

## **COMMUNITY FACILITIES, SERVICES AND INFRASTRUCTURE**

GOA	L	POLICIES FOR DECISION MAKERS	FOR MORE INFORMATION, SEE PAGE:		
1	Water, sewer, and drainage infrastructure repaired, upgraded, safe and resilient	<ol> <li>Rebuild the city's water, sewer and drainage system to add resiliency, improve efficiency and preserve public health.</li> </ol>	10.13		
2	Public safety services and facilities that meet best-practices	2.A. Make all public safety facilities state of the art and with integrated services.	10.15		
	performance standards for all areas of the city	2.B. Implement a more robust community policing program and overall communication with the public.	10.15		
		2.C. Continue to pursue implementation of the Fire Department Master Plan.	10.16		
		2.D. Enhance the EMS program.	10.16		
		2.E. Improve customer service and response tracking in the Community Information/311 office	10.18		
3	Cost-efficient, resource-efficient, well maintained public facilities and services	resource-efficient, clusters as neighborhood civic centers designed to well maintained public fit into neighborhood character.			
	Taciliues and Services	3.B. Provide a library system accessible to all neighborhoods with libraries that function as centers of learning and centers of community.	10.19		
		3.C. Establish an asset management system for all city property and facilities, including streets, to be fully operating in 2015.			
4	State-of-the-art public school campuses and facilities accessible to all neighborhoods	4.A. Promote collaboration among city agencies and community and neighborhood groups in implementation of the New Orleans School Facilities Master Plan.	10.20		
5	Up-to-date justice system facilities and programs	5.A. Rebuild and expand justice facilities in ways that contribute to the commercial district and neighborhood vitality.	10.21		
6	Energy efficiency and utility-service reliability and reasonable cost	6.A. Reorganize incentives to utilities and to households and business to emphasize conservation, reliability and reasonable cost.	10.21		

GOAL		POLICIES FOR DECISION MAKERS	FOR MORE INFORMATION, SEE PAGE:	
7	State-of-the-art telecommunications communications infrastructure	7.A Enact regulations and pursue contracts that result in the highest level of cost-efficient services for businesses and individuals.	10.22	





### **Water Supply**

- 1,610 miles of water mains and 16,500 hydrants
- Two water treatment plants purify raw Mississippi River
  - > Carrollton Plant services East Bank and producing 120 MGD - million gallons per day (design capacity = 232
  - Algiers Plant produces 10 MGD (design capacity = 40 MGD)
- · To date, all identified water main breaks have been fixed.
  - > Several unidentified leaks have yet to be located and repaired; could take 2 to 3 years to restore water service system to pre-Katrina levels
  - Estimated cost for repairing currently identified water system damage: \$10M to \$20M

#### Sewerage

- 1,600 feet of gravity sewer lines, 8-inches to 7-feet in diameter
- 83 pumping and lift stations, of which 2 are large ones on the East Bank and I large station on the West Bank
- The majority of sewage pumping stations are still undergoing Katrina related repairs. Of the 65 pumping stations: 11 in service, 54 on partial pumping capacity or completely on portable pumping.
  - The approximately \$80M in repairs to pumping stations will be paid for by FEMA
- Two sewerage treatment plants service the entire City
  - > East Bank capacity = 122 MGD (dry weather); currently receiving 100 MGD; current improvement plan to increase capacity to 265 MGD (wet weather)
  - West Bank capacity = 20 MGD; currently receiving 10
- 1998 Consent Decree between the City of New Orleans, the Sewerage & Water Board of New Orleans, the State of Louisiana, and the U.S. Government; scheduled completion December 2010; the Sewerage & Water Board has requested an 8 year extension
- About \$500M remaining work in the over \$650M of sewerage system capacity improvements on-going

#### WHAT DOES IT MEAN?

- · Current water plant capacity meets needs but distribution system requires significant repairs and improvements to reduce leaks.
- A significant amount of work is necessary to restore the sewerage system.
- Adequate funding needed for necessary significant improvements to drainage system.
- A safer, smarter, and more intelligent electrical grid is necessary.

### **Drainage**

- · 90 miles of open canals and 90 miles of subsurface canals
- · 13 roadway underpass pumping stations
- System pumping capacity is 29 billion gallons per day
- On the East Bank, 20 pumping stations send flow to Lake Pontchartrain and 2 send flow to the Intracoastal Waterway; of the 22 pumps on the East Bank, only 6 are in full service
- On the West Bank, 2 pumping stations send flow to the Intracoastal Waterway (one in service and one partially operating).
- \$803M budget for five-year Capital Improvement Program (2007-2011); \$407M of this provided through funding sources other than SWB revenue

### **Street Lights**

- · 55,000 street lights
- · The City has assumed responsibility for the street light maintenance program in lieu of continuing to contract with Entergy.

#### **Electric Grid**

- Entergy has two generation stations: 870 million watts Michoud Plant and the 61 million watts Patterson Plant
- There has not been significant investment in the transmission system in the last 20 years.
- Today's transmission infrastructure is designed to withstand 140 mph winds. Towers built in 1950s and 1960s designed to withstand 100 mph winds.

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### COMMUNITY EACH ITIES

#### **School Facilities**

- 79 Public Schools in operation in Orleans Parish including OPSB, RSD and charter schools.
- 33,550 students for the 2008–2009 school year.
- · The School Facilities Master Plan for Orleans Parish
  - > Outlines the renovation/rebuilding of public school facilities
  - > Outlines schools within a ½-mile walking radius of every neighborhood.
  - > The Orleans Parish School Board approved the plan on November 6, 2008 and it is currently under review by the Louisiana Board of Elementary and Secondary Education.

#### Libraries

• 11 Public libraries open in Orleans Parish (as of August 2009; includes temporary facilities)

#### **Child Care Centers**

• 117 Child care centers open in New Orleans (2008)

## Police Facilities (Headquarters and District Stations)

- · 15 Stations
  - > 2 in undamaged or repaired facilities
  - > Remainder operