds during off hours. For this reason, schools are important for both citywide and local planning.

³⁹ New Orleans Public Schools Information Planning Packet, September 2006, Draft Report; interview with Rob Logan, RSD Chief Operating Officer, 9/2/06

⁴⁰ New Orleans Public Schools Information Planning Packet, September 2006, Draft Report; interview with Rob Logan, RSD Chief Operating Officer, 9/2/06

Part 6: Recreation Facilities

Parks, recreation facilities and open space comprise the community facilities and services impacted by Hurricane Katrina. The purpose of this document is to assess the status of these assets in the fall of 2006 over one year since the Hurricane.

According to the Parks, Recreation and Open Space component of the City's Master Plan, the City contains approximately 25,000 acres of open space of which 4,400 acres is designated park land composed of regional, major, neighborhood and pocket parks. While the open space system is also composed of over 250 miles of street medians and land along levees both at the river and lakefront, this assessment is directed at the main park land and facilities comprising the core of the City's recreation assets.

This assessment also does not address the private recreation facilities including swim clubs, tennis clubs, private golf courses and fitness centers which also make up part of the recreation system.

Facilities such as the Louisiana Superdome (reopened in September 2006), Jazzland (closed), the Fairgrounds Race Track (scheduled to reopen in November 2006), the New Orleans Arena (open) and the UNO Lakefront Arena (closed) are not addressed in detail. In addition, Bayou Sauvage National Wildlife Refuge (which contains approximately 22,000 of the city's 25,000 acres of total open space) is not addressed in detail although it is partially open.

It should also be noted that damage estimates from the storm are provided where they have been made available. Often there is a great range of estimates between what FEMA believes are eligible damages and what independent investigators or public facility staff believe are storm-related damage. Where this information was available a range was given. Also the reader should be aware that the facility damage lists are constantly undergoing revision thus figures tend to change frequently. Finally while some facilities are listed officially as closed, in fact some limited use of facilities may be going on as citizens, booster clubs and others carve out particular pieces of a recreation asset for use.

In August of 2005, the City's park system contained six designated regional parks, seven major urban parks, fourteen multi-neighborhood parks, eighty-three neighborhood parks and sixty-four pocket parks. The system is also composed of ten recreation centers, nineteen swimming pools, twelve sites which contain tennis courts, eighty-four sites which contain multi-purpose fields, four football stadiums, five baseball stadiums, six golf courses and four major boat harbors. These facilities are stretched across the City's thirteen planning districts. Most of these assets received some sort of damage from Hurricane Katrina, and many received major damage if not complete destruction. An overall assessment is offered of the regional and major urban parks, and an analysis of the neighborhood and multi-neighborhood parks and play spots is offered by planning district.

Summary of Assessment

In general the current assessment of recreation facilities confirms the obvious. In areas where there was catastrophic flooding, the few open facilities are generally the result of private initiatives of homeowners and booster clubs. There are of course exceptions to this general observation. Despite catastrophic flooding, City Park has managed to open a variety of facilities with more opening by the end of the year. Efforts are underway to clean and open playgrounds (Willie Hall is an example), and the Parks and Parkway Department is cutting the grass at sites as resources allow. West Bank facilities and facilities close to the river have largely reopened although damage to many of them remains to be corrected. No federal repair dollars have begun flowing to repair the damaged facilities, and a wide disparity remains between FEMA's estimate of repair costs and the City's estimate of damage. A preliminary range of damage estimates for recreation facilities varies from \$13.6 million to \$56.6 million.

Just as significant as the damage to the physical facilities has been the reduction in staff of the City's main recreation agencies, the Parks and Parkway Department and the New Orleans Recreation Department. The Parks Department had a pre-Katrina staff component of around 230 employees plus 30 more summer employees. Today their staff stands at around 80, a reduction of approximately 65%. Obviously this translates into longer times to carry out work orders and a greater period of time between cutting.

Similarly the New Orleans Recreation Department had 332 full and part-time employees, pre-Katrina and now has 25. City Park had 230 full- and part-time employees and now has 30. The Audubon Nature Institute had 800 employees and now has 500. The major providers of recreation services and facilities have seen their forces go from approximately 1600 to around 635 a decline of over 60%. Just examining City Park, NORD, and the Parks and Parkway Department, the decline is over 80%. Clearly, the recreation staff of the prime recreation providers has been dramatically reduced, and the implication is that without substantial relief they will not be able to fully program and maintain the City's recreation facilities.

Regional Parks

City Park is the largest regional park in the metropolitan area. The park suffered catastrophic damage during the storm when 80% of the park flooded for approximately three weeks. Over 100 buildings were damaged or destroyed, 1,000 trees lost, all of the park's equipment destroyed, and all of its facilities closed. A preliminary estimate of damage put the figure at over \$40 million. The park was forced to lay off 90% of its work force. Debris removal was accomplished by the Corps. Of Engineers as a mission assignment from FEMA. The park reopened part of its tennis complex in October 2005 and renovated and opened the Botanical Garden, Storyland, the playground area, the golf driving range, several sports fields, its equestrian facility and Tad Gormley Stadium. Its three golf courses remain closed and events are sporadically held at Pan American Stadium and the softball

Quadrplex. The Museum of Art reopened in March. It is anticipated that it will take at least two years to completely repair the park's facilities and perhaps longer for the golf complex. As the park is largely self-sustaining, the loss of revenue will reduce its staff for the foreseeable future.

Audubon Park did not receive massive flooding but suffered approximately \$500,000 in damage, primarily to roofs. Significant debris removal was also accomplished by the USACOE. The park was available for public access within weeks after Katrina and the golf course reopened Thanksgiving weekend. Damage to the world famous Audubon Zoo is estimated at about \$2,000,000, again primarily roof damage. Extensive tree damage was addressed by the Corps., Audubon staff and various military units which were stationed in the Park after the storm. Audubon Zoo reopened Thanksgiving weekend and today is open Wednesday through Sundays.

Bayou Sauvage National Wildlife Refuge was heavily flooded as a result of the storm. They have managed a limited reopening of some of the trails.

Lakeshore Park, which extends from Westend to the Seabrook Bridge and is composed of over 400 acres, was heavily damaged as a result of wave action and flooding. Damage occurred to the seawall, trees, shelter and fountain facilities. Lakeshore Park is closed however it is often used by bikers and sightseers. (Lakeshore Drive is open). The Orleans Levee Board, which has operated the park, has pressed its damage claims with FEMA but no time schedule has been reestablished for repair and reopening of the entire park. (As part of the levee reform legislation passed this summer, the control and operation of the Park will be removed from the Levee Board at the end of 2006 at which time it will pass to the State's Division of Administration).

Woldenberg Riverfront Park's primary damage was to trees, plants, and light fixtures throughout the park. Estimated damage to lighting fixtures is around \$150,000. Due to the relatively small nature of damage to the Park it was able to reopen to the public during daytime hours by the end of 2005. The Audubon Aquarium of the Americas suffered extensive losses when it ran out of fuel for its emergency generators, causing the loss of a great part of its collection. Building and collection damage amounts to approximately \$3.25 million.

Louis Armstrong Park was heavily damaged during the flooding. Its 31 acres received extensive grounds damage as have several of its buildings including: Perseverance Hall – \$200,000, Reimann House – \$150,000, Kitchen Building – \$100,000, Old Fire Station – \$150,000. The Municipal Auditorium and the Theater of the Performing Arts received extreme damage with estimates ranging between \$8 and \$14 million dollars. The park is open on a limited basis. The National Park Service has started renovation of two structures as a first phase of development of the New Orleans Jazz National Historical Park.

Major Urban Parks

Joe Brown Park, located in eastern New Orleans on 187 acres, received severe damage from both wind and flood and is closed. Damage occurred to its maintenance facilities, shelters, ball fields, concession areas, tennis facilities and to its community center and swimming pool. Damage estimates for buildings range from approximately \$3.0 million to almost \$10 million dollars. The Louisiana Nature Center located in the park was also extensively damaged with a current estimate at about \$3.5 million. Most of the trees on the property were impacted. It's repair and reopening is probably years away.

Brechtel Park, located on 232 acres on the Westbank, did not receive extensive flooding but did sustain wind damage. The park was opened soon after the storm on weekends and the golf course was the first public golf course in the area to reopen and is now open daily. Some damage is reported to the golf clubhouse and maintenance buildings as well as ranger stations. The play equipment in the park is in excellent condition and is open on weekends.

Pontchartrain Park, Located on 198 acres in Gentilly, remains closed with heavy damage. The park is dominated by the Bartholomew Golf Course which received significant damage as did the community and senior citizens center. Damage estimates range from \$600,000 to over \$5,000,000.

English Turn Wilderness Park, located on 133 acres of land in the lower coast of Algiers on the west bank, contains walking trails and a central education/restroom facility. The park which was opened only by pre-arrangement is closed.

West End Park, located near Lake Pontchartrain, it covers approximately 23 acres and is open with some of the facilities awaiting repair. The bridge and kiosk are damaged while the shelter is open. The fountain is closed. Damage repair estimates range from a few thousand dollars to \$250,000.

Behrman Park, composed of 60 acres, did not receive significant storm damage. However, Behrman was heavily impacted as it was used as a center for rescue and recovery operations. The park is open but the pool, tennis courts and stadium are not open.

Lincoln Beach, which was in the process of implementing a restoration plan, remains closed with no date for a reopening.

Stadiums

Of the City's nine sports stadiums, three are officially open. The open stadiums are:

- Tad Gormley (suffered an estimated \$2 million in damage, of which approximately \$750,000 has been spent to replace the field and repair electrical damage).
- Kirsch Rooney (suffered approximately \$500,000 in damage).
- Skelly Rupp (suffered minor damage).

The closed stadiums are:

- Pan American (some soccer leagues play without the benefit of power, restrooms, etc.).
- Barrow (nearly \$1.0 million in damage).
- Larry Gilbert (over \$700,000 in damage).
- Harrell (home to a trailer park, minor damage).
- Perry Roehm (currently in use as a trailer park; it suffered over \$300,000 in damage).
- Behrman (estimated \$318,000 in damage).

Recreation Centers

The City had ten recognized recreation centers. Only St. Bernard is currently open. The closed centers with damage estimates are:

- Gernon Brown – (closed, \$1,367,000)
- Rosenwald-(closed, \$438,000)
- Lyons – (closed, site for trailers, \$1,400,000)
- Treme – (closed, \$570,000)
- Bertha Mugrauer – (closed, damage estimates range from \$642,000 to \$5,342,000)
- Joe Brown Center – (closed, damage estimates range from \$1,770,000 to \$5,233,000)
- Behrman – (closed, \$114,000)
- Copelin – (closed)
- Stallings – (closed, trailer site, estimates range from \$241,000-\$1,318,000)

Status and damage estimates of neighborhood parks and play spots
(Previously described regional parks, major parks and stadiums are also included)

Planning District 1 Vieux Carre, CBD

Table 7.7
Park Status in Planning District 1

Park	Status	Damage Estimate
Bienville Place	Open	0
British Plaza	Open	0
Cabrini Park&Doll House	Open	\$40,000-\$66,000
Cancer Survivor Park	Open	\$10,000
Diamond St. neutral ground	Open	0
Duncan Plaza	Open	\$20,000
Edison Place	Open	0
Elks Place	Open	0
Jackson Square	Open 8-6	\$50,000
Lafayette Square	Open	0
Latrobe Park	Open	0
Lee Circle	Open	0
River Heritage Park	Open	\$5,000
Piazza d'Italia	Closed	Unknown
Washington Artillery Park	Open	\$94,500
Woldenberg Park	Open	\$150,000

Planning District 2 Central City, Garden District, Lower Garden District

Table 7.8

Park Status in Planning District 2

Park	Status	Damage Estimate
Amelia Park	Open	0
Annunciation Sq.	Partly Open	\$22,000-\$157,000
Leo Benewell Playspot	Open	\$7,500
Brignac Playspot	Open	0
Burke Park	Open	0
Camp St. Finger Park	Open	0
Coliseum Sq.	Open	\$25,000
A.L. Davis Playground	Closed-trailer site	\$61,000-\$594,000
Harmony Place	Open	0
Hastings Place	Open	0
Keller Center	Closed	\$44,000-\$576,000
Laurence Sq.	Open	0
Lyons Center&Pool	Closed-trailer site	\$312,000-\$1,395,000
Margaret Place	Open	\$1,500
McDonough Park	Open	0
Van McMurray Park	Open	\$11,800
Montiero Park	Open	\$3,300
Parkerson Place	Open	Part of Coliseum Sq.
Samuel Square	Open	\$2,300
Saratoga Playground	Open	\$6,600-\$18,000
Soraparu Playground	Open	0
Stern Tennis Center	Closed	\$559,000-\$768,000
Taylor Playground	Playground open, Pool closed	\$144,000-\$750,000
Sophie Wright Park	Open	0

Planning District 3 Uptown, Carrollton

Table 7.9

Park Status in Planning District 3

Park	Status	Damage Estimate
Audubon Park	Open	\$500,000
Avenger Playground	Closed-trailer site	\$30,000
Broad Place	Open	0
Broadmoor Playspot	Open	Unknown
Cadiz Park	Under demolition	Unknown
Carver Playground	Closed-trailer site	\$10,800-\$57,200
Conrad Playground	Open	\$87,000
Danneel Playground	Open	\$1,500
Dublin Park	Open	0
Evans Playground	Open	\$7,500-\$48,000
Fischer Place	Open	\$25,600
Larry Gilbert Stadium	Closed	\$718,000
Gilmore Park	Open	0
Harrell Stadium&Pool	Closed-trailer site	\$137,000-\$170,000
Laurence Sq.	Open	0
Little General Taylor Park	Open	0
Market Place	Open	\$1,500
Palmer Park	Open	Unknown
Alma Peters Playground	Unknown	Unknown
Samuel Square	Open	\$2,300
Valmont Place	Open	0
Wisner Playground	Closed-trailer site	\$45,000-\$273,000
Whitney Young Pool	Open	\$3,975-\$24,000

Planning District 4 Mid-City, Esplanade Ridge, Treme, Bayou St. John

Table 7.10

Park Status in Planning District 4

Park	Status	Damage Estimate
Capdeville Place	Open	0
Carondelet Canal Park	Unknown	Unknown
Comiskey Playground	Closed	\$155,000-\$401,000
Cuccia-Byrnes Playground	Closed	\$278,000-\$660,000
Jeff Davis Playground	Open	\$8,000
Desmare Playground	Open	0
Easton Playground	Open	\$35,000
Espenan Playground	Open	\$2,500
Alcee Fortier Park	Open	0
Gayarre Place	Open	Unknown
Gert Town Pool	Closed	\$141,000-\$700,000
Golden Age Center	Closed	\$95,000-\$977,000
Gravier Park	Unknown	Unknown
Willie Hall Playground	Open	\$135,000-\$608,000
Hardin Playground	Closed-trailer site	\$86,000
Hunters Field	Closed	\$684,000
Kennedy Place	Open	Unknown
Kruttschnitt Place	Open	0
Lemann Playground	Closed-trailer site	Unknown
Lewis Playground	Open	\$1,400
Pershing Place	Open	Unknown
Rosenwald Center	Closed	Unknown
St. Patrick Playground	Open	\$3,000
Stallings/Gentilly Playground	Playground – Open Pool - Closed	\$18,000-\$38,000
N. Thompson Playground	Closed	\$29,000-\$147,000
Treme Center & Pool	Closed	\$236,000-\$570,000
Louis Armstrong Park	Open on a limited basis	\$8,000,000-\$14,000,000

Planning District 5 Lakeview, West End

Table 7.11

Park Status in Planning District 5

Park	Status	Damage Estimate
J. Bartlett Park	Open	0
Catina Park	Open	0
City Park	Variety of facilities open	\$43,000,000
Delgado Playground	Open	\$520,000
Gernon Brown Center	Closed	\$1,367,000
Fleur de Lis Playground	Closed	\$15,000 + tree damage
Kirsch-Rooney Stadium	Open	\$375,000-\$500,000
Lakeshore Park	Closed	Unknown
Lake Vista Playspot	Open	0
McKay Playspot	Open	0
West End Park	Open	\$250,000

Planning District 6 Gentilly

Table 7.12

Park Status in Planning District 6

Park	Status	Damage Estimate
Barrow Stadium	Closed	\$140,000-\$975,000
Boe Playspot	Open	\$12,900
Carlson Park	Unknown	Unknown
Dauterive Playspot	Closed	Unknown
Donnelly Playground	Open	\$75,000
Gatto Playground	Closed	\$56,000
Harris Playground	Closed	\$131,000
Lakeshore Park	Closed	
Milne Playground	Closed	\$193,000-\$620,000
Mirabeau Playground	Closed	Unknown
Oak Park Playground	Open	\$16,000-\$102,000
Pontchartrain Park & Golf Course	Closed	\$600,000-\$7,000,000
Pratt Park	Closed	\$11,900-\$98,000
Rome Playspot	Open	\$50,000
St. James Playground	Open	\$82,000
Union Playground	Unknown	Unknown

Planning District 7 Marigny, Bywater, St. Claude, St. Roch, Florida/Desire

Table 7.13

Park Status in Planning District 7

Park	Status	Damage Estimate
Alvar Center/Snowden Playspot	Unknown	Unknown
Carver Penn Playground	Closed	\$228,000-\$1,173,000
Odile Davis Park	Closed	\$598,000
Bunny Friend Playground	Closed-trailer site	\$18,892-\$355,800
F.P. Jackson Playground	Open	0
Mandeville Center	Closed	\$408,000-\$1,341,000
Mickey Markey Playground	Open	\$8,000
McCue Playground	Closed-trailer site	\$8,700-\$105,000
Bertha Mugrauer Center	Closed	\$642,000-\$5,342,000
Perry Roehm Stadium	Closed-trailer site	\$144,000-\$366,000
St. Bernard Recreation Ctr.	Open	\$277,000-\$370,000
St. Roch Playground	Closed-trailer site	\$90,000-\$599,000
Sampson Playground	Closed	\$118,000-\$234,000
Schabel Playground	Closed	0
Stallings-St. Claude Center	Closed-trailer site	\$241,000-\$1,318,000
Washington Square	Open	\$20,000

Planning District 8 Ninth Ward/Holy Cross

Table 7.14

Park Status in Planning District 8

Park	Status	Damage Estimate
Sam Bonart Pool & Playground	Closed	\$131,000-\$617,000
Oliver Bush Playground	Closed	\$131,000-\$918,000
Copelin Center	Closed	Unknown
Delery St. Riverfront Playground	Closed	Unknown
Goins Playspot	Closed	\$38,000
Richard Lee Playground	Closed	\$413,000-\$453,000
Roffignac Playground	Closed	\$62,000

Planning District 9 New Orleans East

Table 7.15

Park Status in Planning District 9

Park	Status	Damage Estimate
Barrington Playground	Closed	0
Joe Brown Park, Center, Pool	Closed	\$3,670,000-\$10,000,000
Kerry Curley Playground	Unknown	Unknown
Del Mar Villa Playground	Open	\$78,000
DiBenedetto Playground	Closed	\$35,000-\$594,000
Digby Playground	Unknown	Unknown
East Shore Playground	Opening	\$22,815-\$79,000
Marie Goretti Playground	Open	\$132,000-\$894,000
Kenilworth Playground	Open	\$131,000-\$543,000
Kingswood Playground	Closed	\$78,000
Lincoln Beach	Closed	Unknown
Peace Playspot	Closed	\$10,000
Pradat Playground & Pool	Closed	\$22,639-\$1,195,000
Robert Playground	Closed	\$29,600-\$61,500
Vincent Playground	Closed	Unknown
Wimbledon Playground	Closed	\$65,000
Werner Playground	Closed	\$98,000

Planning Districts 10 & 11 New Orleans East, Village de l'Est, Venetian Isles

Table 7.16

Park Status in Planning Districts 10 & 11.

Park	Status	Damage Estimate
Bayou Sauvage National Wildlife Refuge	Open – Limited Use	Unknown
Fort McComb	Closed	Unknown
Fort Pike	Closed	Unknown
Venetian Isles Playground	Closed	\$4,300-\$86,900
Village De l'est Playground	Closed	\$84,000
Willowbrook Playground	Closed	\$1,900

Planning Districts 12 & 13 Algiers, Lower Coast Algiers, English Turn

Table 7.17

Park Status in Planning District 12 & 13

Park	Status	Damage Estimate
Behrman Park	Open-some facilities closed	\$63,000-\$435,000
Bodenger Playground	Open	\$2,800-\$13,000
Brechtel Park & Golf Course	Open	\$4,000,000
Collins Park	Open	0
Cut-Off Playground & NORD Center	Open	\$103,000-\$176,000
Delcazel Playground	Open	\$7,000
Donseaux/Harrison	Open – some damage	\$20,000-\$48,000
Fisher Playground	Unknown	\$25,600
Flanders Playground	Open	\$10,000
Fox Playground & Pool	Playground-Open Pool-Closed	\$27,500-\$158,000
Kiwanis/Confetti Playspot	Open	0
Lambert Playground	Open	\$5,500
Larkin Playground	Open	\$32,000
Magellan Playground	Open	0
McDonough Triangle	Open	0
McDonough Playground	Unknown	\$23,000-\$116,000
Norman Playground	Open	\$8,800-\$23,000
River Park	Open-trailer site	\$36,000
Skelly Baseball Stadium	Open	\$33,000-\$68,000
Walk of Jazz	Open	Unknown
Wilderness Park	Closed	0
Woodland Park	Open	Unknown

Part 7: Major Community Serving Facilities Owned by the City

The City of New Orleans owns over 300 building ranging from fire and police stations to community pools to boat houses at its Yacht Harbor. Most of these buildings received damage from Hurricane Katrina. In other parts of the Community Services sections, city-owned buildings such as libraries, fire and police protection facilities, law enforcement and sanitation building, maintenance and training facilities, etc. are assessed as to their status in October 2006.

This assessment focuses on city owned buildings which provide major community serving functions. While they could be and are in some cases identified by Planning District, in truth these facilities serve citizens citywide, and their importance goes beyond simply being located in any particular Planning District. We have grouped these buildings into categories and tried to assess their status in terms of being open and fulfilling their city wide functions.

Note: Damage estimates from the storm are provided where they have been made available. Often there is a great range of estimates between what FEMA believes are eligible damages and what independent investigators or public facility staff believes are storm-related damage. Where this information was available a range was given. Also the reader should be aware that the facility damage lists are constantly undergoing revision, thus figures may be subject to change.

Table 7.18

General Purpose Government Buildings located in the CBD in Planning District # 1

Building	Status	Damage Estimate
City Hall	Open	\$2,748,000-\$8,050,000
Civil & Juvenile Courts Bldg.	Open	\$6,975,000
Gallier Hall	Open	\$125,607-\$159,800
Union Passenger Terminal	Open	\$182,946-\$291,000

City Hall – Sustained damage to the roof and mechanical systems. Roof damage has caused additional interior damage. The building is entirely open to the public while the City pursues repairs.

Civil & Juvenile Courts Bldg – Similar to City Hall the Civil and Juvenile Courts building, sustained significant roof damage, damage to its windows and mechanical damage. It is open to the public.

Gallier Hall – The former City Hall suffered minor damage mainly to its roof and is open for ceremonial events.

Union Passenger Terminal – Open with minor damage. Train and bus service continues to be provided out of the building.

Table 7.19

Court facilities located at Tulane & Broad in Planning District # 4

Building	Status	Damage Est.
Traffic Court Building	Closed	\$1,822,000-\$3,306,800
Criminal Court Building	Partially open	\$3,674,386-\$13,810,000
District Attorney's Bldg.	Closed	\$8,235,000
Community Correctional Facility	Closed	\$13,740,000
House of Detention	Closed	\$500,000-\$12,703,000
Parish Prison	Open	\$375,000-\$1,000,000

The criminal justice complex is composed of a number of facilities owned by the City but in some cases operated by other constitutional offices such as the Criminal Sheriff or District Attorney.

Traffic Court Building – Supplies chilled water to the police complex and the House of Detention. It received significant damage including damage to its boilers, pumps, electrical systems and chillers. As a result it is closed as well as the buildings to which it supplies services. Temporary traffic court services are being provided at the court house on Morgan Street at the point of Algiers.

Criminal Court Building – Only recently partially reopened, 7 out of the 14 courtrooms are currently open. Once again flooding in the basement has caused electrical and mechanical damage.

District Attorney's Building – Significant flooding on the ground floor has closed the building. The District Attorney has been functioning out of the Amoco building in downtown New Orleans.

The Community Correctional Center – Also suffered flood damage and is closed. The Orleans Parish Criminal Sheriff is in the process of building new prison facilities on Perdido Street in back of the Traffic Court Building.

House of Detention – As previously mentioned, major services for this facility come from the Traffic Court Building which was heavily damaged. It is closed.

Parish Prison – Open and sustained relatively minor damage.

The criminal justice system facilities sustained some of the heaviest impact from the Hurricane, causing major disruption to the system including delaying trials, a shortage of prison holding space, and disruption to the prosecutorial and defense system. Problems which already existed with regard to evidence holding were increased.

Table 7.20

Break-tag stations located in Planning Districts # 4, 12, and 9

Building	Status	Damage Estimate
Algiers Motor Vehicle Inspection Station	Closed	\$53,100
Lopez Motor Vehicle Inspection Station	Closed	\$411,953-\$431,600
New Orleans East Motor Vehicle Inspection Station	Closed	\$52,947-\$1,412,500

All three vehicle inspection stations are closed with the Lopez Station and the Algiers Station housing other uses such as police operations. Private gas stations and garages throughout the city now perform the service.

Table 7.21

Municipal Yacht Harbor located in Planning District # 5

Building	Status	Damage Estimate
Yacht Harbor Building	closed	\$884,233-\$1,896,000
Watchman's Office	closed	\$106,000-\$385,000
Boat Houses	Varying degrees of damage	\$15,968,000
Piers & Basin	Varying degrees of damage	\$5,680,000
Sheriff Boat Houses	closed	\$169,000

The Municipal Yacht Harbor, one of three significant harbors in Orleans Parish suffered extensive damage from the Hurricane yet is open with boat owners and those leasing boat houses back in their slips or houses. The Orleans Levee Board Marina and South Shore Harbor Marina owned by the Orleans Levee Board suffered much more extensive damage because of their greater exposure to the storm. Even the public boat launch at West End was damaged. Thus only very limited boating facilities are currently available in the City.

Table 7.22

New Orleans Museum of Art and Sculpture Garden in Planning District # 5

Building	Status	Damage Estimate
Museum of Art	Open	\$2,681,000
Sculpture Garden	Open	\$3,015,000

The New Orleans Museum of Art received damage in the basement of the building when hydrostatic water pressure forced its way up through the slab. Fortunately the Museum was able to save all the works of art by being able to keep temperature control of the building. It is open and free to Louisiana residents. The sculpture garden sustained some damage to some of the sculptures and extensive damage to the landscaping. It is open.

Part 8: Library Services

Libraries are one aspect of community facilities and services impacted by Hurricane Katrina. The purpose of this document is to assess the status of these assets in the fall of 2006 over one year since the Hurricane.

Eight of the New Orleans Public Library's (NOPL) twelve branches were severely damaged by Katrina. Currently, five branches (Alvar, the Children's Resource Center, Hubbell, Latter, and Nix) and the Central Library are open to the public. On July 5 mobile libraries began providing library service at the Algiers Regional and Smith branches. Damage assessments have been performed on all library buildings (Attachment A) by FEMA and the City.

At the time of this writing, NOPL has embarked on a planning process for how to provide service in the short and long term. In the short term NOPL is scheduled to receive a grant from the Bill and Melinda Gates Foundation which will allow them to open seven temporary locations. These facilities will be in either storefronts or modular buildings. Funding is available from the Gates Foundation for a period of three years, and can be applied to staff, lending material (books, DVDs, art works, etc.), furnishings and computers. It is hoped that three of these facilities will be in operation this year in Algiers, Broadmoor (modular) and East New Orleans. A site is still needed in Gentilly. Two school-based sites, MLK and Einstein, will be included. All six sites will be open by June, 2007.

The longer-term plans call for the consolidation of the Gentilly and Nora Navra Libraries, both of which have little or no land for expansion. The Smith Library was badly damaged and also is restricted in terms of expansion, and NOPL is actively pursuing other sites in Lakeview. The Algiers Regional Library was also seriously damaged and based on the District Plan identifying Gen. Mayer as a nexus of development a new site is being sought there. The District planning in Broadmoor also calls for the rebuilding of the existing library. There may be, however, conflicts between the current state of planning by NOPL and the District Plans and every effort to coordinate between the two processes should be undertaken.

NOTE: Damage Estimates from the storm are provided where they have been made available. Often there is a great range of estimates between what FEMA believes are eligible damages and what independent investigators or public facility staff believe are storm related damage. Where this information was available a range is given. Also, the reader should be aware that the facility damage lists are constantly undergoing revision, so figures tend to change frequently.

NOTE: The information contained here was obtained from the NOPL website www.nutrias.org and from interviews with Geraldine Harris, Interim Director, who reviewed this document.

Central Library

219 Loyola Avenue: OPEN

The Main Library stood up remarkably well to Katrina. The building sustained only minor damage, and its two basements remained dry. Main reopened to the public on October 31, 2005, and while staff shortages and other factors continue to limit a return to full service levels, the building is currently open. Public access to all three floors, circulation of materials, and library card registration are available, along with access to the Internet and fax and photocopy services.

Algiers Point

725 Pelican Avenue: OPEN

The Hubbell Branch, an original Carnegie Branch, was severely damaged by Hurricane Betsy in 1965 and remained closed for several years afterward. The building stood up heroically to Katrina and sustained only minor damage. The branch is open for business at Algiers Point.

Algiers Regional

3014 Holiday Drive: OPEN

Although the Algiers Regional Branch did not flood, the building suffered major roof damage. As a result, wind-driven rain entered the building, ruining its contents. The gutted branch is currently being used as a holding and sorting space for the thousands of book donations sent to NOPL from around the world. Meanwhile, Algiers Regional patrons are being served by a new [mobile library](#), a fully equipped trailer.

Alvar

913 Alvar Street: OPEN

The Alvar Branch, in the Bywater neighborhood, took on a foot of water. Although the building (built by the WPA in 1940) remained structurally sound, its contents were completely ruined. But Alvar has been rescued! A host of library-world vendors and suppliers teamed with NOPL for a [complete renovation](#) of the branch. The facelift culminated in an "Extreme Makeover, Library Edition" during the ALA Annual Meeting. The branch reopened on July 5, 2006.

Children Resource Center/Napoleon

913 Napoleon Avenue: OPEN

The Children's Resource Center, which also offers services for adults, suffered only minor damage from Katrina and re-opened to the public in early January, 2006. The CRC, one of NOPL's original Carnegie branches, has undergone a [complete interior renovation](#), unveiled on June 27 during the ALA Annual Meeting.

East New Orleans Regional

5641 Read Blvd: CLOSED

Like almost all of New Orleans East, the East New Orleans Regional Branch (built in 1968) received catastrophic damage. The branch flooded, and its contents were completely destroyed. The branch's damaged contents have been removed, and the building has been gutted and will remain closed.

Gentilly

3000 Foy Street: CLOSED

The Norman Mayer Branch (known to most people as the "Gentilly Branch") originally opened in 1949. Only four years ago, the branch underwent a \$300,000 interior and exterior renovation. Katrina destroyed this "new" Gentilly, however, and the branch has been completely gutted.

Keller

4300 South Broad Street: CLOSED

The Keller Branch, in hard-hit Broadmoor, suffered major flooding and has been gutted. Thanks to the efforts of volunteers from the Broadmoor Improvement Association, [the grounds have been newly cleared of trash and debris](#).

Latter

5120 St. Charles Avenue: OPEN

The Latter Branch, located in a turn-of-the-century mansion on St. Charles Ave., lost a good many of its roof tiles but came through Katrina essentially intact.

Martin Luther King Branch

1617 Caffin Avenue: CLOSED

The Martin Luther King Branch was the most heavily damaged of all NOPL branches. Located in the devastated Lower 9th Ward, the branch took the brunt of Katrina's storm surge and was completely destroyed. The King Branch was attached to an operating public elementary school -- the Martin Luther King Jr. School for Science and Technology. The MLK School will relocate and reopen in the Fall, and NOPL hopes the library will reopen in January.

Nix

1401 South Carrollton Avenue: OPEN

At the Nix Branch in the Carrollton neighborhood, Katrina's winds broke several windows and scattered glass inside, but the storm did little serious damage. Nix reopened to the public in early January, 2006, and resumed its normal services.

Nora Navra

1902 Saint Bernard Avenue: CLOSED

The Nora Navra Branch experienced major flooding and total destruction of its contents. The building has been gutted and remains closed.

Smith Regional

6301 Canal Blvd: OPEN

The Smith Branch was inundated by the flood waters that destroyed the Lakeview neighborhood. The branch has been gutted. Service has returned to the area in the form of a donated bookmobile, dedicated on June 26 during the ALA Annual Meeting.

Bookmobiles

In addition to the bookmobile stationed at the Smith Regional Library, a donation of the librarians and citizens of Medina County, Ohio, two more bookmobiles were ordered by NOPL. These will be available at various locations around the City.

Section 8: Historic Preservation

Background

Over the past quarter century, significant progress has been made in preserving the unique historic character of New Orleans, especially with regard to its impressive store of eighteenth and nineteenth century housing. Few cities have done so much to build cultural tourism around its structures, institutions, and places that are in the many historic neighborhoods. A good deal of that unique housing inventory is now at risk.

Following Katrina, historic preservation issues have been addressed as, by law, they must be given attention. However, to know that many historic structures were damaged and to get repairs underway for those structures are two separate issues. Some of New Orleans' most historic areas, located in the "sliver by the river" high ground of the original settlement were but lightly damaged. Repairs in many of these areas are either underway or even completed. The greater damage and the greater housing stock risk is in those historic neighborhoods immediately adjacent to the oldest settlements, those that moved beyond the original settlement into the more flood prone land "back of town." This includes neighborhoods like Tremé, Central City, Mid-City, Tulane-Gravier, Gentilly, South Lakeview, and Broadmoor. Most of these neighborhoods are designated local historic districts while others are eligible and may have already applied for historic district status.

The New Century New Orleans (NCNO) plan clearly envisioned a leading role for historic preservation efforts both in housing and economic development. The NCNO specifically enumerated three supporting goals relevant to historic preservation.

1. The preservation and enhancement of the City's unique cultural, architectural and historic diversity, including land use mix, building stock and traditionally mixed neighborhoods;
2. Existing neighborhoods throughout the City that are stable, clean, attractive and safe; and;
3. Development of new neighborhoods with distinctive character and the capacity to age gracefully. Land use mix, housing options, architectural integrity and cultural potential should all be in harmony with New Orleans tradition and diversity.

If you consolidate those supporting goals, the Recovery Vision for Historic Preservation in New Orleans is:

“Protect the historical elements, character, and neighborhoods of the City, through the preservation, renovation, and revitalization of the historic resources in collaboration with the economic growth and redevelopment of the city.”

To get to this point requires both a strategy and actions pursuant to it. The preservation community is well organized, vocal, and has a well deserved reputation for informed and able leadership. The preservation movement which initially focused on landmark structures and institutional buildings of note moved long ago into the preservation of the neighborhoods with their eclectic inventory of housing styles and appearances. Unlike other cities, the historical districts of New Orleans are populated by citizens interested in a range of civic issues beyond preservation. The neighborhood organizations and the overarching preservation citywide entities are major assets to the recovery effort and should therefore be seamlessly blended in any efforts.

Historic preservation is central to the city's economic recovery. Funds spent on renovation of buildings engenders eight to twenty more jobs than similar jobs in manufacturing (such as of modular structures). On a national scale, Louisiana is one of the top states using the Federal Investment Tax Credit for Historic Rehabilitation and almost 90% of those credits are used to support renovations in the City. Major tax credit supported projects include the American Can Company Renovation into apartments and condominiums and the renovation of the Holmes Department store into the Ritz Carlton hotel on Canal Street. In both cases, properties that had lost their current economic value were converted to taxable assets. In addition, with the increase of labor demand, specific architectural trades can be developed and embraced within the City overall. This would lead New Orleans not only in its recovery process, but would engender an economic environment that would enhance the region and other national historic communities.

Current Conditions

In January of 2006, according to the Bring New Orleans Back (BNOB) Urban Planning Committee Report, it was estimated that 25,000 properties located in historic neighborhoods were damaged by the storm. It was also estimated that a dozen of the City's twenty historic districts encompassing half of Orleans Parish suffered significant damage. At the same time, it was estimated by the Historic Districts Landmarks Commission that 115 buildings in seven historic districts were seriously damaged.

Since January, the Preservation Resource Center (PRC) and FEMA have been working in tandem to address rebuilding in historic neighborhoods. According to a historic preservation officer at FEMA, it is uncertain how many structures were actually damaged by the storm's floods, wind/rain, or both. Since many residents have moved back to the city and have begun rebuilding, it is now difficult at this point to determine the exact number of storm-damaged structures left untouched.

However, local preservation agencies and FEMA agree that preservation is critical to the rebuilding process of the City. In fact, FEMA and the State Historic Preservation Officer (SHPO) expanded the historic district boundaries of Carrollton, Esplanade Ridge, Bywater, and Holy Cross. In addition, Edgewood Park and a portion of Ponchartrain Park as well as Gentilly Terrace are now eligible to be placed on the National Register of Historic Districts.

There is an increased amount of buildings requiring attention based on their location either in a national and/or local historic district.

Capacity of Local Historic District Commissions

Historic District Landmarks Commission

The Historic District Landmarks Commission (HDLC) is a city-based agency which oversees design guidelines for the rebuilding process in addition to other duties. Prior to the storm, the HDLC had nine employees. Currently, there are four and their office has been condensed into the City Planning Commission offices at City Hall. According to the PRC, the ratio of staff members at the HDLC to buildings in local historic districts is 1 to 4,000. Additionally, there is only one inspector for 16,000 buildings. As a result, the capacity of the HDLC is minimal, which can compromise the rebuilding process for local historic neighborhoods. Homeowners in local districts need to go through the appropriate channels at the HDLC to obtain a Certificate of Appropriateness for design or to obtain a demolition permit. With the lack of staffing, the time frames for such actions are lengthened, which hinders rebuilding in general. Also, with one inspector, architectural infractions can be easily missed, which impacts the architectural integrity of historic neighborhoods.

Preservation Resource Center

The Preservation Resource Center is currently operating at its pre-Katrina capacity with twenty employees. After the storm, the PRC and FEMA entered into an agreement as to how to address rebuilding in historic neighborhoods. Specifically, the demolition process has become an issue. The State Historic Preservation Office requires that demolitions in national historic districts must undergo a 106 Review. Through the PRC, FEMA has reestablished an expedited 106 Review whereby the process is shortened. Additionally, the PRC seeks to ensure that buildings in historic districts are not demolished prematurely. They also are working to aid building owners with mediation suggesting either architectural salvation or sale of property rather than demolition.

Vieux Carré Commission

Even though the Vieux Carré, or the French Quarter, had minimal damage from the storm, the Vieux Carre Commission (VCC) has been operating with only two employees since 2005. Currently, they have no inspector for its approximate 2,000 structures. The issues the VCC faces post-Katrina includes the rebuilding process whereby wind/rain-damaged structures must meet exterior architectural guidelines. With no inspectors, it is difficult to oversee inappropriate rebuilding whether building material or architectural changes are involved.

Role of FEMA

FEMA is working in close coordination with Federal, State and local counterparts to ensure that FEMA meets its statutory historic preservation responsibilities in accordance with the National Historic Preservation Act (NHPA). Section 106 of NHPA requires FEMA to identify properties eligible or listed on the National Register of Historic Places and to adequately consider the effect of any FEMA-funded undertaking, including potential removal of private and public property, on historic properties.

FEMA and the Louisiana State Historic Preservation Office (SHPO) have completed surveys of affected New Orleans neighborhoods in order to evaluate the historic integrity of districts currently listed in the National Register, confirm the existing boundaries of these National Register districts, and identify other neighborhoods that may also be eligible for National Register consideration. For those structures identified by FEMA and the Louisiana SHPO as historic and which the City of New Orleans determines are an imminent threat of collapse and must be removed, FEMA must first consult with the City and the State of Louisiana (including the SHPO, the Advisory Council on Historic Preservation, and other invited parties) and agree upon measures to either avoid, minimize, compensate for, or otherwise address adverse effects that would result from the demolition of historic structures. FEMA also must adequately consider the views of public and historic preservation organizations about the proposed undertaking.

State Historic Preservation Office (SHPO)

Recently it was announced that the Louisiana State Historic Preservation Office will offer grants ranging from \$5,000 to \$45,000 for historic properties damaged in the storm. Those properties applicable must be listed on the National Register of Historic Places or be eligible for listing thereon. Generally, those homes fifty years or older qualify. Other properties that are eligible include those that are of national/and or local significance or are important examples of a particular design or construction. For more information, see www.crt.state.la.us/hp/.

Corridor Assessment

Major thoroughfares have been identified as historic and/or cultural corridors. These corridors serve the community with cultural identifiers either through businesses along with their unique architectural identifiers. These cultural/architectural components are critical for creating a “sense of place” as the city rebuilds. Those corridors identified include, but are not limited to, the following:

- Tulane Avenue
- Canal Street from Claiborne to City Park Avenue
- Jefferson Davis Parkway
- Tulane Avenue
- Elysian Fields

- Franklin Avenue
- Broad Avenue
- Claiborne Avenue
- St. Claude Avenue

Similar to what is now an Overlay District for St. Charles Avenue or a section of Carrollton Avenue, both of which have a design review procedure in place to precede alterations, by preserving and protecting the architectural integrity of main streets throughout Orleans Parish, the historicity of the community is preserved.

Neighborhood Considerations

Although there are twenty national historic neighborhoods, there are also thirteen local historic districts overseen by the HDLC. Additionally, the VCC oversees the Vieux Carré in terms of mandating architectural integrity. Although being placed on the National Register as a historic district, there are less design guidelines and requirements than if designated as a local historic district. Some neighborhoods seek local designation, such as the Irish Channel, which recently received local historic designation. As neighborhood plans emerge, those communities that desire local historic designation should be considered as part of the rebuilding process and recovery planning with appropriate guidelines.

In addition, some neighborhoods should be able to receive alternate designation for unique design and planning. Parts of Lakeview have unique streetscapes, architectural styles, and layouts. Special consideration to neighborhoods that are not necessarily historic but have buildings with unique and/or historic value ought to be considered as well for historic designation or conservation district.

Planning Implications

Throughout the rebuilding process of New Orleans, maintaining the integrity of the City's unique architecture is critical. Conversations with preservationists and community stakeholders agree that it is essential to preserve the urban fabric of the City. One of the most fundamental guidelines in preservation for Orleans is the concept of "Tout Ensemble," which is a combination of not only architectural fabric, but streetscape as well. Therefore, when addressing housing issues, rebuilding after demolition, or making changes to existing structures, the following issues are essential for the recovery plan:

- Setback;
- Spacing of Buildings;
- Site Coverage;
- Height and Width; and
- Proportions.

Equally important is the rebuilding education process for property owners within historic districts, especially in local designated neighborhoods. The HDLC oversees these entities and has demonstrated that time and funding would be maximized if the process for rebuilding historic structures were more transparent to the public. Although education efforts have been made by the HDLC and the PRC, the recovery plan for New Orleans must include an education program such that historic structures, when rebuilt, maintain architectural integrity. In addition, new buildings in historic neighborhoods should be built to adhere to the existing historic context of the neighborhood.

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NOPD Officers Assisting In Data Gathering:

- Bambi Hall, Public Affairs Division
- Captain Norville Orazio, Public Affairs Division

APPENDIX 1
SEWERAGE & WATER BOARD
CAPITAL IMPROVMENTS PROJECTS

SEWER

East Bank Wastewater Treatment Plant-Repairs to Clarifiers \$2,500,000
Katrina accelerated the extensive damage to the clarifiers' drive mechanisms. The mechanisms were under saltwater for several weeks. The clarifiers separate out solids and allow treated sewage to pass to the effluent pumps. FEMA agreed to these repairs and issued project worksheets but the funds have not been obligated.

East Bank Wastewater Treatment Plant – Oxygen Basin Repairs \$750,000
Katrina caused external structural cracks to the oxygen basins. Tight structural integrity is needed for proper dissolved oxygen levels for microbiological development and treatment efficiency. The cracks enable oxygen to escape leading to increased oxygen demands. There are four reactors that need repairs. FEMA has approved repairs to one reactor, reactor #4, at a cost of \$250,000. The cost to repair the other three reactors totals \$750,000.

East Bank Wastewater Treatment Plant – Misc. Structural Repairs \$50,000
Katrina caused considerable leaks between the sedimentation basin and the effluent channel. The leaks allow treated sewage into the sedimentation basins.

East Bank Wastewater Treatment Plant – Grease Concentrator \$1,200,000
Saltwater damaged the grease concentrator's chains, sprockets and flights beyond use. The grease concentrator allows grease to be separated and disposed of instead of being returned to the headworks.

East Bank Wastewater Treatment Plant – Road Repairs \$314,000
Katrina damaged roads throughout the Treatment Plant. The roads are needed for the recovery, operation and maintenance of the plant.

East Bank Wastewater Treatment Plant – Levee Improvement Mitigation \$12,000,000
The levee improvement project will increase the survivability of the plant in any future storm surge.

East Bank Wastewater Treatment Plant – Backup Power Supply Mitigation \$8,950,000
The Treatment Plant was serviced by two separate 13,800 volt feeders. The feeder from St. Bernard is not scheduled for repair in the foreseeable future. The second feeder is unreliable causing power loss and power fluctuations. Veolia, the Plant operators, and Entergy have been unable to resolve the power supply problems. There have been several recent outages lasting up to six hours and the ongoing power fluctuations can potentially damage motors and transformers. To fully run the plant, two 5 mw generators are needed at a cost of \$4,100,000 each. A 600,000 gallon fuel tank costing

\$750,000 is also needed to supply the two generators with fuel for 30 days under emergency conditions. FEMA is currently reviewing this funding request.

East Bank Wastewater Treatment Plant – Emergency Plant Dewatering Mitigation \$450,000
A 450 kW generator provides power for the 10 MGD storm water pumps and various essential plant lighting in the event of a plant outage. The generator was damaged during Katrina. FEMA has denied funding for this generator.

East Bank Wastewater Treatment Plant – Sludge Management Facilities Mitigation \$10,300,000
The primary source of sludge disposal prior to Katrina was disposal by incineration in the fluid bed incinerator. The backup sludge disposal method, required by the EPA, was a multiple hearth incinerator. Both were severely damaged during the flooding. The repair costs for the fluid bed incinerator is \$3,800,000. The repair cost for the multiple hearth incinerator is \$6,500,000. The current consensus is to discontinue using the multiple hearth incinerator, as a back up, and use the \$6,500,000 to demolish it and procure an alternative method for sludge disposal. The alternative method has not been selected.

Wastewater Collection System – Cleaning and Inspection of Sewers \$28,000,000
Sanitary sewer lines were flooded and damaged by storm debris. A thorough cleaning and an inspection is the only way to determine the extent of damage. To date \$14 million has been spent on inspection of gravity mains and additional contracts have been let for inspection of force mains and gravity sewer lines.

Wastewater Collection System – Sewage Pumping Stations Long Term Mitigation \$58,000,000
Twenty-nine sewage pumping stations are built below ground with limited above-ground access. Their mechanical and electrical components are below ground and vulnerable to flooding. Replacing the below ground stations with above ground facilities will reduce the likelihood of future flood damage. The project includes construction of an above ground sewage pumping station and re-routing sewage flow from the existing station to the new station. The work also includes decommissioning of the old station. This price does not include the cost of purchasing additional property, if needed, to construct the new stations.

Wastewater Collection System – Sewage Pump Station Short Term Repairs \$11,000,000
Emergency work is ongoing to keep the existing stations running for the next five years. These short term repairs will prevent the ongoing daily emergencies. These repairs include the purchase of pumps and motors for stations as well as repair to above ground structures and the removal of debris from station property.

Wastewater Collection System – Sewer Hydraulic Model \$525,000
With damages sustained to the sewer stations and significant shift in population the existing model is no longer accurate. The old model was based upon documented expectations for anticipated growth. These expectations are no longer valid and must be retested. Without a proper model, the sanitary

system could be undersized in some areas, preventing the growth of an area and causing backups, and oversized in other areas, causing the sewage to become septic.

Wastewater Collection System – System Wide Sewer Repairs \$632,200,000*
 Katrina and Rita impacted over 80% of the East Bank collection system. Because of the widespread nature of the disaster and the damage identified by the preliminary system inspection following the storms, it is highly unlikely that the results of the previous sanitary sewer evaluation study (SSES, part of the preliminary design) conducted for the Consent Decree are still valid. In order to meet Consent Decree compliance, it is necessary to perform a new SSES, reassessing the system condition and making new repairs. Until a full system assessment can be finalized as prescribed by the SSES protocols, the cost of this project can only be estimated based on previous Consent Decree work.

- Sewerage System Evaluation Study - \$24.1 million
- Rehabilitation Work - \$218.1 million
- Remaining cost to bring collection system to EPA Standards - \$390 million

* derived from RMAP info at gosserp.com

WATER

Carrollton Drinking Water Plant – Filter Gallery Improvements \$19,000,000
 Much of the Carrollton Water Plant’s Filter Gallery piping, valving, and hydraulic and pneumatic control systems were flooded by salt water. These components were, in some cases, 80 years old; however, they were functioning. Also, the increased demand for water due to system leaks has accelerated the wear on filter media. This work involves replacement of the filter gallery piping, valves, control systems and filter media.

Carrollton Drinking Water Plant – Flow Measuring Devices \$80,000
 Flow measuring devices are essential to the efficient operation of the water distribution system. Flow measuring allows for accurate estimates of production and losses throughout the water distribution system.

Carrollton Drinking Water Plant – Ferric Capacity Increase \$300,000
 Katrina increased awareness of the Board’s dependence on truck deliveries of water purification chemicals and the limited storage capacity for these chemicals. A 5 to 7 day storage capacity exists, but a two week supply is needed due to limited access to chemicals after major storms. The work includes installation of additional chemical storage tanks, metering pumps and associated piping and valves.

Carrollton Drinking Water Plant – Old River Intake Pumping Station Rehab \$34,000,000
 This 70 yr.-old facility is the larger of the two raw water intake facilities on the East Bank and augments flow from the New River Station. The station is not automated. The increased demand for potable water due to water system leaks has accelerated wear on this facility. This work includes

rehabilitation of Old River Station's mechanical and electrical components and upgrades for remote operation of the station to allow the Board's limited personnel to focus on other critical needs.

Carrollton Drinking Water Plant – Additional Flocculation and Sedimentation Capacity \$24,000,000
 Katrina caused numerous leaks in the water distribution system. These leaks require increased water production to satisfy demands for consumption and fire protection. The increased demand accelerated accumulation of sedimentation in the basins. Additional capacity is needed to satisfy this demand while allowing for required basin cleaning and maintenance. This work includes the construction of an alternate 100 MGD treatment train to provide for system redundancy.

Algiers Drinking Water Plant – Emergency Fuel Storage \$45,000
 Katrina raised awareness of the Board's dependence upon truck deliveries of diesel fuel and the limited storage capacity for fuel. The facility's diesel generator uses more than 2,000 gallons of fuel per day and there is only 10,000 gallon storage tank. A storage capacity of 40,000 gallons is desired. The work involves the installation of additional diesel storage tanks and associated piping and valves.

Water Distribution System – Leak Detection Management Program \$400,000
 Leaks in the water distribution system have increased due to Hurricane Katrina. Many of the leaks do not surface but instead run-off through underground utilities. Excessive water loss results in increased treatment costs and makes it difficult to provide consistent, adequate water pressure throughout the water distribution system.

Water Distribution System – Water Hydraulic Model \$525,000
 Due to damages sustained to the potable water system and a significant shift in population the existing model is no longer accurate. The old model was based upon documented expectations for anticipated growth. These expectations are no longer valid and must be retested. Without a proper model, the water system could be undersized in some areas, preventing the growth of an area and causing backups. Or it could be oversized in other areas, causing the water to lose potability.

Water Distribution System – Water System Replacement Program \$4,000,000,000
 The mains, services, valves, vaults and hydrants of the potable water system were under corrosive, polluted salt water for an extensive amount of time. During this time there was a significant amount of damages. The S&WB is experiencing difficulties in operating valves and hydrants and a significant amount of the mains experienced trauma as a result of trees being uprooted and other impact damages caused by the high winds during the storm. Replacement of the system had been planned over a 20 year period, but the storm accelerated the replacement needs. The estimate for this project is \$4 billion over 20 years. In the short term, S&WB crews and contractors are repairing the water system. This work has proved only moderately effective and parts of the City continue to experience water outages and extended periods of low pressure.

DRAINAGE

Emergency Cooling Water Systems at Drainage Pumping Stations \$6,000,000
Katrina revealed the interrelation between the Board's drainage and water distribution systems. Potable water is needed for bearings, heat exchanges, vacuum pumps, etc. at the drainage facilities. Post-Katrina, the pumps could not be operated until the Board was able to plumb up a system to use drainage water instead of potable water. The Board was able to run the pumps using drainage water; however, doing so severely damaged the bearings and other mechanical components at the stations. This work involves drilling potable water wells at each of the drainage stations, installing a pump, generator and fuel storage tank, and plumbing the well pump into the station.

Drainage Station Emergency Power Supply \$330,000
Katrina revealed the need to provide a safe and comfortable environment for emergency personnel who man the facilities during these crisis situations. This work involves installing a 45 KW generator with fuel storage at each station and connecting it to the station's electrical system.

Lining of Open Drain Canals in New Orleans East \$20,000,000
The canals in New Orleans East are earthen and this reduces the flow to the drainage stations. It also allows these canals to fill with debris and lose the capability to transport water to the pumping stations. The debris and condition of the earthen slopes are unsatisfactory and dangerous.

Section 9: Environmental Concerns

Geological Hazards

It is no secret that some areas in New Orleans are plagued with chronic foundation problems, as evidenced by uneven settling of slabs, building and street cracks, and breaks in sewer pipes and gas and water lines. The worst cases of foundation problems have manifested themselves as levee and floodwall breaches during Hurricane Betsy and Hurricane Katrina. These problems historically have been attributed to “organic soils” and “subsidence.”

Indeed shrinkage and oxidation of highly organic soils within the confines of the levees and forced drainage areas are major causes of subsidence and the contributing factors have been well documented (Saucier and Snowden, 1995; Campanella, 2006 and others). As shown in **Figure 9.1**, the upper 50 feet of sedimentary deposits upon which the City was built consists of poorly consolidated sands, silts, clays and organic deposits that accumulated during the last 5000 years in near-shore marine, barrier-island and deltaic-plain environments. It is this sequence of Holocene sediments that is subject to shrinkage and subsidence when dewatered and oxidized. Because the character of the different sedimentary units varies, the resulting subsidence is uneven and accentuates cracking and shearing of infrastructure elements.

Figure 9.1
Pontchartrain Basin Land Forms and Near-Surface Sedimentary Deposits



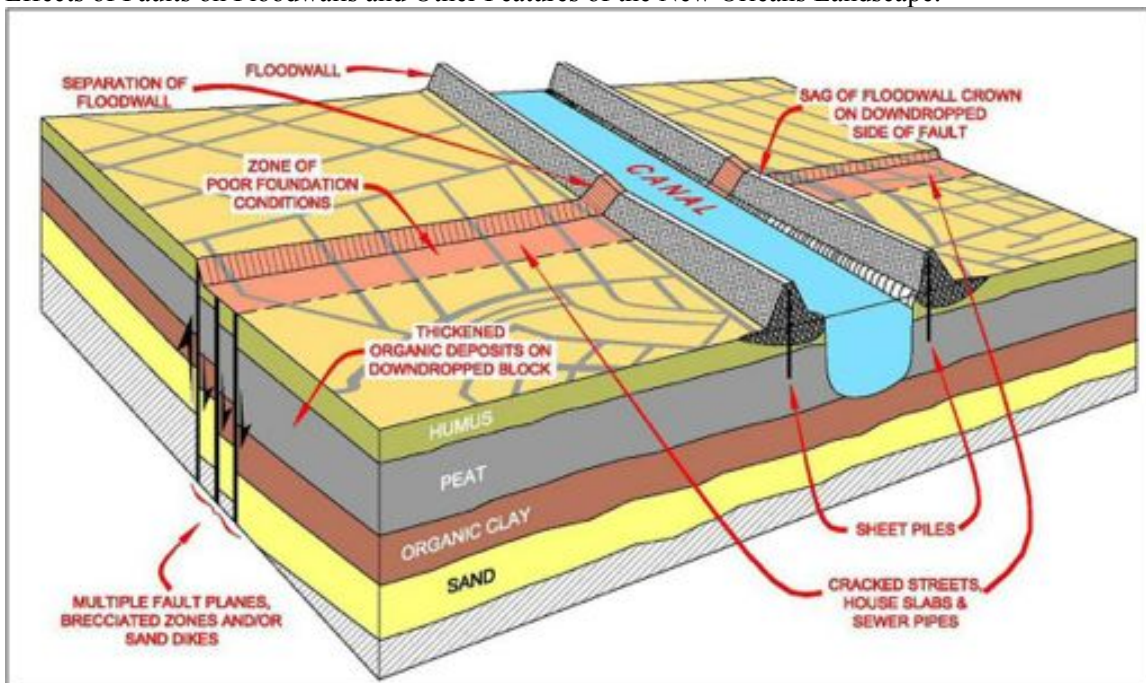
Source: Modified from R.T. Saucier and J.O. Snowden, 1995

The base of the major faults is 25,000 to 30,000 feet below the surface and movement has occurred episodically for millions of years. Geological, archaeological and historical data indicate that movement has also occurred during the period that Native American people have been in the area (11,000 years), since colonization by Europeans and during modern decades. Fault movement has accelerated during modern decades and is a major contributing factor to subsidence and coastal land loss.

Fault movement not only causes the blocks between the faults to tilt and subside, but also creates a hazardous zone where the trace of the fault intersects the surface. The fault plane may be paper-thin or may be a chopped zone hundreds of feet wide. Fluids and gases may migrate upward along the fault plane. There is evidence that floodwall breaches along the 17th St. Canal, the London Ave. Canal and the Inner Harbor Navigation Canal (IHNC) that occurred during Hurricane Katrina (and which were responsible for much of the flooding) were at places where the levees were built across faults (Gagliano 2005b, see also **Figures 9.2 and 9.4**). Areas of chronic foundation and street failures and pipe ruptures are also found along these same faults.

Figure 9.4

Effects of Faults on Floodwalls and Other Features of the New Orleans Landscape.



Source: After S. M. Gagliano, 2005b 4

The simple truth is that if a structure is built on top of a fault there is a risk that it will subside and/or fail. If a structure or part of a city is built on a fault-bound block there is a risk that the land surface will subside and tilt. For these reasons it is important to know where the faults are and what the magnitude and frequency of movement is along them. At this time, the faults underlying New

Table 9.1
Wetland Habitat Types and Acreages Within Planning Units

Wetland Types	Unit 1 (ac)	Unit 2 (ac)	Unit 3 (ac)	Unit 4 (ac)	Unit 9 (ac)	Unit 10 (ac)	Unit 11 (ac)	Total Wetland Type (ac)
Estuarine/Marine Deepwater					385	1224	17492	19101
Freshwater Pond			12	4	204	807	42	1069
Freshwater Lake			19		104	3020	542	3685
Riverine Channels	16	10	4	25	141	219	70	485
Estuarine/Marine Emergent Wetland (Marsh)						994	31001	31995
Freshwater Emergent Wetland (Marsh)					48	5027	178	5253
Freshwater Forest/Shrub Wetland			18		1057	9193	831	11099
_Total Units Wetland Area	16	10	53	29	1939	20484	50156	72687

Source: LOSCO 2004

District 11 is unique among the UNOP planning districts because of: 1) its location outside of the flood protection levees, 2) the predominance of wetland environments, 3) its significant contribution to renewable resource harvesting by commercial and recreational interests, and 4) its land bridge's function as a severe wave energy buffer for the flood protection levees and developed areas and constriction of tidal movement and storm water surges between Lake Pontchartrain and the Gulf of Mexico.

Seven communities within Unit 10 (Vietnamese Community) and Unit 11 (Irish Bayou, Bayou Sauvage, Venetian Isles, Lake St. Catherine, Fort Pike, Paris Road-Bayou Bienvenue) (**Figure 9.5**) represent a distinct cultural heritage with an orientation toward harvesting of renewable resources and recreational interests. Unit 11, in particular, functions as a portal between the Greater New Orleans Area and the recreational/renewable resources of the Lake Pontchartrain-Lake Borge-Chandeleur Sound-Gulf of Mexico areas. Data (**Table 9.2**) provided by Leo Richardson, Board Member of the Lake Catherine Civic Association (personal communication 2007) reveals the commercial fisheries interests of these local communities immediately before and one year after Hurricane Katrina. Hurricane Katrina reduced the number of fishermen by over 54 percent, the number of boats by 68 percent and the number of pounds of landings (shrimp, fish, crab, mullet roe, crab bait, fish cutters) by over 40 percent.

Table 9.2.

Comparison of Fisheries Data in Part of District 11 Pre- and Post-Katrina

Vessel Base	Date	Fishers	Boat	Size (ft)	Target Species	Approximate Average Landings		
						Pounds (Min)	Pounds (Max)	Value
Bayou Bienvenue	Aug '05	130	65	30 -	Shrimp, Fish, Crabs	2,000,000	5,000,000	8,750,000
	Nov '06	45	30	60		1,500,000	3,750,000	7,218,750
Bayou Sauvage	Aug '05	150	75	35 -	Shrimp, Fish, Crabs	3,000,000	5,000,000	10,000,000
	Nov '06	45	30	60		2,500,000	3,750,000	8,250,000
Chef Pass	Aug '05	300	150	26 -	Shrimp, Fish, Crabs	4,000,000	6,000,000	12,500,000
	Nov '06	75	50	60		3,000,000	4,500,000	10,312,000
Irish Bayou	Aug '05	40	20	28 -	Shrimp, Crabs	500,000	1,000,000	1,875,000
	Nov '06	5	2	40		100,000	300,000	550,000
Rigolets	Aug '05	150	75	28 -	Shrimp, Fish, Crabs	3,000,000	6,000,000	11,250,000
	Nov '06	30	20	50		2,500,000	4,500,000	9,281,250
West End	Aug '05	76	38	30 -	Shrimp, Fish, Crabs	600,000	800,000	1,750,000
	Nov '06	47	31	45		450,000	600,000	1,443,750
Crab Shedders all areas	Aug '05	60	0		Softshell Crabs	4,000,000	6,000,000	2,500,000
	Nov '06	2	0			300,000	500,000	260,000
Processors all areas	Aug '05	50	0		Mullet Roe, crab bait fish cutters	1,000,000	1,500,000	3,125,000
	Nov '06	0	0			0	0	0
Total	Aug '05	656	273			14,100,000	25,300,000	41,125,000
	Nov '06	299	163			9,850,000	17,900,000	37,316,250
Net decline	05-'06	358	110			4,250,000	7,400,000	3,808,750
Overall Decline		-54.5%	-67.5%			-43.1%	-43.1%	-9.3%

Source: Richardson 2007

Three of the communities in Unit 11 (Irish Bayou, Venetian Isles-Chef Pass, Lake St. Catherine-Fort Pike) supported commercial fishermen, seafood buyers, and processors who supplied fresh seafood to downtown restaurants in New Orleans and to other regions of the United States and abroad (Richardson per. comm. 2007). Prior to Hurricane Katrina these communities accounted for approximately 20 percent of the Louisiana inshore shrimp landings; 1,500,000 pounds of male crabs shipped to Maryland per year in addition to the processing of 5,200,000 pounds of crab meat; 30-40 small shedding tank operators who processed 70,000 soft-shell crabs per year; and one million pounds of mullet roe exported to Asia (Richardson per. comm. 2007). The seafood industry employed approximately 300 people who multiplied the economic impact of revenues with supplies, repairs, fuel and personnel consumption (Richardson per. comm. 2007). Prior to the devastation of Hurricane Katrina commercial fishing associated with the Orleans Land Bridge communities contributed an economic impact of over \$43 million (Richardson per. Comm. 2007).

The Paris Road/Bayou Bienvenue community supported about 50 boats and 75 fishermen before Hurricane Katrina. The area supplied ice, bait, fuel, repairs, and parts for both commercial and recreational fishermen. According to Richardson (per comm. 2007) about 25 to 30 boats have returned to the area. Fuel is now available, and a small mobile ice plant was installed through a private grant.

The Vietnamese Community had an entrepreneur who was a major buyer of mullet from which he extracted roe for export to the Far East. His facilities were destroyed by Hurricane Katrina and he has not rebuilt (Richardson per. comm. 2007).

According to Richardson (per. Comm. 2007) the Bayou Sauvage community supports both commercial and recreation fisheries operations along a 1-mile long waterfront by providing extensive boat slips, retail/charter boats, motors and gear. This community also contains Bell Textron Marine and Land plan, located west of the commercial waterfront, which employs about 1200 people. The area also includes the Pearl River Navigation Co., a dredging and marine fabrication enterprise and a few small contactors. The seaplane service operating out of this area was destroyed by Hurricane Katrina.

Conclusion

Preservation of the Orleans Land Bridge in District 11 is crucial for long-term flood protection for New Orleans, as well as other low-lying communities within the remainder of the Lake Pontchartrain Basin. Maintenance of the wetlands, shallow-water estuaries, and tidal passes also supports the production of a wide array of renewable resources (finfish, shellfish, crabs) and the commercial and recreational harvesting of which contributes to the local, state, and national economy. Flood protection measures, such as the US Army Corps of Engineers' proposed Reach A levee from Caernarvon to Slidell, need further evaluation to determine if realignment between the CSX railroad embankment and the GIWW would be a more viable alternative because of the better soil foundations (e.g., underlining beach sands) and the avoidance of destruction of the Lake St. Catherine/Fort Pike Communities and their associated cultural heritage and seafood industries along US HWY 90.

Contamination Concerns

The floodwaters brought by Hurricane Katrina breached several levees and flooded 80% of New Orleans and large areas of Plaquemines and St. Bernard Parishes. Much of the area that was flooded in Hurricane Katrina was re-flooded by storm surge from Hurricane Rita. The flooded areas were declared unwatered by the U.S. Army Corps of Engineers (USACE) on October 11, 2005 (EPA 2005). One of the many concerns in the wake of the flooding was contamination from the probable release and dispersion of biological and chemical pollutants in the floodwater (Reible et al. 2006, and Presley et al. 2006).

Directly following the landfall of Hurricane Katrina, the U.S. Environmental Protection Agency (USEPA) and the Louisiana Department of Environmental Quality (LDEQ) along with several other agencies and experts initiated investigations to gauge the amount of contamination of both the floodwaters and sediment/soil in the Greater New Orleans Area (Reible et al. 2006, and BNA, Inc 2006). Although some opinions on the magnitude and potential effects of the contamination vary (Lubick 2006, NRDC 2005a, and BNA, Inc. 2006) the majority of the experts agree that the contamination was far less than expected (Presley et al. 2006, Pardue et al. 2005, Reible et al. 2006, and CDC 2006).

Environmental Testing and Assessments

The USEPA, LDEQ, and several other federal, state, and local agencies initiated an investigation into the extent of floodwater sediment contamination before the floodwater receded in residential neighborhoods (USEPA, 2005). Initially the sampling was intended to determine the risks posed toward people who could return to their neighborhoods for short-term visits, and eventually, to provide an assessment of the need for remediation to reduce the long-term risks from exposure to chemicals. The 4-phased sampling procedure began with an area-wide search for contaminated areas and was systematically scaled back to concentrate in those areas with the highest level of concern and areas where the public was most likely to come into contact with the contamination (BNA, Inc. 2006). Several other independent studies were conducted (Pardue et al. 2005, NRDC 2005a, and Presley et al. 2006) after the storm had passed to assess the environmental condition of the impacted area.

Floodwaters

The USEPA (2005) concluded that the initial concerns of widespread contamination by floodwaters were unwarranted. Their study found that average concentrations of chemicals were below levels of concern for short-term dermal contact (i.e., 90 days) and incidental ingestion. However, a small number of floodwater samples contained concentrations of chemicals that exceeded the 90-day exposure levels. Subsequent sampling in the Lake Ponchartrain area showed very low concentrations that were within the recreational standards.

Pardue and others (2005) collected and analyzed floodwater samples from New Orleans within a week of Hurricane Katrina and reported elevated concentrations of several metals. With the exception of lead, arsenic, and chromium in several samples, concentrations were not alarmingly

high. Low levels of dissolved oxygen was found near discharge points for floodwaters into Lake Ponchartrain but were localized and had only minimal impacts on the lake as a whole. The report states that the data suggests that the distinguishing characteristic of the floodwaters from Hurricane Katrina was the large volume of pollutants and the human exposure to them, rather than elevated concentrations of contaminants. The floodwaters were generally typical of normal stormwater runoff but with somewhat elevated lead and volatile organic compounds (VOCs) (Pardue et al. 2005).

Presley et al. (2006) collected environmental samples in New Orleans during September 2005. None of the floodwater samples tested exceeded the Safe Drinking Water Act parameters. High concentrations of pathogenic bacteria were detected in water samples from collection sites at the Superdome and Charity Hospital.

Sediment/Soils

Pre-Katrina background contamination has complicated the assessment of concentrations in soils and sediments. For example, about 40% of nearly 5,000 soil samples exhibited levels in excess of the lead cleanup standard (Pelley 2006). Arsenic also has high background concentrations throughout the Mississippi River Delta region of south Louisiana. Residential areas may have even higher levels of arsenic due to its presence in lawn fertilizers. There have also been studies that indicated elevated levels of polycyclic aromatic hydrocarbons (PAHs) in pre-Katrina New Orleans (Reible et al. 2006).

Several samples collected by the USEPA between September 10 and October 14 exceeded the screening criteria of the LDEQ Risk Evaluation/Corrective Action Program (RECAP). Presley et al. (2006) found several inorganic constituents (arsenic, iron, and lead) and organic constituents (predominantly PAHs) in sediment/soil samples from New Orleans that exceeded USEPA levels.

Agriculture Street Landfill

The Agriculture Street Landfill is the only listed site on the National Priorities List (NPL), Active, Archived, or Deleted, in the Greater New Orleans area (EPA, 2006). It is currently listed as partial deletion (EPA, 2000).

Soil samples at the site of the Agriculture Street Landfill were analyzed for lead by the USEPA, the contaminant of concern for the site, but showed no concentrations that exceeded the lead cleanup standard or USEPA screening standards for lead (Reible et al. 2006). NRDC analyzed samples for other contaminants at the Agriculture Street Landfill and found elevated arsenic levels and several other polycyclic aromatic hydrocarbons PAHs at somewhat elevated levels (NRDC 2005b).

Planning Districts

The information in this section is available on the LDEQ website (LDEQ 2006).

In general the major contaminants of concern for the City of New Orleans are lead and petroleum hydrocarbons. Elevated levels of lead in soil in cities are often associated with the past use of leaded-gasoline, lead-based paints, and pesticides. Arsenic is found at elevated levels naturally in the soil, and is also commonly used in products such as pesticides, herbicides, fertilizers, potting soils, and

wood preservatives. Elevated levels of petroleum-related chemicals are likely attributable to surface runoff from roadways and parking lots in combination with releases of petroleum products from flooded vehicles.

Planning District 1

No major environmental concerns. There were very few localized sites that contained elevated levels of lead, arsenic, or petroleum hydrocarbons.

Planning District 2

No major environmental concerns. There were very few localized sites that contained elevated levels of lead, arsenic, or petroleum hydrocarbons.

Planning District 3

No major environmental concerns. There were very few localized sites that contained elevated levels of lead, arsenic, or petroleum hydrocarbons.

Planning District 4

No major environmental concerns. There were few localized sites that contained elevated levels of lead, arsenic, or petroleum hydrocarbons. The major concerns are arsenic and petroleum hydrocarbons in the Gert Town Neighborhood.

Planning District 5

No major environmental concerns. There were some localized sites that contained elevated levels of arsenic or petroleum hydrocarbons in the Lakeshore and West End Neighborhoods.

Planning District 6

Several sites were identified for possible further evaluation by the USEPA along Franklin and St. Bernard Avenues. Petroleum hydrocarbons, arsenic, and lead are the major concerns.

Planning District 7

No major environmental concerns. There were few localized sites that contained elevated levels of lead, arsenic, or petroleum hydrocarbons.

Planning District 8

No major environmental concerns. There were few localized sites that contained elevated levels of arsenic or petroleum hydrocarbons.

Planning District 9

Arsenic and petroleum hydrocarbons are the main environmental concern at various locations throughout the district.

Planning District 10

Petroleum hydrocarbon is the main environmental concern between Highway 90 and Michoud Boulevard.

Planning District 11

Petroleum hydrocarbon is the main environmental concern along the Intracoastal Seaway, and Highway 90.

Planning District 12

There was no sampling program in District 12. No information could be found.

Conclusion

The USEPA's most recent sediment/soil testing show little to no health risk in the areas impacted by Hurricane Katrina. The sediments, in many cases, are no longer present at many of the locations that were sampled early after the floodwaters receded. Exposure to the sediment/soil is not expected to result in long-term health effects if people avoid obvious signs of hazardous materials, practice good personal hygiene, and use common sense.

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Section 10: Culture

Introduction

Louisiana's state Department of Culture, Recreation, and Tourism (CRT) uses the slogan Louisiana Rebirth: Restoring the Soul of America. The wording of this theme particularly applies to New Orleans post Katrina. New Orleans' culture is its food, music, architecture, visual and performing arts, and the laissez faire attitude of its citizens—all combining to make New Orleans a unique cultural experience. The cultural sector of New Orleans is its heart AND its soul. It must be brought back to health post Katrina as part of the recovery plan for the City.

The state and the city of New Orleans had underinvested in the cultural sector before the storm. The city of Montreal, for comparison, has invested quite significantly (350m) in the cultural economy and reaped huge benefits (\$3.5b). New Orleans had an investment (exclusive of state monies) of \$2m but reaped \$45.5 million in benefits, a truly astounding return on investment (BNOB, Cultural Committee: 1/06:11). Even within our region the City faced competition for the tourist dollar from cities like Houston, Birmingham, and Mobile, cities not traditionally thought of as places with either the historicity or the performance record of New Orleans as an incubator of culture.

As CRT pointed out, the cultural sector is not to be regarded lightly as an afterthought to the other vital elements of economic redevelopment. During the recovery process to date, it is evident that big businesses have either left the City or at least are considering doing so. On the other hand there are calls to rebuild and diversify the New Orleans economy. Sentiments for diversification of the City's economy resonate back to the late 1960's when studies showed that the City could not equitably support its growing population with its limited economic base. In the recovery process an economic vacuum will have to be filled. The cultural economy, called by CRT "the engine of economic and social re-birth," is one critical element that will be used.

Though the cultural economy cannot repair on its own the City's economy, it must be considered a major underpin of our economy. However, its future health cannot be taken for granted. There are actions that need to be taken, and we outline those actions in the following sections. This section draws heavily on the excellent report of the Cultural Committee of the BNOB as well as work done by the previously-cited state department of CRT.

Invest in Our Creative Talent Pool by Assisting Artists, Institutions, and Cultural Entrepreneurs

Cultural organizations depend on outside funding sources to underwrite their operations. Public money is sometimes used to “seed” worthy projects or support extraordinarily talented individuals, but this is quite rare. New Orleans dedicates 1% of the cost of public construction to public art, and there are numerous public displays of this art, often placed side by side with privately sponsored artworks.

It is difficult, however, to ask people who are financially stressed from the storm to support cultural institutions in the face of competing demands. Many members of the New Orleans cultural community (4,000 or more by BNOB count) were forced to leave the City and cannot return for lack of housing, places to work, or other compelling factors. For example, musicians who were invited to apply for housing in the well publicized “Musicians village” were quite regularly denied funding due to a spotty credit record or the inability to document a dependable future income stream (Times-Picayune, 1/03/06). They depend on performance outlets to book them, but with tourism down, institutions unable to reopen, or necessary equipment like sound systems destroyed, those institutions cannot re-open. A cultural group, such as a small jazz ensemble or a brass band, functions as a small business of a unique sort and should be given consideration for economic support similar to that given small businesses.

Support Neighborhood-Based Cultural Traditions, Repair Damaged Cultural Facilities, and Build New Cultural Venues

On a citywide basis some cultural institutions such as the Mahalia Jackson Theatre for the Performing Arts, are already in the process of being repaired with FEMA monies. A critical question that remains unanswered at this date is how many people may choose to return and rebuild if their Road Home and insurance monies give them that opportunity. The dispersed population numbers over a quarter-million persons

Teach Our Arts and Cultural Traditions to Our Young People

The public education system of New Orleans had failed prior to Katrina and was largely taken over by the state, which now operates the majority of the public schools under the Recovery School District (RSD). The RSD has a remaining statutory life of four years. Charter schools (such as the heralded New Orleans Center for the Creative Arts) continue to open and take up some of the slack. Some of these charter schools advocate the use of specialized curriculum materials. However, there is no systematic teaching of the New Orleans cultural heritage or traditions in the public school curriculum, much of which is

dictated by state education officials. As a result many of our young people do not understand our present or our past with a cultural emphasis. The oral tradition of culture dissemination was weakening before the storm and has further declined since. There needs to be a way to ensure that our children are exposed to our cultural and arts tradition, for the mantle will fall to them to carry on those traditions in the future. One possibility is to partner schools with selected (and supported in the effort) local arts and culture organizations. In the past the National Endowment for the Arts sponsored an Artists in Schools Residence program, and this kind of partnership between public schools and working artists and performers might now be expanded to mutual benefit.

Attract New Investment from National and International Sources

The recovery of New Orleans will not be fueled alone by public sources. There will have to be an infusion of funds from other sources. The local business community will doubtlessly do its share, but it too has been weakened by the storm. The international community is one source of funding that will have to be investigated, especially given both our Anglo-French-Spanish heritage and the popularity of New Orleans music and food in Europe. It will be necessary to ensure that not only the more established arts and culture organizations receive the benefit of any such support but that more embryonic entities are supported as well. Cultural additions begin on a small scale and need time and space to become viable. Historic traditions need exposure to insure that they don't fade away. . A coordinated framework for national and international investment under the auspices of a BNOB-suggested Cultural Restoration Oversight Commission would provide a platform for such investment efforts and guidance.

Conclusion

The cultural economic sector of New Orleans has been badly bruised by the storm and has been slow to recover despite a few bright spots such as the resumption of a limited Mardi Gras in 2006. There is much work to be done to ensure the eventual sustainability of the arts and cultural traditions of New Orleans neighborhoods and the City at large. There are needs everywhere: housing for performers, equipment for their use, places to perform, and funds to tide them and the institutions over during the time of financial stress. The investment dollars would be small in comparison to other recovery costs, but the value of investing in the heart and soul of the City cannot really be calculated in dollar terms alone. Jobs will be created, performances will draw audiences, and facilities will become places to congregate and relate. These are just some of the benefits that will accrue from a cultural restoration effort.

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NOPD Officers Assisting In Data Gathering:

- Bambi Hall, Public Affairs Division

Captain Norville Orazio, Public Affairs Division

APPENDIX 1

SEWERAGE & WATER BOARD CAPITAL IMPROVEMENTS PROJECTS

SEWER

East Bank Wastewater Treatment Plant-Repairs to Clarifiers **\$2,500,000**

Katrina accelerated the extensive damage to the clarifiers' drive mechanisms. The mechanisms were under salt water for several weeks. The clarifiers separate out solids and allow treated sewage to pass to the effluent pumps. FEMA agreed to these repairs and issued project worksheets but the funds have not been obligated.

East Bank Wastewater Treatment Plant -Oxygen Basin Repairs **\$750,000**

Katrina caused external structural cracks to the oxygen basins. Tight structural integrity is needed for proper dissolved oxygen levels for microbiological development and treatment efficiency. The cracks enable oxygen to escape leading to increased oxygen demands. There are four reactors that need repairs. FEMA has approved repairs to one reactor, reactor #4, at a cost of \$250,000. The cost to repair the other three reactors totals \$750,000.

East Bank Wastewater Treatment Plant-Misc. Structural Repairs **\$50,000**

Katrina caused considerable leaks between the sedimentation basin and the effluent channel. The leaks allow treated sewage into the sedimentation basins.

East Bank Wastewater Treatment Plant-Grease Concentrator **\$1,200,000**

Saltwater damaged the grease concentrator's chains, sprockets and flights beyond use. The grease concentrator allows grease to be separated and disposed of instead of being returned to the headworks.

East Bank Wastewater Treatment Plant-Road Repairs **\$314,000**

Katrina damaged roads throughout the Treatment Plant. The roads are needed for the recovery, operation and maintenance of the plant.

East Bank Wastewater Treatment Plant-Levee Improvement Mitigation **\$12,000,000**

The levee improvement project will increase the survivability of the plant in any future storm surge.

East Bank Wastewater Treatment Plant-Backup Power Supply Mitigation **\$8,950,000**

The Treatment Plant was serviced by two separate 13,800 volt feeders. The feeder from St. Bernard is not scheduled for repair in the foreseeable future. The second feeder is unreliable

causing power loss and power fluctuations. Veolia, the Plant operators, and Entergy have been unable to resolve the power supply problems. There have been several recent outages lasting up to six hours and the ongoing power fluctuations can potentially damage motors and transformers. To fully run the plant, two 5 mw generators are needed at a cost of \$4,100,000 each. A 600,000 gallon fuel tank costing \$750,000 is also needed to supply the two generators with fuel for 30 days under emergency conditions. FEMA is currently reviewing this funding request.

East Bank Wastewater Treatment Plant -Emergency Plant Dewatering Mitigation
\$450,000

A 450 kW generator provides power for the 10 MGD storm water pumps and various essential plant lighting in the event of a plant outage. The generator was damaged during Katrina. FEMA has denied funding for this generator.

East Bank Wastewater Treatment Plant-Sludge Management Facilities Mitigation
\$10,300,000

The primary source of sludge disposal prior to Katrina was disposal by incineration in the fluid bed incinerator. The backup sludge disposal method, required by the EPA, was a multiple hearth incinerator. Both were severely damaged during the flooding. The repair costs for the fluid bed incinerator is \$3,800,000. The repair cost for the multiple hearth incinerator is \$6,500,000. The current consensus is to discontinue using the multiple hearth incinerator, as a back up, and use the \$6,500,000 to demolish it and procure an alternative method for sludge disposal. The alternative method has not been selected.

Wastewater Collection System-Cleaning and Inspection of Sewers **\$28,000,000**

Sanitary sewer lines were flooded and damaged by storm debris. A thorough cleaning and an inspection is the only way to determine the extent of damage. To date \$14 million has been spent on inspection of gravity mains and additional contracts have been let for inspection of force mains and gravity sewer lines.

Wastewater Collection System-Sewage Pumping Stations Long Term Mitigation
\$58,000,000

Twenty-nine (29) sewage pumping stations are built below ground with limited above-ground access. Their mechanical and electrical components are below ground and vulnerable to flooding. Replacing the below ground stations with above ground facilities will reduce the likelihood of future flood damage. The project includes construction of an above ground sewage pumping station and re-routing sewage flow from the existing station to the new station. The work also includes de-commissioning of the old station. This price does not include the cost of purchasing additional property, if needed, to construct the new stations.

Wastewater Collection System-Sewage Pump Station Short Term Repairs
\$11,000,000

Emergency work is ongoing to keep the existing stations running for the next five years. These short term repairs will prevent the ongoing daily emergencies. These repairs include the purchase of pumps and motors for stations as well as repair to above ground structures and the removal of debris from station property.

Wastewater Collection System-Sewer Hydraulic Model \$525,000

With damages sustained to the sewer stations and significant shift in population the existing model is no longer accurate. The old model was based upon documented expectations for anticipated growth. These expectations are no longer valid and must be retested. Without a proper model, the sanitary system could be undersized in some areas, preventing the growth of an area and causing backups, and oversized in other areas, causing the sewage to become septic.

Wastewater Collection System-System Wide Sewer Repairs \$632,200,000*

Katrina and Rita impacted over 80% of the East Bank collection system. Because of the widespread nature of the disaster and the damage identified by the preliminary system inspection following the storms, it is highly unlikely that the results of the previous sanitary sewer evaluation study (SSES, part of the preliminary design) conducted for the Consent Decree are still valid. In order to meet Consent Decree compliance, it is necessary to perform a new SSES, reassessing the system condition and making new repairs. Until a full system assessment can be finalized as prescribed by the SSES protocols, the cost of this project can only be estimated based on previous Consent Decree work.

- Sewerage System Evaluation Study - \$24.1 million
- Rehabilitation Work - \$218.1 million
- Remaining cost to bring collection system to EPA Standards - \$390 million

* derived from RMAP info at gosserp.com

WATER

Carrollton Drinking Water Plant-Filter Gallery Improvements \$19,000,000

Much of the Carrollton Water Plant's Filter Gallery piping, valving, and hydraulic and pneumatic control systems were flooded by salt water. These components were, in some cases, 80 years old; however, they were functioning. Also, the increased demand for water due to system leaks has accelerated the wear on filter media. This work involves replacement of the filter gallery piping, valves, control systems and filter media.

Carrollton Drinking Water Plant-Flow Measuring Devices \$80,000

Flow measuring devices are essential to the efficient operation of the water distribution system. Flow measuring allows for accurate estimates of production and losses throughout the water distribution system.

Carrollton Drinking Water Plant-Ferric Capacity Increase \$300,000

Katrina increased awareness of the Board's dependence on truck deliveries of water purification chemicals and the limited storage capacity for these chemicals. A 5 to 7 day storage capacity exists, but a two week supply is needed due to limited access to chemicals after major storms. The work includes installation of additional chemical storage tanks, metering pumps and associated piping and valves.

Carrollton Drinking Water Plant-Old River Intake Pumping Station Rehab
\$34,000,000

This 70 years old facility is the larger of the two raw water intake facilities on the East Bank and augments flow from the New River Station. The station is not automated. The increased demand for potable water due to water system leaks has accelerated wear on this facility. This work includes rehabilitation of Old River Station's mechanical and electrical components and upgrades for remote operation of the station to allow the Board's limited personnel to focus on other critical needs.

Carrollton Drinking Water Plant-Additional Flocculation and Sedimentation Capacity
\$24,000,000

Katrina caused numerous leaks in the water distribution system. These leaks require increased water production to satisfy demands for consumption and fire protection. The increased demand accelerated accumulation of sedimentation in the basins. Additional capacity is needed to satisfy this demand while allowing for required basin cleaning and maintenance. This work includes the construction of an alternate 100 MGD treatment train to provide for system redundancy.

Algiers Drinking Water Plant-Emergency Fuel Storage
\$45,000

Katrina raised awareness of the Board's dependence upon truck deliveries of diesel fuel and the limited storage capacity for fuel. The facility's diesel generator uses more than 2,000 gallons of fuel per day and there is only 10,000 gallon storage tank. A storage capacity of 40,000 gallons is desired. The work involves the installation of additional diesel storage tanks and associated piping and valves.

Water Distribution System-Leak Detection Management Program
\$400,000

Leaks in the water distribution system have increased due to Hurricane Katrina. Many of the leaks do not surface but instead run-off through underground utilities. Excessive water loss results in increased treatment costs and makes it difficult to provide consistent, adequate water pressure throughout the water distribution system.

Water Distribution System-Water Hydraulic Model
\$525,000

With damages sustained to the potable water system and a significant shift in population the existing model is no longer accurate. The old model was based upon documented expectations for anticipated growth. These expectations are no longer valid and must be retested. Without a proper model, the water system could be undersized in some areas, preventing the growth of an area and causing backups, or oversized in other areas, causing the water to lose potability.

Water Distribution System-Water System Replacement Program \$4,000,000,000

The mains, services, valves, vaults and hydrants of the potable water system were under corrosive, polluted salt water for an extensive amount of time. During this time there was a significant amount of damages. The S&WB is experiencing difficulties in operating valves and hydrants and a significant amount of the mains experienced trauma as a result of trees being uprooted and other impact damages caused by the high winds during the storm. Replacement of the system had been planned over a 20 year period, but the storm accelerated the replacement needs. The estimate for this project is \$4 billion over 20 years. In the short term, S&WB crews and contractors are repairing the water system. This work has proved only moderately effective and parts of the City continue to experience water outages and extended periods of low pressure.

DRAINAGE**Emergency Cooling Water Systems at Drainage Pumping Stations \$6,000,000**

Katrina revealed the interrelation between the Board's drainage and water distribution systems. Potable water is needed for bearings, heat exchanges, vacuum pumps, etc. at the drainage facilities. Post-Katrina, the pumps could not be operated until the Board was able to plumb up a system to use drainage water instead of potable water. The Board was able to run the pumps using drainage water; however, doing so severely damaged the bearings and other mechanical components at the stations. This work involves drilling potable water wells at each of the drainage stations, installing a pump, generator and fuel storage tank, and plumbing the well pump into the station.

Drainage Station Emergency Power Supply \$330,000

Katrina revealed the need to provide a safe and comfortable environment for emergency personnel who man the facilities during these crisis situations. This work involves installing a 45 KW generator with fuel storage at each station and connecting it to the station's electrical system.

Lining of Open Drain Canals in New Orleans East \$20,000,000

The canals in New Orleans East are earthen and this reduces the flow to the drainage stations. It also allows these canals to fill with debris and lose the capability to transport water to the pumping stations. The debris and condition of the earthen slopes are unsatisfactory and dangerous.



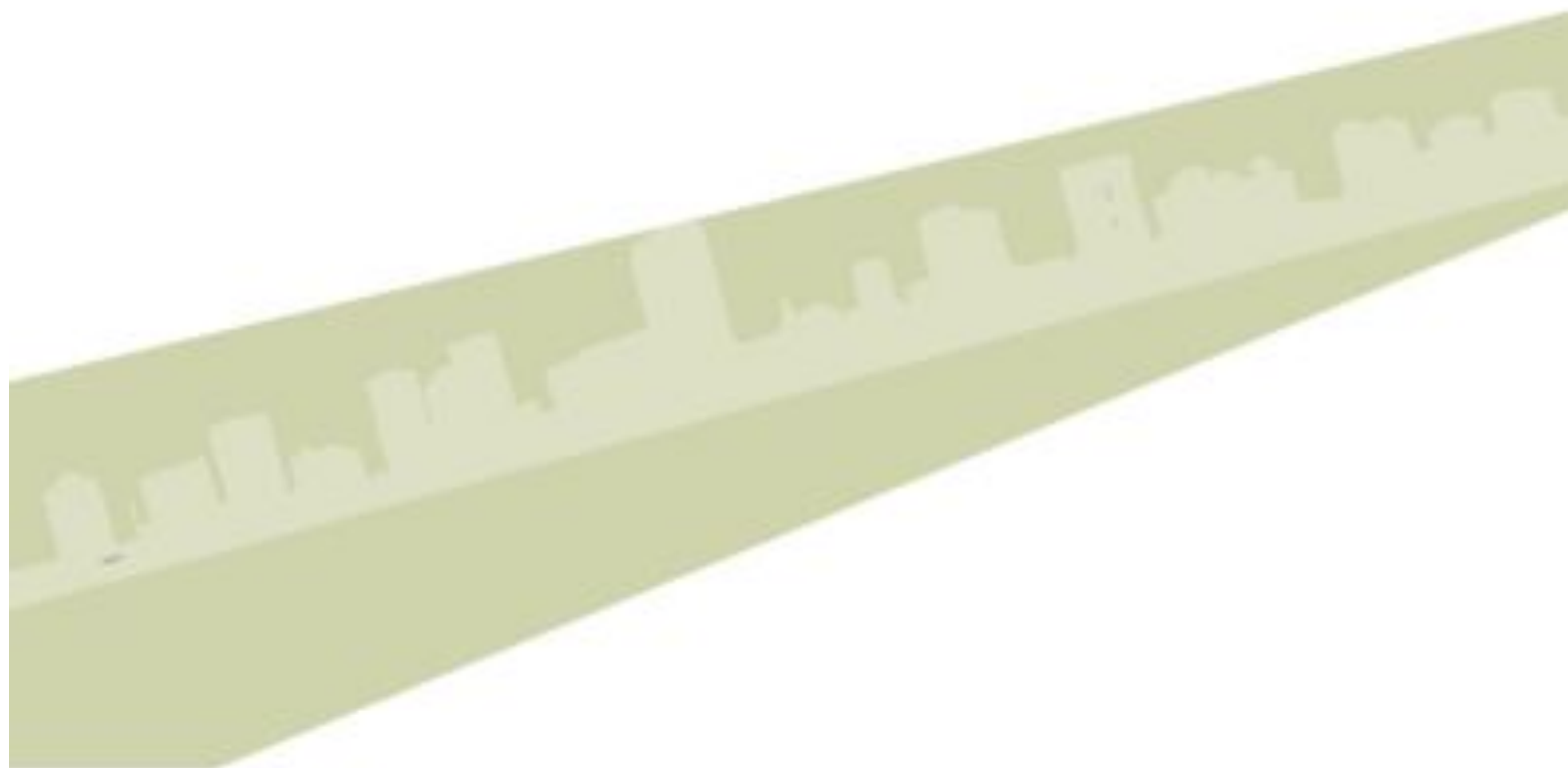
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The Unified
New Orleans Plan

CITYWIDE STRATEGIC RECOVERY
AND REBUILDING PLAN

Appendix E

PRELIMINARY CITYWIDE FINANCIAL ASSESSMENT





Preliminary Citywide Financial Assessment

A Report Prepared by
The Citywide Planning Team

January 2007



Port of New Orleans

Pre-Storm Analysis

The deep water Port of New Orleans contributes significant economic resources to the local, regional, and national economies through employment income, tax revenues to state and local governments, custom fees to the Federal government, and business revenues. According to Pat Gallwey, COO, the Port is the largest facility in the world with extensive geographic reach in the United States and to other countries. The Port, pre-Katrina, was very strong both from an operations and financial perspective. Operating revenues and cash flow were substantial, debt coverage was well above covenant requirements, and significant investment was made to upgrade and enhance most of the Port facilities. Long-term debt, which was a minimal \$1.8 million in 2000, increased during 2000-2005, to over \$121 million, reflecting this targeted investment upgrade. The prudent investment and operating performance can best be reflected in the Port's debt ratings prior to the storms. Standard and Poor's had assigned a rating of A- while Moody's had rated the debt as A2. Both rating agencies in essence ranked the Port obligations as strong investment grade quality, which confirms strong revenue generation and operating revenues, and the ability to repay the debt invested for the enhanced operations.

The overall economic impact of the Port, pre-Katrina, is analyzed and estimated in a report presented to the Port on August 15, 2005. The study was presented by Martin Associates of Lancaster PA and highlighted the following economic impacts for the calendar year 2004.

The number of Port Sector jobs, defined as direct, induced and indirect, exceeded 28,000 and when combined with Port users related jobs, increased exponentially to over 160,000 jobs. The personal income figures related to these jobs, for both the Port sector and Port user categories, was estimated to exceed \$8.4 billion in 2004. The value of economic activity, measured by business revenues and user output, exceeded \$17.8 billion for the same period of time.

The Port, in 2004 and prior to any storm related impact, was one of the major drivers of economic activity for the State, Local, and Federal jurisdictions. In addition to the estimated \$228 million of local purchases related to the Port, Martin Associates was able to quantify the impact of related taxes attributable to the Port. Port sectors and users generated over \$882 million of total state and local taxes, while the same constituents generated almost \$1.4 billion in total Federal taxes.

The Port was a critical facility to the local, state and Federal economies in the year just prior to the hurricane devastation experienced in 2005. Capital investment had accelerated to support the additional business and revenues that were being generated. The Port had strong management that was focusing on sustainable growth through aggressive marketing and business development, prudent operations, and financial management. The bonds raised to support the development were rated as strong investment grade and as highly secure debt instruments by both rating agencies. In general,

most of the business aspects of the Port were trending upward with an extremely positive economic impact as analyzed and reported for the year ending 2004.

Post-Storm Analysis

Operations

The Fiscal Year 2006 Plan was revised in December, 2005, to reflect the impact of the Hurricane. Projected operating revenues were reduced from \$43 million to \$32 million, or roughly 26%, due to the significant impact the storm had on facilities and operations. The two months following the storm were “nearly non-existent” related to cargo movement and other normal activities, according to Gary LaGrange, President and CEO.

Through perseverance, hard work and commitment, the Port was able to institute recovery and growth opportunity measures to restore its’ operations as a leading economic generator for the city, state, and nation. The response should be analyzed as a Case Study on how to mitigate disaster damage and negative economic impact. For a coordinated response, the Port worked very closely with a myriad of agencies including the Federal Maritime Administration, the U.S. Army Corps, the U.S. Coast Guard, the National Oceanic and Atmospheric Administration, and many other federal and state military and law enforcement agencies. Despite third party predictions that the Port would be closed for at least six months, the Board responded with a goal of 70% pre-storm ship calls within six months. Actually, ship calls exceeded 80% of pre-Katrina levels within the six months; in fact, ship calls rebounded to exceed 100% of pre-storm levels by May and June 2006. The Port has also experienced a rebound in tonnage volumes as cargo levels now range between 80-90% of pre-Katrina volumes.

The results for the Harbor in the Projected Fiscal 2006 operating revenues show a \$26 million, or almost \$4 million increase from post-Katrina expected dockage activity, with a slight decrease in cruise operations. Instead of a 26% decline in revenues, the Port was able to limit the decrease to roughly 19% from an expected \$43 million to \$35.2 million. When adding the \$5 million of business interruption insurance that was received, total revenues in 2006 are projected to exceed \$40 million. Total operating expenses were reduced by \$2.1 million resulting in approximately \$12.4 million in income from operations, before depreciation. Staffing levels were reduced by approximately 20% when employee positions vacated after the storm were not replaced. Once again, the financial results projected for 2006 are a remarkable case study in the Port’s ability to recover operations quickly, expand on residual revenues, and limit expenses. The fact that the Board set aggressive goals in December, 2005, is impressive. The fact that management beat those projections and fell just short of normalized performance, once operational, is remarkable.

Despite the operating measures, the overall negative economic impact to the Port is still significant. After non-cash depreciation expense of \$15.4 million, a write down in assets of \$47 million due to the storm damage (this accounting loss does not reflect actual damages), and increased expenses to manage insurance/FEMA claims, the Port is projecting a net loss exceeding \$49 million for the year 2006.

To shore up the potential for impaired cash flow, the Finance group, headed by James Ruckert, was successful in securing a FEMA Community Disaster Loan (CDL) in the amount of \$7.1 million. The loan is for federal assistance to support operating expenses of government entities. A line of credit was also secured for \$8 million to provide further support, if required, to expedite construction and repair projects until insurance proceeds are received. Also, the department participated in the GO Bond Program to obtain \$7.5 million that will be used to pay principal and interest on existing debt for a period of two to three years. In essence, shorter term obligations are being paid off with long-term, no interest (for five years) loans.

Projections for the full year 2007 Plan call for an increase in revenues to \$39 million (still \$8 million below pre-storm expectations), expenses that are slightly higher at \$30 million (due mainly to increased insurance costs), and income from operations, before depreciation, of \$9.5 million (or below 2006 projections due to the elimination of business interruption proceeds). However, with proceeds from the expected realization of other insurance claims of approximately \$27 million in 2007, the Port is anticipating a positive net gain for the year.

A “normalized” projection of future operations is in process which will attempt to reflect go-forward expectations for revenues and expenses without the disruption of storm related activities, expenses and business interruption. It is expected that the Port should once again have a business with increasing revenues, positive operating income, and net gains that justified a strong investment grade rating. Because of the business interruption and impairments, Standard and Poor’s had downgraded the Port’s rating two notches from A- to BBB following the storm. Subsequently, the rating has been upgraded to BBB+, a strong affirmation of recovery.

Asset Damage/Impairment

In addition to operating disruptions, the storm had a significant negative impact on the assets of the Port. The total loss from Katrina is estimated to exceed \$164 million. The total loss is divided as follows: \$140 million for damage to facilities and cranes; \$9.4 million for damage to pumps, drainage and other equipment; \$9.2 million for emergency protective measures and debris removal; and, \$5.5 million in business interruption that was already discussed in the operations review and is considered an operating make whole from insurance proceeds.

The Port is in a rather unique situation in that capital recovery from insurance proceeds is expected to be a higher percentage of storm assessed damage than other agencies or entities within Orleans. In a potential case study for properly insuring assets and operations, the Port has been advised by its consultants that under its pre-storm policies of coverage, virtually all of the losses or damage to assets and operations should be covered. However, the reality is that an additional case study may need to occur which shows the amount of insurance coverage expected by the policy holder and the amount actually paid by the insurers in the case of a major disaster. Of the \$149 million of damage to facilities, equipment and other assets, Adjustors International and the Port have determined that anticipated insurance coverage should be approximately \$131 million. However, apart from the \$5 million of BI insurance already discussed and collected, the Port to date has only received approximately \$15 million of insurance proceeds. It now appears that the balance of disputed insurance coverage, or \$111 million, will be determined through negotiations or worst case, litigation. Thus far in the analysis, verbal indications and historical claims experience provided to the Port may result in as little as \$30-50 million in incremental payments being received.

FEMA's obligation for the emergency measures total \$1.7 million, with an additional \$1.9 million in obligated funds for buildings and equipment. Although the Port has an incremental \$10.7 million of Project Worksheets (PW) in process, as part of the PW analysis the amount of the claim for Public Assistance (PA) is limited by the insurance proceeds received for those PW's. There is an additional \$10.9 million in PW's still to be submitted. FEMA's position is that the Port did an excellent job of insuring against losses and should maximize those claim payments to make repairs. The Port concurs but is limited to the actual claims payment made by insurance to determine the amount of PA proceeds that it may be eligible to receive. Although the PW's in process may total \$10.7 million with \$10.9 million still to be submitted, there is no assurance that this will be an actual amount of PA received. In the meantime, the Port is projected to spend approximately \$2.5 million in 2006 pursuing these various claims, and another \$1.6 million in 2007.

Therefore, the Port is anticipating a potential funding gap of \$55-75 million, with some potential mitigation for incremental insurance claims and/or PA funding for damage related assessments in the future. Reportedly, the LRA has set aside as much as \$40 million for CDBG funding (including match) for the Ports. If realized, these proceeds would significantly reduce the potential gap in funding.

In the interim, the Port has established plans to begin making the necessary repairs and improvements required because of the storm, regardless of the outcome of the insurance or FEMA issues. Expenditures on equipment and facilities are expected to exceed \$52 million in Fiscal Year 2006. These expenditures are supported by Board-generated funds of \$23 million, including long-term debt financing of \$13.9 million; State and Federal government funding of \$10.1 million; CG Rail financing of \$14.3 million for a project specific to its operation; and, the balance from proceeds of \$15 million of insurance already collected.

A total of \$58.7 million is projected to be expended for equipment and facilities in Fiscal 2007. Board-generated funds will total \$12 million, almost all of which will be long-term debt financing; State and Federal funding is expected to total \$19.6 million; and, anticipated insurance proceeds of \$17 million (\$10 million received) expected to cover the balance.

Of the total expenditures of \$110 million deemed necessary by the Port in 2006-07, \$35 million will be covered by Board funds including: debt; State and Federal funding of \$29.7 million; private project financing by CG Rail of \$14.3 million; the proceeds from \$15 million of insurance received; and, \$17 million of insurance conservatively expected. Therefore, the projected funding gap of \$55-75 million is being further reduced in the immediate future by limiting expenditures to \$110 million in the two years post-Katrina, versus the total damage assessment calculated. The insurance claims, FEMA PA obligations and the LRA proceeds, all outstanding and subject to adjustment, should be better known or at least more accurately assessed by the end of this period.

Although committing to these projects with debt, internal funds, and expected funds is riskier than waiting for receipt of all monies owed, the delay may be two to five years and could cause irreparable damage to future business success. By utilizing a combination of funding sources and supplementing expected funds with internal commitments, the Port has implemented a prudent yet measured business approach to addressing recovery and future growth needs.

Other Asset Impairment

Impeding further recovery and expansion efforts, the Port lost critical deep-draft access to about 25% of its terminal operations and customers. Companies located in the Tidewater Area depended on the MRGO for deepwater access to the Gulf. Analysis of storm damage to facilities and closure of the MRGO has forced the Port to prioritize additional planning to establish its operations and those of its customers to other venues, potentially along the Mississippi River. The Tidewater area is being considered for new maritime roles; however, preliminary analysis has just begun and is constrained due to physical limitations to deepwater access through the lock system.

In an effort to obtain necessary capital for either relocation of operations or subsidies to utilize the Inner Harbor Navigation Canal lock, the Port has met with federal and state officials in Washington, Baton Rouge, and New Orleans to testify before both federal and state committees. Although little progress has been realized to date, the ongoing effort has been established as the Port's top priority at this time.

Funding Needs/Sources

An economic analysis performed by reviewing seven hurricane-impacted MRGO related businesses, both Port owned and privately owned, concluded that over 1000 direct jobs were affected, with 9000 total direct and indirect jobs potentially affected. The total economic output of these operations was \$2.3 billion prior to the hurricane. The total cost to move all of the facilities to the Mississippi River is estimated at \$360-380 million. If such a move could be orchestrated using economies of scale of a shared space and workers, along with expansion for other new or existing businesses, the potential payback would probably meet the requirements for a private financing initiative that stands on its own merits.

For economic consideration and perspective, further analysis is provided on just one of the businesses in question, the New Orleans Cold Storage (NOCS) facility at Jourdan Road Terminal. NOCS tonnage grew 141% between 2000 and 2005 to more than 310,000 tons annually. The Port became the leading poultry export facility in the United States. NOCS employed 135 full time workers (\$12.8 million payroll) and generated employment for 140 truck drivers. Revenues received by the Port from NOCS grew 132% during the same time to \$1.5 million, making NOCS the Port's the second largest customer. Due to increased demand plans were already underway to construct a third birth for an additional 60,000 square feet of space. NOCS exported through the Port approximately 30-40% of all chicken produced in Louisiana, accounting for an additional 500 plus farm and processing related jobs. NOCS contributed direct and indirect jobs for over 1500 employees with an economic activity value of over \$76 million. State and local taxes were approximated to exceed \$12 million.

NOCS has been curtailed significantly since the storm. A majority of the product had to be handled at facilities on the river due to draft restrictions, and the company is forced to truck cargo to the river at a cost of \$8-10 per ton incrementally. Due to the business challenges total losses reported by NOCS during the most recent seven month period , exceed \$500,000 and will reportedly jeopardize the firm's viability.

Analysis of the industry and company needs support the development of a new cold storage facility on the river. Projected employment is estimated to exceed 235 jobs with a payroll of \$25 million and an additional 282 truck positions required. The projected economic value of just a new poultry facility would add \$153 million of direct and indirect activity with local and state tax generation of \$24 million. Although not verified or analyzed, the projected cost of the facility would be \$75 million. Once again, even on a micro level of one facility, the economic prospects probably could support private investment.

If the concept of a new and expanded cold facility to support NOCS was coupled with a refrigerated and dry logistic center, all built at the same time and utilizing contiguous space, the economies of scale could be greatly enhanced, support additional new business expansion, and provide a needed upgrade to facilities to support both damaged operations and future growth.

As part of the Fiscal 2007 Financial Plan presented to the Port's Board of Commissioners, several initiatives were presented for possible business growth and funding consideration.

The **Marketing** department, headed by Robert Landry, recommended improving cargo performance by becoming more of a strategic and value added partner in all phases of the maritime business, rather than acting simply as a landlord.

Technology Alliances

A recommendation was made to form Associations with companies that provide expertise in fields that impact cargo business, such as IT, automated warehouse and handling, or other activity that expedites and economically enhances cargo logistics. Robert Landry cited Silocaf as a historical example for adding technology expertise to the Port related to coffee imports.

Strategic Partnerships

Further development to form relationships with companies where third party financial investment is attractive (either from the customer directly or from financial institutions) is also recommended. These arrangements would be similar to co-packing arrangements already established in manufacturing or third party logistics for warehousing and trucking. Potential partners with cargo related interests include CN railroad, MSC and NYK, as well as, retailers such as Wal-Mart, Target, Home Depot, etc. and terminal operators or multiple parties pooled together to achieve critical mass of operations and investment. In other industries these agreements have typically been negotiated as long-term commitments and preferred supplier agreements to provide the long-term financial economics to justify major investments. Germany's Thysson, with whom the State is negotiating with for a new steel mill, is a potential target partner.

Breakbulk Expansion

Competitive ports such as Houston and Mobile have targeted commodities from South America that would reduce business expansion opportunities for New Orleans. Once again, large companies (Cargill, Mittal, Bao etc.) should be targeted to provide dedicated or shared terminal expansion on an economic long-term basis. Also, creating a "Captured Cargo" initiative that works with the State to induce local producers of products, like chemical, forest, and food related products, to more fully utilize the Port should be targeted. Also, the Port should continue to aggressively pursue exploiting and growing a container-on-barge strategy that is being implemented by the competition.

Finally, Port and State officials should work directly with Central and South American entities to capture a growing business of import and export activity especially in light of the recently announced plans to implement a CAFTA strategy similar to the highly effective NAFTA agreements years ago. In conjunction with this activity there should be further exploitation of the Foreign Trade Zone Master Plan.

The **Port Development** Division, under Deborah Keller, also had numerous recommendations in the same report.

MRGO Replacement

The division has prepared a \$375 million funding request to the LRA which included costs for relocating all business dependent upon the MRGO, which was discussed earlier in this report.

Continued Cruise Terminal Development

In addition to completing construction of the Erato Street Cruise Terminal Complex, a \$37.7 million capital project to create a new parking garage and cruise terminal, the State has funded planning and design for a cruise terminal at Poland Avenue Wharf.

Replacement of Almonaster Bridge

Although the Almonaster bridge is not part of the State system, it is a national connector route eligible for Federal funds. Replacement of the bridge is reportedly LADOTD's highest priority because it is part of the Southern rail gateway linking national east/west rail service through New Orleans.

Other Funding Sources

The Development Division assists in obtaining State and Federal funds from various programs as well as economic development funding for maritime and industrial projects. The Department is considering utilizing Public/Private partnerships for funding.

The **Cruise and Tourism Division**, headed by Robert Jumonville, also formalized some critical business initiatives in the last year.

Cruise Terminal Development

Reportedly, cruise industry trends are expecting additional capacity of twenty five new vessels to be added in the next three years. Building a new first-class terminal is recommended to secure at least three of the ships. In addition, Development has secured a commitment from Royal Caribbean for a five year berthing agreement through 2009 and has commenced negotiations with Carnival for a new ten year operating agreement.

The **Division of Business Development**, headed by Joseph Cocchiara, Jr., has completed negotiations on a Riverfront Development Agreement to spur non-maritime development on the river front. What has been industrial or little utilized land is now targeted by a joint agreement with a 75/25 revenue share agreement by the City and Port respectively to allow developers and others to propose business, residential, and commercial projects to further capitalize on the river front potential.

Regional Transit Authority

Pre-Storm Analysis

Prior to Katrina, the RTA operated three maintenance facilities and a Headquarters building that supported 372 buses covering 46 routes, 36 lift vans for para-transit services to the disabled, and 66 street cars that provided services to the Canal Street, Riverfront and St. Charles Avenue lines. With 1357 employees, a payroll of \$71 million, and an operating budget in excess of \$110 million annually, the RTA provided services to over 855,000 riders per week on average.

The operating budget was supported by a number of different revenue sources. Passenger fares before the storm totaled \$37 million; sales tax (1%) revenue was \$55 million, with an additional \$5 million generated from a hotel/motel surcharge. The balance of funds for operations and capital projects was provided through various grants from the Federal Transportation Administration and LDOT. The revenues were also used to service the principal and interest on \$120 million of long-term debt.

Post-Storm Analysis

Although the storm caused significant damage to virtually all of the RTA's assets, it is a more straightforward exercise to review the asset assessment than to analyze the operational ramifications.

Asset Damage/Impairment

The RTA has reported that 197 of 372 (53%) buses were destroyed, 30 of the 66 (45%) streetcars were damaged or lost, and 24 of 36 (67%) lift vans lost. They also reported significant damage to the lines, facilities, and equipment. However, in a case study on how to effectively manage a relationship with FEMA representatives, Mark Major, GM, and Fred Basha, Program Director, have diligently worked with the agency since immediately after the storm. According to Fred, as soon as possible after gaining access to operations, the RTA worked directly with FEMA on a daily basis. Initially, as reported with most agencies, the level of damage assessed by the RTA varied widely from the initial values that FEMA was estimating. Through due diligence, utilizing additional asset documentation and third party experts, the RTA and FEMA were able to arrive at a very close agreement on final damage assessment and PA money available for repair and replacement. The RTA also worked directly with FEMA throughout the process to make sure that Hazard Mitigation plans were implemented as part of the PW process.

Listed below are some of the various assets categorized by the RTA, the estimated amount of damage, and the negotiated FEMA obligated amount.

<u>Assets</u>	<u>Est. Damage (\$000)</u>	<u>Obligated Amt.(\$000)</u>
Bus Stops	130	130
Buses	23,702	23,702
Canal Facility	6,427	5,241
Canal Line	256	0
Canal/SIS	1,764	290
Carrollton	105	28
Desire/ENO	6,642	3,728
Plaza	3,675	310
River Line	161	161
St. Chas Line	156	156
Street Cars	30,144	27,144
Support Veh.	1,285	1,285

Source: RTA Version 11/08/2006, does not include all PW's

The obligated amounts listed above are not the final reimbursements expected from FEMA, instead, they reflect what has been agreed upon to date. Also, the amounts do not show the insurance proceeds received or expected from private coverage, nor do they show the FEMA match requirement which the LRA has committed to pay.

The total amount of claims and obligated amounts do not reflect the actual replacement value, which is the cost in many asset categories that FEMA agrees to pay, even if over and above the PW amount. For example, in the case of buses and streetcars, the estimated damage and obligated amount of \$53.8 million and \$50.8 million, respectively, reflects the market value for those assets at the time of the storm. Many buses and streetcars in the fleet were aging and depreciated in value. In fact, if FTA funds are used to purchase buses, the RTA is required to use them for at least 12 years before disposition. After proving to FEMA that replacement buses and streetcars could not be purchased for the agreed to damage amount because of lack of like-kind assets available in the market, the RTA has actually gained agreement to replace all at the OEM equivalent price, or roughly \$66 million. Since the actual price of replacement exceeds the obligated amount, FEMA has committed to fund the difference.

The RTA feels that through its own estimates and those of qualified third parties, total system-wide asset damage is approximately 30% higher than the total estimated amount. Instead of the roughly \$75 million of damage which has been agreed to, the actual number is estimated by the RTA to be in the \$90-95 million range. However, against this damage FEMA has already obligated \$63 million out of the original \$75 million. If an additional \$15 million is obligated for the buses and cars, as verbally indicated, then the FEMA PA would increase to \$78 million and perhaps higher once the actual costs are incurred to replace or repair the balance of the assets.

In addition to FEMA commitments, the RTA has received indications from insurance companies that an additional \$9 million of coverage is expected, mostly from NFIP. Also, as mentioned previously, the LRA has committed to provide the match portion of funding not covered by FEMA, which is typically 10%. If the total damage does result in the higher replacement range of \$100 million, then theoretically, an additional \$10 million may be provided from the state. Obviously the RTA will not make money from the disaster, but Management, based upon the analysis and indications available currently, does not feel that asset damage will create a significant gap versus the disaster funding that is expected.

Cash flow timing related to receipt of the proceeds to cover the damage, however, is still a major issue. Of the total amounts obligated by FEMA at this time (\$63 million), only \$1.23 million has been paid to the RTA. Some of the insurance proceeds have also been received, but only a small portion as well. As with every agency or operation in the City, the flow of payments from the various sources has been minimal despite significant obligations. As it relates to the ongoing PW process, the RTA continues to work closely with FEMA in order to get 10-40% advances against the obligated PW's and make adjustments to un-obligated claims. Until additional monies are received the RTA's cash flow is severely limited, which is curtailing initiation of the majority of repair and recovery work. The bulk of available cash flow is being applied to sustain operations and cannot be diverted to capital projects. The balance is being used to support a small scale building recovery of the system.

Operation Impairment

Although the RTA appears to be well positioned to recover the bulk of the value for facilities, equipment, and other ancillaries damaged in the storm from disaster-related sources, the ongoing operational drain on financial liquidity is a more critical constraint to future sustainability and growth of the system. If all or most of the streetcars are refurbished, new buses are ordered and received, and all other facilities and infrastructure are rebuilt to a pre-storm or even like-new standard, then the system is still only able to conduct business to extent that ongoing operating funds are available. That has become the RTA's dilemma.

The RTA has dramatically cut its operating budget from \$110 million in 2005 to a proposed \$67 million for 2007. Although a 9% increase from a recovery budget in 2006, it still falls

40% short of a normalized year. Even at the proposed level, the budget revenues are expected to experience a continued shortfall. The largest portion of revenues, sales and hotel taxes, is expected to yield \$44 million in 2007 compared to \$60 million collected before the storm. The second largest revenue stream, fare collections, a paltry \$3.5 million in 2006 (50% of the year was offered free to riders), is expected to double to \$7 million in 2007, but is still a fraction of the \$37 million collected pre-Katrina. Although riders have in the last month increased dramatically from less than 20% to almost 65% of pre-storm levels as of October, the fare receipts of only 20% of normalized levels do not support the current operating commitment of 62% of original routes.

From October 2005 through June 2006, the RTA used a \$47 million grant from FEMA, the state, and the FTA to subsidize and support basic operations and the augmentation of providing transportation to and from Baton Rouge. The RTA received an additional grant of \$20.3 million to provide the same level of service from July through November 2006. The Baton Rouge service has recently been extended by the State through the end of December along with the LA Swift program through November 2007. The FTA has also authorized the use of 2007 capital allocations of \$13.6 million (typically used on an annual basis for equipment and facilities upgrades) to be converted into operating funds to subsidize the same level of service now being offered through the end of 2007 within New Orleans.

The RTA has already reduced total employees through attrition or other means from a pre-storm number of 1360 to 600 currently, with a 150 reduction as recently as August. This is a dramatic reduction and is reflected in the budget for salaries and benefits declining to \$38 million, down from the \$71 million budgeted before the storm.

The RTA has also secured \$36 million in GO Zone Bonds, which can be used to repay principal and interest on debt that is coming due. The 2007 budget includes \$14.8 million of GO Zone proceeds to shift the shorter term obligations back into low interest long-term liabilities.

Funding Needs/Sources

However, even with the expense reductions and the traditional revenues growing modestly from the lowest levels after the storm, the RTA has stated that the scaled-back service levels offered currently would be impossible without continued assistance from the federal government. The FTA has indicated its willingness to send additional support revenue if the RTA can justify the need with data of an increased, sustainable customer base. This should be viewed as only a short-term stop-gap measure.

The RTA is in the process of preparing an analysis which outlines the level of sustainable service given a minimum level of riders and an assumed sales/hotel tax revenue foundation. Additional subsidies from the state and federal agencies will have to be viewed on more of a

historical basis than the disaster recovery levels received during the last two years. That will necessitate further rationalizing employees and overhead expenses, while limiting expanded service to areas of the City until the customer base can support the operations at a historical or slightly revised basis. The service levels and route management will have to continue to adjust to geographic density, and capital assets will have to be rationalized to accurately reflect population declines and shifts. Despite political and public pressure to restore full service to pre-storm levels, RTA management has stated that current service levels can only be maintained if rationalized operations can be sustained with required Federal and state subsidies, and expanded only if the economics of doing so can be supported. Sales/hotel tax and fare revenues must increase.

With regard to long-term plans contemplated by the RTA prior to the storm (commuter rail services, light rail systems, extending and adding streetcar lines etc.), these projects make sense to the extent that the RTA will be able to implement a visionary plan for the future. Although all of the projects may be justified to make the RTA a true regional provider of transportation services, the projected cost of a best-case scenario was estimated in a conservative \$3-5 billion range. Even if such projects could be privatized, it is unlikely that the operations could self fund all required operating and capital expenses. In the realm of transportation, the successful cost benefit analysis to justify private funding seems limited to projects like toll roads and bridges (as is the case in Chicago). The first privately financed light rail system in the U.S. was constructed in Las Vegas during the past five years. That line is only a couple of miles long, cost over \$1 billion to construct, and was heavily subsidized by the rail car manufacturer, the city of Las Vegas, and the direct investment from participating casinos and indirect long-term marketing commitments from corporations for theme cars and stations. The balance was financed by investment grade bonds.

A true regional system of transportation will almost certainly have to be subsidized at the state, regional, and federal level to justify adding the incremental capacity with a technologically modern design. California issued state bonds on a massive scale in order to support a true upgrading and modernization of its infrastructure and transportation system for a planned 2020 completion. The bonds will be repaid only in part from use, with the balance potentially coming from state and local taxes. In 1991, the state of Louisiana had a similar initiative to support the upgrade and augmentation of the transportation infrastructure, including highways, bridges, airports and other related assets.

The current funding gap for the RTA is being generated by operational realities. For 2007, at current service levels (60% of pre-storm), a \$13.6 million subsidy is being provided along with a \$14.8 million defeasance on debt service. The operating deficiencies are not gaps that are readily filled by alternative funding sources. The existing commitment from the FTA and the LADOT will have to be continued. Visionary reconfiguration of the system longer term would have to be supported by the same agencies, with a very large strategic capital allocation from government bond issuances.

Louis Armstrong International Airport

Pre-Storm Analysis

The Louis Armstrong New Orleans International Airport (“Airport”) plays an integral role in the local economy as the gateway to the tourism industry, one of the mainstays of employment, and one of the few sectors that had experienced continuous growth before the storm. The economic activities directly related to the Airport generate hundreds of millions of dollars of income and thousands of jobs. The Airport also provides crucial services to local business and industry.

In a report published in May, 2004, by Timothy Ryan of the University of New Orleans, the economic impact of the Airport was analyzed, providing a frame of reference to the importance of the overall operation prior to the disruptions from the 2005 storms. The report analyzed the economic impact of the Airport for the full year 2003.

According to the report the Airport contributed over \$1.09 billion annually in direct and secondary spending to the New Orleans area economy. As part of this impact, over 12,400 jobs, or roughly 2% of all jobs in the metro area, were supported. Total earnings from this employment translated into almost \$500 million and generated over \$71 million in tax revenue for the state and local governments. The Airport was also the conduit for 58% of all visitors to the city, which supported \$2.6 billion of additional tourism and convention spending.

In conjunction with the strong economic impact of the Airport to the state and local areas, the financial and operational aspects of the facility as a whole were very well regarded. Throughout the early 2000’s, passenger volume was steadily increasing and resulted in increased revenues and capital sources derived from landing fees, airport leases, Passenger Facility Charges, Passenger taxes, and Federal Funds provided by the Federal Aviation Administration (AIP grants). The FAA provided discretionary funds, which were not passenger driven per se, but also provided improvement funds and entitlements that were based upon the number of passengers utilizing the Airport. Accordingly, as the level of passengers increased, the level of capital and revenues from most sources increased as well.

With the passenger and revenue growth during the period of 2002 through 2004, the airport was able to support operations, capital investment and pay debt service in excess of \$21 million annually. In fact, total debt decreased from \$184 million in 2002 to a little over \$167 million in 2004. Standard & Poor’s had assigned a debt rating of A on the revenue bonds, signifying the strong investment grade financial and operational condition of the Airport.

In terms of Capital Projects, the Airport was continually investing in facilities and operations to accommodate the growth plans and upgrades necessary to remain a Class A institution. In the 2005 Capital Improvement Plan submitted prior to Katrina, the Airport was budgeting a total of \$141 million to be invested in 2005-2007 for perimeter security and upgrades, terminal improvements, apron expansion, runway rehabilitation, levee improvements, and terminal expansion and connections. The proposed budget was to be financed through an almost equal combination of funds generated from the FAA and bonds supported by Passenger Facility Charges.

Post-Storm Analysis

Asset Damage/Impairment

Shortly before and then after the hurricane, the airport was basically closed to all airline traffic. Despite the immediate impact, a dedicated staff was able to make the facility available to emergency and relief workers for staging in recovery operations. Maggie Woodruff, Deputy Director of Community and Governmental Affairs, personally drove to Baton Rouge to advise the Governor and staff that the airport was open and available to assist in any rescue and staging operations. The terminal lobby was used as a medical facility and the offices were utilized for housing and operations of emergency personnel.

Despite the devastation from Katrina and a subsequent tornado in February 2006, the Airport facility held up against the destruction better than most agencies. The total estimated damage was approximately \$25.6 million. The major damage was to the roof, exterior and interior of the terminals, concourses, transportation and parking facilities, as well as the ancillary facilities. Similar to the Port, the Airport had very good insurance coverage which has thus far paid \$12.5 million in claims coverage. An additional \$2.7 million is still being negotiated under the insurance settlement. The FAA (via AIP Funds) has agreed to reimburse the Airport for \$7 million of the damage repair, and so far has advanced \$3.5 million of the money. FEMA has also paid \$3.5 million of obligated PA money.

A study is in progress to formulate a preparedness plan to harden facilities and to ensure uninterrupted service through another disaster, which is estimated to cost, through implementation, an incremental \$22 million. FEMA will be asked to fund the additional implementation as part of the Airport's Hazard Mitigation request.

The bulk of the Hurricane Katrina Rehabilitation program has been funded or obligated to date with a small portion of the insurance proceeds still in negotiation. Not only did the Airport staff and contractors do a good job at quickly estimating the damage and submitting the appropriate claims, but employees were expeditiously dispatched to begin the recovery work that is now progressing toward completion. There is not expected to be a significant

funding gap for the Airport as it relates to damaged assets or facilities and disaster recovery funds.

Operation Impairment

Despite the critical role played by the Airport in the aftermath of the storm, commercial operations were severely impacted due to a dramatic decrease in passengers, charter, and cargo flights. On average, there was a 42% reduction in all aircraft arrivals and departures. Currently the airport is operating at roughly 65% of pre-storm levels. With an operating budget of around \$60 million, approximately \$25 million of revenue is generated from sources not directly attributable to the airline landing fees and leases. After the storm, negotiations with the airlines were not finalized and are now handled on a sliding scale basis. The fees and leases would typically be negotiated with the airlines to cover a large balance of operating costs. The \$9.50 per passenger that was charged before the storms has remained flat despite the decrease in passengers. The Airport estimates that it would have to charge \$20.00 per passenger to fund the deficit. The Airport has not done so in order to promote business and to create an incentive for airlines and passengers to utilize the Airport. Due to lower revenues, the net result for the Airport in 2005 was an \$8.4 million loss. At current operating levels, the Airport would generate additional operating losses of \$12 million in 2006, \$11 million in 2007, and \$6 million in 2008.

The Airport has used emergency funding from federal and state sources in the form of grants and loans to meet its operating obligations. FEMA has extended \$10.9 million in Community Development Loans, partially used to offset the 2005 operating deficiency. The Airport has also secured \$35.4 million in GO Zone notes which will be used to pay principal and interest on existing debt while extending the maturities and lowering the implied interest rate. Unfortunately, because of the operating challenges, the Airport's total outstanding debt, which was decreasing consistently before the storm, has increased from \$167 million in 2004 to over \$206 million currently. Standard & Poor's has downgraded the revenue bonds from the investment grade rating A to below investment grade BB. This dramatic six level decrease to "junk" status will impair future debt issuance and make debt financing significantly more expensive.

Funding Needs/Sources

Despite the Airport's ability to address asset damage through recovery funding like insurance, FAA and FEMA, operations continue to lag pre-storm levels and have created a constraint to future viability and growth. As with most recipients of CDL and GO Zone notes, the proceeds were desperately needed to fund short-term obligations. In the case of

the Airport, agency forgiveness from these additional obligations is very important to regain a stronger debt rating and debt liquidity for future funding needs. There is precedent that in other disasters, these obligations have been waived by the issuing authority. This would free up 23% of original debt capacity.

The East/West runway rehabilitation was started before Katrina and recently completed despite the operational difficulties caused by the storms. The cost of the refurbishment was approximately \$80 million. The funding of the project was allocated from FAA (AIP) funds, a short-term line of credit intended for refinancing by future long-term bonds backed by PFC funds, and a small portion of operating funds. AIP funds contributed so far equal \$28.2 million, or 37% of the eligible costs. Increasing the AIP participation from the 37% to the full funding permitted, which is 75% of eligible costs or \$57.1 million, would free up approximately \$29 million of PFC funds that could be utilized for additional capital projects. Additionally, \$23 million of eligible state grant funding could further be used to free up additional PFC funds and operating funds that were used to finance the runway. In essence, FAA and state grant money eligible to support this project could provide the Airport with reimbursement of \$52 million of internal funds and PFC debt capacity used to invest in and expedite the rehabilitation.

The Airport has delayed the five year Capital Improvement Program until passenger traffic recovers to more normalized pre-Katrina levels. However, Airport management feels that in recent meetings with representatives from the FAA, that the grant money provided to repair and replace damaged facilities has left the future commitment of additional AIP grants in limbo or in a status quo mode. No expansion discussion is occurring with New Orleans even though a \$70 million expansion was recently supported by the FAA in Gulfport, an airport that handled 10% of the passenger volume.

The Airport's new five year plan calls for an investment of over \$220 million, mostly in the expansion of existing concourses and loading bridges, taxiways, and acquisition of limited land surrounding the Airport. Management feels that the new development is critical to increasing passenger levels to pre-Katrina and beyond. While the majority of the proposed development would be supported by PFC and bond financings, if available, the continued support of AIP grants (26%) is critical as the cornerstone to the overall program. Airport lobbying efforts need to be augmented at the Federal level with the FAA. The initial contention is to support the Airport at historical levels. Incremental funding for growth should be pursued in tandem.

As part of the Hazard Mitigation funds that will be made available through the LRA and funded by FEMA, the Airport has proposed a \$22 million plan to further harden existing facilities and capabilities. If this funding can be obtained, it would provide incremental funds for projects that are utilizing valuable internal and PFC capacity that could be directed elsewhere.

The Airport reported a few weeks ago that the existing parking structure used to support the facility was full to capacity, forcing the diversion of additional customers to more remote parking areas. According to management, the Airport has migrated from a predominately destination airport, to one that now operates as a commuter operation. Additional funding could be raised by the Airport, assuming that the structure is owned, by contemplating a privatization, sale/leaseback, or even outright sale of the facility to a third party. Also, if additional parking capacity is required on an ongoing basis, a new facility should be contemplated on a similar arrangement. Proceeds could be realized from the sale of the existing property, sale or lease of land for the new parking area, and ongoing rental or revenue share in both operations.

The Airport should also be considered for an expanded/new cargo operation as well. The Airport had only limited cargo traffic prior to the storm and has a small operation currently. If a cargo “hub” could be established to capture additional business from the aforementioned CAFTA that is being negotiated, new business relationships could be formed with Central and South America companies. A hub operation would not only create additional cargo revenues, but may also support headquarters, maintenance and other required ancillary services for third parties which could exponentially stimulate new financial opportunities. Supported by a \$500,000 feasibility grant, the Louisiana Airport Authority is reportedly assessing a new cargo facility 70 miles from New Orleans.. Resources should be allocated to ensure that any new cargo operation takes into account the valuable infrastructure and growth opportunities already existing in New Orleans. A business case study should also be performed to analyze the recent implementation and economics of a cargo hub at the Incheon airport, which used a similar business model to support expansion.

On a similar note, an expanded airport operation should also take into consideration the new Airbus A380 platform that is seeking final FAA certification. The two story super jet is the largest commercial aircraft in production. Reportedly, only one U.S. airport, San Francisco, is currently configured to handle the large aircraft and the passengers that it would transport. Assuming this new platform could attain a modicum of commercial success and subsequent orders by airlines, New Orleans could be uniquely positioned to build expanded facilities to become a hub operation that further transports incoming passengers to final destinations. Once again, the support of a new commercial platform could also translate into additional support facilities like headquarter operations and maintenance operations, exponentially increasing the financial impact of expansion.

If the Airport’s expansion to support increased cargo and commercial operations is viable but limited by surrounding land constraints, additional analysis should be initiated to revisit the relocation of the Airport operation to a new venue. In the past, consideration has been given to moving the entire operation to a location within the Orleans area. Although this report does not delve into the merits of those past discussions, if plausible as part of a larger

planning initiative for the future, the relocation and rebuilding of such a large scale project makes more sense after such a large scale disaster has occurred. In discussions with industry experts, rough approximations for the expansion of the existing airport were historically priced in the range of \$5-6 billion for invested capital. A new facility, which could be designed to accommodate the new growth as well as provide state of the art technologies and configurations, including parallel operations, could be constructed for a reported incremental \$2-4 billion. Given the capital outlay and complexity of such a large scale endeavor, more detailed analysis would be required to assess the feasibility as well as economics of increased revenues, expenses and ability to repay this investment. However, given that the Airport is already such a critical asset to the area, it is important to leverage the operation to the greatest extent possible to provide additional economic development and resources.

New Orleans Public Belt Railroad

Pre-Storm Analysis

The New Orleans Public Belt Railroad (“NOPB”) was created in 1908 as a short line railroad to connect all of the class I major railroads with the riverfront and Port docks. The impetus for the NOPB came about when multiple railroads terminating in the city created congestion and safety concerns in the streets and at the Port. The NOPB created a uniform, impartial and cohesive conduit from the rail yards to the Port.

In addition to acting as the intermodal gateway to New Orleans, the railroad owns and maintains the Huey P. Long Bridge, the longest rail bridge in the world. NOPB has over 100 miles of track with eight engines, over 250 boxcars and 65 gondola cars. Most of the railcars that are moved by NOPB are owned by the railroads that it services: Burlington Northern Santa Fe, CSX Transportation, Canadian National/Illinois Central, Kansas City Southern, Norfolk Southern, and Union Pacific.

Historically the majority of NOPB’s business consisted of moving railcars and freight to the riverfront docks. However, in 1995, with the Union Pacific acquisition of Southern Pacific, NOPB became an agent to transfer cars between the two rail yards. In recent years the rail yard transfer business constituted 85% of the NOPB business while riverfront dock transfers were reduced to 15% of overall activity.

Prior to the storms, all of the NOPB operating and capital costs were covered by revenues. In fact, the last time the entity was funded by the city was in 1910. A number of years ago NOPB borrowed money to purchase new locomotives, and subsequently repaid the loans in full. More recently management has maintained a policy of no third party funding and has used excess operating funds to cover capital and reserve costs. In 2004, NOPB reported \$14.5 million in annual revenues and a net operating profit of \$3.4 million. The cash reserve for capital and maintenance at the end of 2004 was \$11 million. Capital expenditures averaged approximately \$2.5 million per year.

Post-Storm Analysis

Operation Impairment

According to John Morrow, the NOPB was virtually shut down for four months following Katrina. The facilities were used by the National Guard and the U.S. Military as a staging ground, refueling yard, and housing for the troops. With some supplemental revenue recognized from the recovery activities (although at no margin), and a rise in tariff prices

earlier in the year, revenues of \$12.7 million were still achieved for 2005, or less than 10% of pre-storm normalized revenue. Operating profit however, was only slightly better than breakeven due not only to \$3.5 million in lost revenue, but also because NOPB continued to pay full salaries to all employees (98%) who were willing to show up and help with the recovery efforts. The NOPB also lost approximately \$1.6 million in lost H & W and railroad taxes.

The net result was the NOPB used \$6 million of its cash reserve to support operations during clean up and to begin recovery and repair work to its equipment, track, and facilities. The NOPB did not petition for any CDL loans to support operations. Through diligent financial management both before and after the storm, the NOPB was able to support recovery efforts, support recovery workers, support its own personnel, and begin to repair its business without borrowing money or furloughing any staff. Once the Bay-St. Louis bridge was reopened, the NOPB was positioned to assume almost full operations. Results for the eleven months in 2006, with the diligent recovery work and higher tariffs in place, are expected to produce \$17.3 million in revenues with a \$5 million net operating margin. Management was able to bring the business back from a shutdown of four months to a highly successful financial and operating year in 2006.

Asset Damage/Impairment

Despite the success that the NOBP had in managing operations, the storms were very destructive to facilities and assets. Total damage (not including the loss of revenues) was approximately \$43 million. The largest estimates for damage were tracks (\$25 million), facilities (\$8 million), signals (\$4 million), Huey P. Long bridge (\$3.4 million) and rolling stock (\$2.5 million). Unfortunately, because of the historic nature of the facilities, insurance deductibles were very high and other assets were not insured at all. The NOPB expects little or no proceeds to be covered by any insurance policies.

FEMA has obligated \$4.1 million thus far against eight PW's; only a little over \$1 million has been received to date. The remaining eight PW's that are still open account for an additional \$25 million in claims, but there are no indications as yet to expected obligations or funds from those filings. Since the historic rate on PW's that have been obligated run less than ten cents on the dollar of damage, the NOPB is expecting only another \$4-5 million of total proceeds to come from FEMA.

Funding Needs/Sources

If the additional proceeds are realized, the NOPB will have a funding gap relating to asset damage assessments in the range of \$30-35 million. Net operating revenues and cash reserves could be used to further close the gap, but doing so will leave the operation without

sufficient funds to make anticipated capital expenditures of \$9 million in 2007. Management has vowed not to take on any debt, if possible, that would encumber future operations.

If a business plan to support the future expansion of the Port includes relocation and expansion of facilities along the river, the NOPB could provide a strategic asset to assist in implementing this strategy. With tracks and access already in place throughout the Port area, the NOPB could return to its historical role as an inter-terminal transporter of containers and other cargo between the rail lines and the cargo ships. The cargo ships that arrive in port could utilize barge transportation for heavier bulk freight going up the Mississippi or could be loaded via NOPB onto rail cars for shipment to the rest of the country. The railroad would need only a modest investment in track and equipment to accommodate a large increase in cargo business. If such a business model could be implemented, the Port, cargo companies, and Class I railroads could be approached for captive or project financing.

Also, due to the historic nature of its facilities, there should be more exploration of funds that might be available from the Historical and/or Preservation societies that may have an interest in assisting in the restoration of the damaged facilities.

Although never approached, the Federal Railroad Administration may be a good candidate to seek grant money, especially if the NOPB is expecting to play an expanded role in commerce between the Port and the railroad companies.

Finally, the Military and National Guard used and viewed the NOPB as a strategic point to stage and conduct recovery operations. Since troops, equipment and materials could be brought in by rail and ship, the importance of the NOPB and its ties to the Port, as well as its track which runs from the Huey P. Long bridge to MRGO, were fully realized. Both should be approached for the services that have already been provided but not reimbursed, as well as for future consideration as a dedicated operation for future activities to support routine operations as well as disaster related events.

City of New Orleans

Pre-Storm Analysis

From fiscal year 2001 through 2004, the City had increasing revenue that was used to pay expenses and repay debt service. During that time general fund recurring revenue increased roughly 18% from \$405 million to \$479 million. In general, the revenues were sufficient to pay the general fund expenditures and 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 Public Finance sector.

Analyzing the 2005 Capital Improvement Program ("CIP") for the city reveals the capital plans and needs for the various agencies prior to any storm related damage or disruption. The CIP outlined the expected capital to be invested as well as future needs for the years 2005-2009.

The focal point of the plan was the proposal to allocate \$260 million in New General Obligation Bonds, the largest referendum ever to be considered, to improve, upgrade and expand the assets of various city agencies. With a strong balance sheet and financial operating performance, the City was preparing, just prior to Katrina, to sell the bond issuance to take advantage of a BBB investment grade rating. The voters subsequently approved the measure. The priorities of the plan were set forth in the CIP.

A summary of the use of proceeds had the following breakdown: \$163 million for streets; \$17 million for police, fire, and judicial facilities; \$43.5 million for parks and recreation facilities; \$10.5 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. At the time of the plan's approval in late 2004, the city operated over 400 buildings and maintained over 1600 miles of streets that had various needs of renovation or replacement.

In addition, the plan outlined total investment during that five year period of over \$665 million. This reflected the projects recommended for the initial budget year, approval for use of proceeds from the General Obligation bonds, projects recommended for capital reserve status with fund allocations in future years, and deferred projects for future consideration.

The largest allocation of the CIP was targeted toward the Department of Public Works. A total of \$142 million was allocated and a total of \$189 million was planned to continue the 100 miles of major/collector street construction program and the rehabilitation of more than 450 miles of minor streets in the City. An additional \$10 million targeted the urban systems

program. The balance of Public Works capital was allocated to new buildings, bikeways, and ADA required improvements.

In each of the other departments' budgets there was a combination of new facilities (including land acquisition), improvements, and renovations to existing facilities, expansion plans, and replacement projects. In an effort to identify the pre-Katrina immediate capital needs reflected in the budget, each department was viewed to ascertain the upgrades, improvements, and renovations targeted in the base year 2005. Excluded were the new and replacement facilities as well as proposed land acquisitions. This is a proxy for those capital dollars that were targeted to projects with the greatest needs for immediate upgrades and improvements. A total of \$62.5 million was slated for these projects in 2005. Taking a percentage of 2006 projects, once again trying to eliminate expansion and new facilities, approximately \$61 million was allocated for repair and maintenance needs for existing assets in 2006. These numbers reflect an approximate depiction of what the City's needs were for base case capital dollars pre-Katrina.

Post-Storm Analysis

Operation Impairment

Immediately after Katrina the City instituted an amended 2006 budget to reflect the reductions in revenues due to storm related tax collection impairment. To address the shortfall in revenues, there was a \$155 million reduction in scheduled expenditures, a 50% reduction in administrative workforce (excluding public safety positions), reductions in operating funds for all departments, mitigation of major contractual obligations, and a 30% reduction to other ancillary offices. These immediate steps were taken to offset the greater than 50% reduction in sales and property tax receipts as well as anticipated declines in other revenue sources.

At the same time, the City utilized \$33 million of bond reserves issued pre-Katrina to begin repairing and rebuilding the criminal courts, prisons, police, and fire capabilities. Limited additional funds, when available, were focused on public safety enhancements and used to conduct damage and engineering assessments to support infrastructure recovery project identification. Despite furloughing more than 3000 employees and reducing personnel, the City had to utilize 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.

General fund recurring revenue is expected to yield approximately \$300 million for 2006 versus over \$479 million for 2004. Although expenses were reduced dramatically, the City

still had to utilize the \$36 million balance of CDL I proceeds to subsidize the balance of operations through June 2006. An additional \$10 million of GO Zone bonds were used to subsidize principal and interest from debt existing pre-Katrina. 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. However, the recurring operating revenue portion of the General Funds is expected to be only 70% of the pre-Katrina budget, or \$334 million. The 2007 budget includes approximately \$49 million utilization of CDL II proceeds and \$21 million in GO Zone debt relief, for a combined \$71 million in operating and debt service subsidies. The City is forecasting that by utilizing the remaining CDL and GO Zone proceeds over the next couple of years, by 2011 recurring revenues will sustain the projected operating expenses.

As of 12/5/06, 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 management adequate future funds for debt repayment over and above operating expenses. However, 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. There is no certainty as to the timing of when the upgrade can be achieved.

Asset Damage/Impairment

According to a post-Katrina damage assessment report compiled by the City and various representatives, dated 1/18/2007, there was a total estimated loss of \$1.035 billion attributable to City owned properties.

City of New Orleans 2007 Capital Analysis

	Applicant's Estimate	Identified Sources			Identified Total	Potential Needs
		Insurance	Obligated PA	Expected Obligations*		
Public Safety	\$109,061,200	\$4,900,380	\$46,697,455	\$27,000,000	\$78,597,835	\$30,463,365
Quality of Life	\$183,370,680	\$3,344,692	\$45,482,894	\$40,000,000	\$88,827,586	\$94,543,094
Public Works	\$729,048,899	\$680,879	\$8,216,114	\$628,000,000	\$636,896,993	\$92,151,906
Property Mgmt	\$13,816,500	\$816,692	\$5,949,301	\$1,500,000	\$8,265,993	\$5,550,507
Total	\$1,035,297,279	\$9,742,643	\$106,345,764	\$696,500,000	\$812,588,407	\$222,708,872

* Includes additional FEMA funding

* Public Works - Includes additional FHWA and LRA funding

The property damage assessments for various City departments were broken down into the following categories: Public Safety; Quality of Life; Public Works; and Property Management. Public Safety includes NOPD, NOFD, courts, prison, EMS, juvenile, EOC, and telecommunications. Quality of life includes Parks and Parkways, NORD, Municipal Yacht Harbor, libraries, health clinics, nursing homes, museums, and theatres. Public Works includes roads, bridges, catch basins, drains, and sanitation. Property Management includes City Hall, City Hall Annex, Gallier Hall, etc, cemeteries, vehicles, and contents.

The stated damage estimates are now ranging higher due to additional degradation of the assets since the storm as well as reported escalating costs of labor and materials required to repair the properties. According to the CAO, the estimate for the same properties is now approximately \$350 million.

Education

According to Alvarez & Marsal, the Recovery School District (“RSD”) was appointed to assume control over 112 out of 128 facilities just prior to the storm. The Orleans School District owns another 20 facilities that are not schools. Estimated capital needs before the storm were in excess of \$500 million.

The estimated storm damage to facilities, infrastructure and contents is \$600-800 million (80% flooded).

A total of 54 public schools are currently open, with 98% capacity and an enrollment of roughly 27,000 students (versus 59,000 before the storm). A total of 9 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.

The school repairs to date have totaled \$103 million, for work that has been completed or is in progress. The funding has been received from the following sources; \$68 million from FEMA for structures with 51% or greater damage (qualifying for demolition and rebuilds); a \$28 million advance from the LRA CDBG commitment; and, an advance of \$25 million from expected insurance proceeds.

A total of \$488 million of PW’s have been submitted by the Recovery School District for structural and infrastructure damage. Another \$50 million of PW’s are in process related to

demonstration and modular class room damage. In addition, approximately \$115 million has been filed for content damage that the RSD feels should be covered by FEMA.

Total Recovery resources are expected from the following sources: \$585 million from FEMA; \$90 million from insurance proceeds; \$175 million from the LRA CDBG allocation; and, the Department of Education's Restart program, which has committed up to approximately \$200 million including paying the 10% match for content reimbursement not covered by FEMA.

The RSD furloughed approximately 7500 employees after the storm and has rehired or staffed the schools as needed as they reopen. Currently Alvarez & Marsal is running the schools on a breakeven or better operating basis.

The RSD had approximately \$270 million of total debt prior to the storm. The debt has been restructured to have interest only payments for the next five years. The plan is to pay down the indebtedness through the disposition of up to 50 buildings over the medium to long-term. Currently, two buildings are on the market with an asking price of roughly \$5 million.

Medical

LSU/Veterans-replaces Charity and University Hospitals
\$950 million versus \$650 million original estimate
LRA=\$300 million (still in negotiations)
FEMA= \$100 million
Tax Exempt bonds=\$550 million

The assets directly owned and controlled by the City have been included for damage and obligation capital in the overall assessment listed above. However, in addition to the repair of existing community health care facilities, the acquisition and refurbishment of the Methodist facility in New Orleans east is also suggested.

The project would include the acquisition and revitalization of the existing Methodist Hospital site in the New Orleans East area. The current owner does not intend to reopen the facility and has indicated a willingness to sell for a negotiated price. Reportedly, the first floor of the facility, which housed records, admissions and radiology, was damaged by three feet of water and will have to be totally refurbished. The second and third floors, which housed the OR, ICU and delivery rooms were untouched and weather proofed to prevent further storm degradation. The first floor will require nominal repair to building and infrastructure, with FF &E replacement for the medical records and reception areas. Most of the equipment for the radiology area will also have to be replaced. The majority of the rest of the building will have minimal repair and can be cleaned and reopened in place.

The acquisition cost of the existing PP &E, as is, has been verbally estimated to be \$15-20 million, but could be further negotiated. Additional clean-up and repairs, along with FF & E for the first floor will approximate \$1 million. The equipment costs needed for radiology and medical records has been verbally committed to by Siemens and Intel. The majority of existing equipment on the second and third floors can be cleaned and reused in place. The annual operating and maintenance costs for the facility are currently being analyzed by Deloitte, which has been retained to perform a feasibility analysis on the proposed project.

Dr. Kevin Stephens, Director of Health, has conducted preliminary conversations with the current owners and potential public/private partners to establish preliminary estimates. Also, the Methodist Foundation, has verbally indicated a willingness to participate in Quasi-equity funding of the acquisition. The balance of funding, construction and permanent financing (up to 90%) can be obtained through the HUD 242 program, on a 25-year term. Siemens is considering donation of all equipment to provide a state-of-the-art hospital facility that can showcase its latest technology. Intel has committed to providing equipment and ongoing technical support for the electronic records and IT component of the facility. The US Department of HHS has also allocated grant availability of \$15 million to New Orleans for recruitment and retention of health care providers, which could be further utilized. Ultimately, the City will negotiate a third party operating agreement with a qualified firm to operate the facility on a long term basis, subject to a Needs Certification and positive feasibility assessment.

In addition, an integral part of the health care system redesign being coordinated with the Louisiana Health Care Redesign Collaborative is to offer the Medicaid uninsured population access to a choice of affordable health insurance coverage for high quality care. This will be accomplished through an administrative function called the “Health Insurance Connector.” The Connector will be an administrative entity for easily connecting any individual needing health insurance to the affordable options for insurance coverage that are available to them. The entity will ensure that all citizens have affordable health insurance options.

Health Information Technology has been identified as a critical piece to redesigning a patient-centered health care system. In order to participate in the medical model system of care, providers in New Orleans would be expected to use an electronic medical record or equivalent technology. Dr. Stephens, as mentioned above, is working closely with the Intel Foundation to implement a required system. Intel has provided hardware, software, and ongoing support services to implement a one stop solution for electronically tracking multiple facets of the medical record requirements.

Sewerage & Water Board

The total capital needs over the next 25 years are projected to be in the range of \$5.7 billion, according to a report presented to the S&WB Board on December 20, 2006 by engineering firm Black & Veatch. The total need is further broken down into near term essential and immediate support needs (1-3 years) of \$1.9 billion, medium term needs (4-8 years) of \$1.5 billion with the balance being required for full recovery, repair and rebuilding over the longer term.

Sewerage & Water Board 2007 Capital Analysis

Applicant's Estimate	Identified Sources			Identified Total	Potential Needs
	Insurance	Obligated PA	Expected Obligations*		
\$3,288,646,000	\$20,000,000	\$154,595,000	\$949,000,000	\$1,123,595,000	\$2,165,051,000

* Includes FEMA, COE, & SELA; an additional \$1B requested from LRA

The near term needs of \$1.9 billion are supported by FEMA Funding, LRA match, as well as SELA and Army Corps grants. Approximately 60% of funding is identified. The S&WB has requested \$1 billion of additional funding from the LRA.

Emergency Needs

Drainage: \$855 million

Wastewater: \$454 million

Water Distribution: \$227 million

The S&WB analysis identifies a \$1.14 billion near term funding gap; offset by the LRA request for \$1 billion, if obligated.

The total recovery need translates into a \$4.6 billion medium to long-term funding gap.

Operating budget, with drop in population and old mil rate, will not cover expenses. Operating budget in 2006 supported by \$31.9 million of Federal Disaster Loans and \$27.3 million in short-term loans.

Funding the Recovery and Rebuilding of New Orleans

The Citywide Team has been working with officials from FEMA, the LRA, the City, and other agencies to construct a comprehensive assessment of the funding to date in Orleans

Parish. During the first 15 months of recovery, nearly \$40 billion has been expended or allocated for recovery and rebuilding in Orleans Parish.

The majority of this funding has been directed towards individuals and property owners including residential, commercial, and government property holders. Insurance proceeds account for over \$20 billion or 50% of the current recovery funds. According to the Insurance Information Institute, 95% of private claims have been settled for homes and businesses totaling \$13.75 billion, with another \$300 million still pending. In addition, there has been \$2 billion of vehicle insurance settled accounting for 99% of the related claims.

According to the FEMA NFIP Section of LA, as of December 12, the National Flood Insurance Program has paid \$6.46 billion on 60,000 of the 71,199 claims filed. These claims are further classified as \$5.3 billion for building and structural damage, while \$1.1 billion has been paid for damage to building contents. Of the over 11,000 claims still pending, the average claim thus far has been just over \$107,000, meaning that over \$1.1 billion of claims could be still outstanding. As a side note, according to the CAO, the City has received only \$12 million of insurance proceeds to date.

Homeowners and small business owners have taken out more than \$2.83 billion in Small Business Administration loans. Despite these large settlements and loans, the Orleans permitting authority has only registered \$4.3 billion of residential and commercial permits to date. The disparity between payments made to owners and permit value to date suggests that the level of recovery funds obligated or available is not indicative of the level of cash resources that are being reinvested into real estate or communities at this time by homeowners or businesses.

Since only 67% of homes had flood insurance, there is a large population that did not have any coverage. There is another segment of owners who had some coverage but certainly not adequate to fully cover such devastating losses. The LRA has allocated Housing and Urban Development CDBG funds of approximately \$4.2 billion to provide property owners with additional resources through the Road Home program. Unfortunately, the Road Home Program has been slow to distribute committed funds. As of the first week of December, of the over 85,256 applications received, only 10,465 had benefit calculations with an average of \$65,000 per claim. Against the \$4.2 billion Road Home commitment, only \$651 million of benefits had been calculated. Little more than a handful of actual benefits had been distributed. Orleans incurred major or severe damage to over 70% of the rental units. The LRA has also allocated an additional \$1.8 billion CDBG funds to mixed income and affordable rental housing. It is unknown how much of these commitments have actually been distributed.

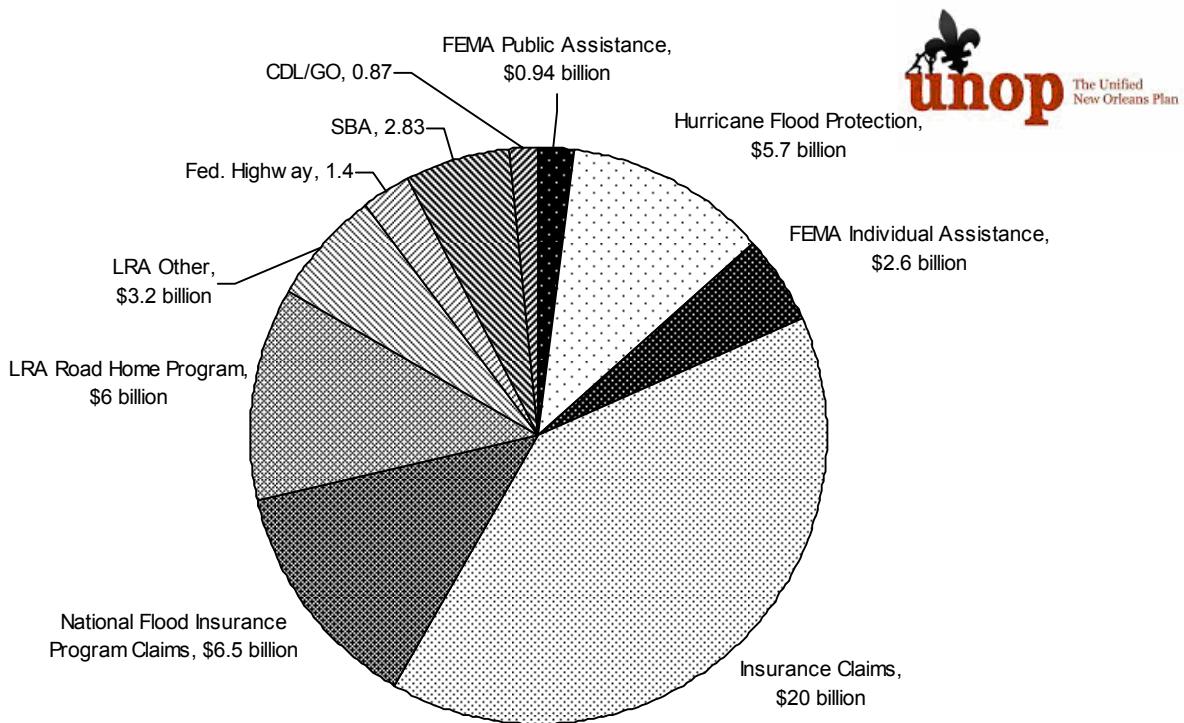
In addition to the Road Home program, the LRA has designated additional CDBG money to Infrastructure and Economic Development. These funds become extremely valuable as a

resource because of the flexibility governing there investment. At a state level, the allocations were almost \$2 billion for infrastructure and an additional \$350 million for Economic Development. As initial allocations, the LRA obligated approximately \$380 million to Orleans for infrastructure and an additional \$140 million for public school repairs. A total of almost \$4 billion of additional requests have been made since the fund was established. Since the initial infrastructure allocation an additional consideration of \$300 million has been granted to the Medical Center LA in NO, \$200 million to Entergy New Orleans, and \$40 million to private and nonprofit schools. An additional \$400 million was recently voted on by the LRA infrastructure committee reportedly leaving only \$20-40 million of the initial amount available for future projects, assuming all else remains constant.

Of the \$350 million in Economic Development appropriations, the following amounts have been announced or are in the approval process: \$38 million for small business loans and grants; \$10 million for small company training and technical assistance; \$95 million for long-term recovery loans; \$28.5 million for tourism and marketing programs; \$38 million for workforce training and placement; and, \$28.5 million for a recently issued RFP for research and education. An additional \$90 million is reportedly being contemplated for bridge loans to SBA/insurance proceeds. The City's Economic Development group is aggressively pursuing unallocated funds available for Economic Development activities. In addition, the LRA recently approved the reallocation of \$105 million from other disaster recovery programs (although the specifics are not known) to increase money available in a loan and grant program for small businesses. The initiative will provide grants up to \$20,000 and zero-interest loans up to \$250,000 to businesses that can document negative economic impact from the storms.

The LRA has also allocated \$800 million for the 10% match that FEMA does not cover as part of the PA (please see below for definition) reimbursement process. The state has agreed to make the payment but is actively seeking from FEMA a waiver of payment which is similar to what the agency enacted in disasters in New York and Florida. It is unknown at this time whether the \$800 million will be available for other recovery needs in lieu of the match payment.

FEMA has also provided \$2.61 billion in Individual Assistance funding. Approximately 65% has been paid for housing assistance including temporary housing, repair, and replacement construction. Over 345,000 individuals have been funded for other needs including vouchers, personal property, transportation, medical, and storage expense reimbursement.



For public and non-profit agencies, one of the major sources of post-disaster funds is FEMA's Public Assistance (PA). The PA Program provides federal funds towards repairing public property, including schools, roads, pipes, sewers, and public space such as parks and open spaces. The PA Program funds up to 90% of the costs for eligible projects that are restored to pre-storm condition. However, it is important to note that PA obligated amounts that are quoted by FEMA, include 100% of the eligible costs and do not deduct the 10% match for reporting purposes. If the eligible project is an improvement from pre-storm conditions or is an alternative project, then PA funds will cover only 66.5% of the total project cost.

One-hundred sixty-four public or non-profit agencies in Orleans have filed more than 5,000 claims for FEMA PA. PA covers emergency response and clean-up costs of agencies as well as the repair of damaged structures and contents. As of early November 2006, FEMA had paid or obligated more than \$924 million for public and non-profit agencies in Orleans Parish. Of this, more than \$635 million has been obligated for facility and infrastructure repairs, and many more applications are still under review.

The City of New Orleans is the largest PA applicant in Orleans Parish with more than 819 project worksheets with an estimated value of \$398 million in PA funds. Of the 819, only 760 worksheets have been deemed eligible for reimbursement with an obligated value of \$274 million to date. Another 103 worksheets have been deemed eligible but have been

assigned a value of \$0. The City has hired Adjustor's International to appeal the PW amounts and methodology of calculation. Reportedly, there are over 70 different points relating to the PW process that are being contested. FEMA has paid on 308 of the project worksheets for a value of \$135.5 million. However, the vast majority of the funds paid to date have been for the emergency response and clean-up initiatives. Another \$92 million has been obligated by FEMA for facility and infrastructure repairs. Since this is a reimbursable amount, none of the obligations have been paid pending the City initiating the projects and submitting receipts for work completed. This has created a cash flow constraint to beginning a significant recovery and rebuilding program. On the upside, PA amounts could increase if the work performed in the same scope of the PW's obligated actually cost more to complete than was estimated. FEMA has agreed to cover the actual cost of repair work performed.

According to the CAO's summary dated 12/14/06, the City has approximately 108 more project worksheets that are still to be written and submitted. Although the values are not known, the incremental worksheets are estimated to be in excess of \$400 million, including \$300 million for street related damage in process through Public Works. According to Robert Mendoza, even this estimate for road repair is designated to "flooded" streets only. The actual damage and repair need should include the 20% of streets not flooded but needing work. Mendoza still expects the \$168 million of Bond proceeds, when issued, to be targeted to roads as prioritized in the 2004 CIP.

The streets and roads have several different classifications and are funded from different entities. According to the Regional Planning Commission ("RPC"), the state-owned roads in Orleans are eligible for federal funding which allocated roughly \$12.5 million per year before the storm to the region, roughly 50% of that amount to Orleans. After the storm, the Federal Highway Emergency Relief program allocated \$1.1 billion for statewide highways. However, \$800 million of this amount was targeted for the I-10 twin span bridge, with only \$300 million left for the entire state road system. Reportedly, the state is expecting another \$300 million to be allocated to roads as part of a more recent funding initiative. The RPC has recently approved \$150 million of immediate roadway capital projects in Orleans. Annual sources of funding to the RPC include the National Highway System (Federal), Interstate Maintenance (90/10 Federal/State), Federal Bridge Replacement, Surface Transportation Enhancement Program (Federal), STPFLEX (80/20 Federal/State), and DEMO (Congressional Earmarks).

The RPC has 142 Damage Inventory Reports (DIRs) submitted to the DOTD. Initial indications are the Federal Highway Administration is estimating the damage to be approximately \$35 million versus internal RPC estimates of \$190 million. Other revenue for repairs is expected from Economic Development Grants (Main Street Initiative, but proceeds are unknown), Florida Avenue Bridge Project for \$210 million which is 100% state funded and approved prior to the storm, Transportation Infrastructure Model for Economic

Development (TIMED) which is a 4 cent per gallon tax, and tolls from the various bridge collections.

The City and other public agencies are still conducting due diligence and either reassessing damages or filing new claims for PA and insurance reimbursements. These efforts will continue for months, even years, and more funding will continue to flow into the Parish to cover the repair and rebuilding costs over time.

The Federal and state governments also approved approximately \$409 million in a GO Zone bond program and an additional \$465 million in a Community Disaster Loans (“CDL” program). The GO Zone program is available to government entities to use to repay principal and interest that is due on existing obligations to prevent the default on payments due to disaster related curtailment in tax and other revenues. The GO bonds are typically low interest loans, which are interest only for the five years, and provide immediate debt relief by extending maturities to longer term obligations.

The CDL program provides government entities with loans that can be used to subsidize operating budgets, once again giving agencies the ability to continue to fund payroll and expenses during a time of decreased revenues. Both programs are considered debt obligations and can constrain debt capacity of the agencies going forward. As a side note, reportedly in other disaster scenarios, similar relief obligations have been converted to grant status or forgiven as indebtedness obligations. In the past, the President had to make such a declaration. The power of conversion has recently been extended to the Congress as well.

Also, Orleans Parish will be a major beneficiary of the \$5.7 billion that the U.S. Congress has allocated for hurricane flood protection upgrades and planning. However, only \$748 million has been obligated for these repairs, and less than this has actually been spent in the initial phases of levee rebuilding and repair. The balance of the work will be performed over time, and is mainly controlled by the Army Corps.

The City’ near-term recovery funding will continue to be driven by the FEMA PA reimbursements. As noted, there is a wide discrepancy between the currently obligated amount of \$92 million for reimbursement for equipment, building and other assets, and the additional \$100 million that the City and its contractors feel is eligible for reimbursement. Negotiations and discussions are ongoing as it relates to obligated PW amounts, obligated PW’s that are \$0, and other PW’s that have been deemed ineligible. There is also the \$300 million for Public Works to repair and rebuild roads, which is not reflected in the obligated total. In order to spur the actual recovery and rebuilding, the City is currently negotiating a \$150 million bridge facility with a bank group. The proceeds of the loan will be used to begin the repair construction, and once reimbursed by FEMA, the loans will be repaid.

Additional proceeds will be available and need to be maximized for the FEMA Hazard Mitigation funding. The City has completed its comprehensive Hazard Mitigation plan and has submitted the plan for consideration. The plan details procedures and priorities for mitigating risk to property within the City. Projects submitted pursuant to the plan are then competitively ranked by the State against projects submitted by other eligible Parishes. A total of approximately \$75 million is being requested in conjunction with the City plan.

The LRA has also committed to fund the 10% match that FEMA reimbursement does not cover. Based upon the damage assessments and the current level of FEMA commitment, the City hopes to receive approximately \$50-100 million in additional proceeds from the LRA. Negotiations are currently taking place between the City and the LRA.

A majority of the almost \$40 billion in recovery funds thus far obligated target individuals for rebuilding residential, rental, and commercial sectors with promised flood protection in the future (\$15 billion insurance, \$10.8 billion IA/CDBG and SBA loans, and \$5.7 billion for Flood Protection). Although obligated or paid on claims, very little “cash” investment has reached the communities and the streets. The remaining identified and somewhat quantified recovery funds, PA, CDBG Match, and Hazard Mitigation will be paid over a longer period of time and are projected to be inadequate to cover the City’s billion dollar infrastructure recovery needs.

Financing Plan

FEMA PA Reimbursement

In each agency there are PW claims that are being contested. There are numerous claims that have been deemed ineligible, which are being revisited with FEMA representatives. There are also PW's that have been assigned a \$0 value for reimbursement, which are also undergoing the same level of scrutiny. In other cases, the FEMA PW amount is significantly less than the applicant's damage estimate, which can be a result of errors in the calculation methodology or in an assessment of the pre-storm existing condition. Also, as mentioned, the actual PW amounts will be adjusted upward if approved and eligible projects are implemented under the defined work scope parameters, but actually cost more to complete than the original estimates. In this case, FEMA reportedly agrees to cover the actual construction cost incurred if greater than the PA amount obligated.

John Connolly, FEMA PA Branch Chief, has recently announced a program to expedite reimbursement on the top five identified PW's by Parish to "prime the pump" and advance the flow of funds against obligated projects. He further stated that once the initial five were completed, then an additional five would be targeted.

Hazard Mitigation

The initial allocation of FEMA HMGP sources of funds identified by the LRA were \$1.17 billion related to the Road Home program and \$330 million related to infrastructure. Although most agencies have included HM plans as part of the PW process or, like the City as a separately submitted document, it is not known how these funds will be obligated and distributed.

Road Home Not utilized

Program to offer homeowners' buyout options

Other Federal and State Agencies

Prior to the storms, Orleans received Federal Awards from the following agencies for the year ended 12/31/04:

U.S. Department of Agriculture	9.96 million
U.S. Department of Commerce	.05 million
U.S. Department of HUD	27.11 million
U.S. Department of Interior	.27 million
U.S. Department of Justice	5.07 million
U.S. Department of Labor	8.28 million

U.S. Department of Transportation	1.64 million
U.S. Department of Treasury	0
Environmental Protection Agency	.34 million
U.S. Department of HHS	15.46 million
U.S. Department of Homeland Security	<u>3.52 million</u>
Total	\$71.70 million

Proceeds to the City from Federal sources have declined dramatically and consistently since 2000. In 2005, the grants totaled only \$55 million. The major source of decline continues to be HUD, which decreased from \$27 million in 2004 to only \$10-12 million in 2006. All agencies should be pursued aggressively for incremental grant funds.

Economic Development Corporations

EDC's generally are established to assist existing and new businesses located in a geographic area through a variety of activities including grants, loans, expertise, or creation of designated commercial or industrial areas. EDC's are formed to provide assistance to induce new businesses to locate to the area or provide assistance to existing, emerging businesses so that they remain viable. The EDC's can provide low-interest loans, facilities, and equipment to businesses as well as clerical and technical services in an effort to encourage business in a depressed area. The services provided are typically at a reduced market rate or free of charge. EDC's can be established or sponsored by state or local governments, affiliated with universities, or can be an extension of existing tax-exempt entities. The basis for tax-exempt status is that although the services are provided to for-profit businesses, the ultimate benefit received by the general public outweighs the benefit accorded to the direct beneficiaries.

EDC Successes:

- NY City
- Newark, NJ
- Boston
- Potomac Corp. DC
- Inner Harbor- Baltimore

Public/Private Partnerships

A Public-Private Partnership is a contractual agreement between a public agency (federal, state or local) and a private sector sponsor. The agreement sets forth the skills and assets of each sector (public and private) that are shared in delivering a service or facility for the general public. In addition to sharing the resources, each party shares in the risks and rewards potential in the delivery of the services and facilities.

There are a large number of different structures that can be utilized according to the National Council for Public-Private Partnerships, but below are listed a few with greater relevancy to the City of New Orleans. These structures are subject to the latest guidelines set forth by the IRS and other relevant agencies.

Buy/Build/Operated (BBO)

A BBO is a form of asset sale that includes a rehabilitation or expansion of an existing facility. The City would sell the asset for a nominal price to a private sector entity, which then makes the improvements necessary to operate the facility in a profitable manner.

Developer Finance

A private party finances the construction or expansion of a public facility in exchange for the right to build housing, commercial stores, and/or industrial facilities at the site. The developer contributes the capital and could also operate the facility. The developer gains the right to use the facility and may receive future income from operating or user fees. The developer could also choose to make a capacity payment for a right to use a portion of the property, which proceeds can then be used by the City to repair or improve the public facility.

Lease/Develop/Operate

The private party leases or buys an existing facility from the public agency, invests the capital to renovate, upgrade or expand the facility, and then operates it under a contract with the City. If the City does not need the entire facility, the private party can contact with other third parties for the balance of the space.

Sale/Leaseback

This is a financial arrangement in which the City sells a facility to a private entity, and leases it back from the owner. The lease would contain the provisions necessary to specify what improvements would be required, and which party would be responsible for making the improvements.

Tax Exempt Lease

The City finances the repair or improvement of capital assets or facilities by borrowing funds from a private investor (institution). The interest component of the lease payment is tax exempt. The title of the asset transfers to the City at the end of the lease.

Foundations/Corporations

Major corporations announced a \$1 billion commitment to help rebuild storm damaged areas of the Gulf Coast. As part of the Gulf Coast Rebuilding Challenge, corporate sponsors will channel long-term, private sector financing into community banks that will use the proceeds for loans to homeowners wanting to rebuild. Microsoft, Home Depot, Bank of America, General Motors, Fannie Mae and the First American Corporation have set a goal of \$1 billion over the next five years.

NORA

An agreement ratified on December 11, 2006, gave the New Orleans Redevelopment Authority additional authority beyond its traditional role of seizing and selling blighted property. The authority is now charged with disposing of adjudicated property, or land and buildings owned by the city because of delinquent taxes. The agreement between the NORA board and the city also designates the agency as the exclusive recipient of all properties bought by the LRA and subsequently ceded back to the city. The agency will keep half of the proceeds from properties it sells to fund operations and other expenses. The remaining proceeds will be paid to the city.

Community Development Corporations

Dillard University reestablished a non-profit CDC in 2000 and is proposing to utilize the structure to assist in the revitalization of the Gentilly community. Dillard's strategic intent is to utilize its economic, intellectual, social and cultural capital together with community stakeholders to provide leadership in the revitalization. The university's involvement will be accomplished primarily through collaboration and public/private partnerships. The vision is to revitalize housing, schools, retail commercial centers, and a community service center that includes a library, health promotions, disease prevention, wellness and recreation facilities. Partners include: Fannie Mae, Neighborhood Works, Johnson Controls, Liberty Bank, Local Initiatives Support Corp., HUD and others.

Economic Development Activities

Donna Addkison, Chief Development Officer, has represented the City on a number of strategic initiatives to further economic activity and gain commitments to sponsor staff and augment further initiatives. Below are a few that are under consideration but is not intended to be a comprehensive list.

Fannie Mae Foundation: International Manager Meeting

Considering adding supplemental staff to the City

Policy Links: Health Disparities

Considering funding Equity Development Senior Advisor

Clinton/Climate Foundations

Offering cost savings by adding City to Purchasing Consortium

Considering sponsoring 4 FTE's: 2 for Business Development and 2 for CAO

LRA Economic Development Grants

4 separate proposals covering 6 sectors

Workforce development for 4 separate proposals

EPA Grant

\$20MM for Lake Borne initiative

Fast Track Initiative

Establish bank loan to expedite Road Home use of proceeds to residents

Others

Department of Transportation

Economic Development Administration

Louisiana Economic Development

US Department of Agriculture

US Department of Commerce

DR CAFTA

INS: EB-5 to support fast track immigration status

Department of Health and Human Services

Minority Business Development Agency

Department of Labor

Foundation Solicitations

Gates Foundation

Grant Makers of NY Club

Housing and Transportation initiatives

Clinton/Bush Katrina

Schools

US Chamber of Commerce

Solicitation of US businesses contributing to City businesses

Finance Innovation Roundtable

Community Development (Wall Street without walls)

City Park Donor

REIT, Venture and Seed Equity Capital, other Private sources

Chairman Powell announced plans to ask bankers and business executives to raise \$100 million as a reserve for Louisiana to finance housing construction and mortgages. Lower income residents would be encouraged to purchase homes through rent-to-own agreements.

The following list was compiled by the Gulf Coast Accountable Rebuilding Project organization, dated November, 9, 2006, to reflect possible new economic development in the private sector. This document consists of a list of possible development projects that have been proposed, are under consideration, or have moved through the approval process. The list is not comprehensive, and is based upon a variety of sources.¹

Mid-City

The Preserve: a four-story, 183-unit apartment building on the site of the former Baumer Foods plant at 4301 Tulane Ave. The ground floor would hold 261 parking spaces, with apartments above and another 33 parking spaces in a surface lot. The 208,000-square-foot complex would fill the entire square bounded by South Alexander, Ulloa and South Hennessey streets on three sides and by Tulane Avenue and an Interstate 10 on-ramp on the fourth side. Of the 183 apartments, 60 percent would be market-rate, with 20 percent reserved for people earning no more than 60 percent of the median area income and another 20 percent reserved for those earning less than 40 percent of the median income.

Treme/Lafitte

Providence/Enterprise Lafitte Development: Controversial project involving the demolition of the Lafitte public housing project and replacement with mixed income housing on the original site and nearby.

Film studio and school: two companies, Film Factory and the Louisiana Institute of Film Technology are planning a 320,000-square-foot film studio and vocational school near the Lafitte public housing complex.

Colonial Condominiums renovation: largest condo project in the Treme's history. The \$10 million, 49,000- square-foot project will house 30 luxury units and a penthouse in the historic community on the outskirts of the French Quarter.

Lakeview:

¹ Sources include news and Web reports, the Emporis database, <http://www.emporis.com/en/wm/ci/?id=101332>, conversations with community members, and others. Descriptions of each project are taken with various amounts of editing from the sources.

L'ultimate Condominiums. 21 floors, 233 feet. Originally proposed at 255 feet, a committee of local residents required a reduction to 233 feet in order to be built. Will consist of a 3 floor parking garage topped with 18 floors of condominiums. To be constructed atop the site once proposed for the [Place Pontchartrain](#).

Hollygrove/Carrollton area:

- a. Walgreens' plans for a drugstore at South Claiborne and South Carrollton avenues.
- b. Carrollton Shopping Center: old site now demolished

Audubon/University (Uptown):

University Square Apartments

Iberville Development Cluster: Five major proposed real-estate developments creating upper-income housing, parking, high-end retail space, and other intensified land uses surrounding the Iberville project.

St. Louis Place or Nouveau Carre condo towers (Thomas Bauer, Dev): The development originally was to encompass 900 condos, parking, and retail shops, and feature two or three towers as tall as 30 stories and 361 feet each; now reconfigured to 500 units. The condos' address would be 1501 St. Louis St., across the street from the Iberville public housing development. The project also would comprise one or more garages with 2,500 parking spaces, including 1,500 spaces for the condos; 240,000 square feet of commercial space for businesses such as a drugstore, restaurant, bakery or coffee shop, dress shop and dry cleaner's; and a 10,000-square-foot museum or theater that the city would be able to use to promote the French Quarter and other attractions.

Basin Street Station: Adjacent to the above lot is the site of developer and hotelier Michael Valentino's Basin Street Station, a refurbished visitor's/cultural center that he hopes to use to funnel tourist off the I-10 freeway to his hotels, or the hotels of competitors.

Krauss Building Apartment Renovation: On the opposite side of the Iberville three other major construction projects are already underway. Developer Elie Khoury's KFK Group has purchased the former Krauss Department Store Building. He plans to renovate into market rate apartments.

Texaco Building Apartment Renovations: Developer Elie Khoury's KFK Group has purchased old Texaco building at 1501 Canal Street. He plans to renovate into 98 market rate apartments.

New Orleans BioInnovation Center: Sitting in between Khoury's two properties is the future home of the New Orleans BioInnovation Center, a biotechnology research and development campus

Plaza Tower or Crescent City Residents (Condo Renovation): Proposal to convert vacant and environmentally blighted Plaza Tower high-rise on Howard Avenue into luxury condominiums. 1001 Howard Ave., off of Poydras Street and its modern high-rise office buildings and hotels. 197 condominiums.

Vantage Tower: 25 floors of condos, 197 units, 270-foot residential tower, Covered, reserved parking and climate-controlled storage units. Fully equipped fitness center,

swimming pool and sun deck for the exclusive use of residents. At Girod and Baronne/O'Keefe. Completely new construction.

Riverview at Julia (a few blocks from Vantage Tower): The \$70 million project, Riverview at Julia, would include 98 condominiums on 11 floors. Proposal to demolish two small buildings near the corner of Julia and Carondelet streets in downtown New Orleans to make way for a 17-story luxury condominium tower. Prices start at \$620,000 for a 1,420-square-foot condo while 4,200-square-foot penthouses top out at \$2.3 to \$2.5 million. That creates a price range of between \$430 and \$600 per square foot. The first floor would be devoted to restaurant and retail space. The sixth floor would be converted into 500 square feet of office space available for purchase by residents only. Another floor would house a full-service spa, an indoor/outdoor pool and meeting space.

The One Hotel New Orleans. The original proposal called for a 168 room, 19 floor tower. Architects: Eskew and Architects. Bordered by Lafayette, Poydras, and St. Peter's.

Trump International Hotel & Tower New Orleans This will have 12 floors of parking and the potential for ground level retail. Units will range in size from between 600 and 2,000 square feet. New design calls for 450 condos and 250 condo-hotel units. Buyers of condo-hotel units can stay there as often as they like. But when the owners are away, their rooms are rented out on a nightly basis like any other hotel room.

La Belle Maison time shares and condos renovation: Fairfield Resorts acquired the former Franklin Printing Co. building next to the French Quarter with plans to convert the former industrial complex into a 119-unit timeshare resort.

Saratoga Building apartment renovation.

925 Common Street apartment renovation: The 925 Common St. office building is being converted into 107 furnished corporate apartments. Grand opening took place.

American Bank Building apartment renovation: The long-dormant American Bank building on Carondelet Street will become 202 affordable apartments.

Jacob Candy Factory Condos: Today Realty has also taken over the Jacob Candy Factory at 827 Carondelet St. Originally bought by Sarpy Hixon Development Inc., Today Realty has acquired the property and is converting it into 25 condominiums.

Commerce & Girod Condo Tower, 367 ft, 28 floors. In order to be built, a variance must be granted to allow for the height of 367 feet in an area only zoned for heights up to 100 feet.

Baronne Street Condominiums/Apartments: The First National Bank building at 210 Baronne St. is being converted by developer Mohan Kailas into 108 condos and 140 apartments. Though the project did not originally involve apartments, Kailas recently added them so that the development will qualify for historic tax credits.

Warehouse District

Tracage condo tower The 24-story, 288-foot-high building, to be known as the Tracage, is to have 133 condo units and 207 parking spaces. It will be built at 1100 Annunciation St. at the corner of John Churchill Chase Street.

Warehouse District Condo Tower: New Orleans developer Tom Bauer is hoping to build 28-story, 150-unit condominium tower in the Warehouse District

Poydras Home Apartments I & II. JTS Realty Services one 15 and one 17 floor building. In order to be built, the developer is seeking a variance for the height increase as a result of current restrictions allowing only for buildings with a maximum height of 125 feet within the Warehouse District.

Central City:

Felicity Place or The Residences at Felicity condo towers

St. Thomas/Garden District/Lower Garden District:

Oak Tree Condominium Complex: The old Sara Mayo Hospital on Jackson Avenue near St. Thomas Street will become 78 condominiums as Dallas-based Today Realty Advisors Inc. (wholly owned by Eric Brauss) invests \$25 million into the conversion of the 135,000-square-foot abandoned property.

St. Thomas/Rivergarden Housing Project rebuilding: condo tower/continuing care facility

French Quarter:

Astor Condotel, 173 feet, 16 floors. Part of the Astor complex, including the Astor Crowne Plaza (Completed).

Audubon French Quarter Luxury Condominium renovation. French Quarter/Warehouse District. corner of Canal and Burgundy.

Algiers Riverfront: Kern's Mardi Gras World

Algiers riverfront residential and commercial development that could eventually include up to 1,500 apartments, a hotel and a new home for Blaine Kern's Mardi Gras World tourist attraction. Plans for the multiphase project involve transforming a portion of the Algiers riverfront into 1,523 apartments, additional housing and retail space, public parks and a streetcar line. The site includes Kern's Mardi Gras World at 233 Newton St., along with the warehouses where Blaine Kern Artists Inc. builds Carnival floats.

Bywater

Port of NO Cruise Terminal: The port plans to turn the facility into a third cruise terminal. The agreement also calls for the port to lease space from MARAD to use as a parking lot for the terminal. The deal allows the port to move forward with construction plans for a cruise terminal in Bywater. The Maritime Administration, known as MARAD, will turn over about 228,000 square feet of wharf and 84,000 square feet of shed space at Poland Avenue to the port. The first phase of the transformation is expected to cost \$7.5 million, paid for with a line of credit approved in 2004 by the Louisiana Bond Commission.

Bywater elder home: Approved plans for a four-story, 37-unit apartment building for elderly residents at 3501-09 St. Claude Ave. and 1115-29 Gallier St. The site comprises seven vacant lots across Gallier from the now-closed Bywater Hospital, previously St. Claude Medical Center. The building, which developers said will not be a nursing home or assisted-living facility, is to have 27 one-bedroom units, nine two-bedroom units, a manager's apartment and community rooms including a library and physical therapy unit. The ground

floor will have parking for 32 vehicles. The project was endorsed by the Bywater Neighborhood Association.

NO East:

Atlantis Project: \$200 million proposal for land owned by the Orleans Levee Board. Atlantis Internet Group Corp. in July also proposed developing a hotel and gambling complex at the agency's dormant South Shore Harbor marina. The Atlantis project involves a 95-room floating luxury hotel, an outdoor amphitheater and 60 waterfront town homes. Long-term, the Atlantis project, which would stretch along Hayne Boulevard facing the lake, would involve the construction of hundreds of new town homes and entertainment venues.

NOLATOWN: A \$200 million proposal involving 1,500 condo units in four to five high-rises; includes entertainment venues, an indoor-outdoor water park, a 350-room hotel, and more than 100,000 square feet of commercial space.

Airport: Replacement airport for current one. Roy Williams, former Director of Aviation at Louis Armstrong New Orleans International Airport, said it is more cost-effective to relocate the airport than it is to retrofit the present facility's runways to handle larger planes.

Possible Locations:

Nine months ago, one proposed location was in eastern New Orleans near Six Flags Theme Park. Sites emerging as frontrunners post-Katrina include the eastern New Orleans area, a possible consolidation with Lakefront Airport or a hybrid of the two locations.

Schedule and cost:

Building a new airport would require a five- to seven-year design phase and cost \$4 billion. Financing would come from four avenues: federal support, private capital, debt and reselling the current site. Williams said he considers the best-case scenario timeframe to be on the city's 300th anniversary - in the year 2018, a schedule he considers ambitious yet possible.

Modular Home Factories:

Modular Home Factory at the Site of the Former MacFrugal Warehouse: Schaffer Mickal, a commercial real estate agent with Latter & Blum, says he's talking with several groups interested in creating a modular home factory at the site of the former MacFrugal warehouse in eastern New Orleans.

Premier Designs Homes Modular Home Factories: A startup modular home company called Premier Designed Homes wants to spend \$1 billion building two eastern New Orleans manufacturing plants, creating 2,500 jobs and the ability to build as many as 63 homes per week.

Brent Lovett Stackable Modular Home Factory: Proposed factory in eastern New Orleans to build living units of 16 feet by 70 feet that can be quickly assembled and stacked into complexes as high as 12 stories. Negotiating purchase of property: \$3.7 million purchase of three warehouses east of Jordan Road and near New Orleans Lakefront Airport that will become the site of his factory.

Recovery Business Opportunities

Business opportunities highlighted during a meeting with Dr. Ed Blakely, Recovery Chief for the City of New Orleans.

Air/Rail/Sea – a.k.a. Incheon Korean Airport

- Flexible center for all docking requirements

Bionano Biomedical Health Technology Center (Reno example)

- Non-communicable diseases

- Chronic Diseases

- Integrated health delivery

- Preventative health care

- Decentralized health care

- Center for Disease Control funding available

Movies, film, Media and Communications Venture- Vancouver model

- Artist support to gain content- Warehouse District

- Graphic designers

- Beehive for the Arts- Paris model where artists live rent free

- French Banks and Foundations would support

- Paducah Kentucky model that sold old and blighted properties for \$1 with low interest loans; returns \$14 for every \$1 invested

Music Industry

- Recording studios

- R & B Hall of Fame

- R & B annual awards

- R & B Museum

Canal Development

- Venice of the South

- Networks for commerce and commercial purposes

Underground Infrastructure

- Boring and sealing technology

- Underground utilities and storm surge

Neighborhood Nexus

- Housing, schools, police, fire, community centers

- Public space that is co-located and fully utilized as live/work space

Housing

Bridge-San Fran Non-profit housing success

Financing Structure

The Development/Recovery Corporation should be structured as a quasi-public authority and governed by a Board of Directors. Directors should be appointed by the (Federal Level), Governor, Mayor, and City council members. Structured similar to the LRA, the Corporation would establish policy recommendations and assist in managing recovery programs, including incorporating the approved plans into formal funding applications and coordinating implementation. A similar structure and process was established by the Lower Manhattan Development Corporation (LMDC), a joint State and City entity created to redevelop Lower Manhattan. LMDC administers federal funds dedicated to restoring Lower Manhattan and coordinates long-term planning for the World Trade Center site and surrounding communities through public and private partnerships and recovery programs for individual residence and businesses.

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New Orleans Community Support Foundation (NOCSF)

Board of Directors

Wayne Lee, Chair; Kim Boyle; M. Cleland Powell;
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Community Support Organization (CSO)

Board of Advisors

Dr. Vera Triplett, Chair and District D representative; HMK Amen, Vice Chair and District C representative; Councilmember Cynthia Hedge-Morrell, City Council; Becca O'Brien, Mayor's Office; Carey Shea, Greater New Orleans Foundation; Poco Sloss, City Planning Commission; Al Petrie, District A representative; Tarence Davis, District B representative; Terrel Broussard, District E representative.

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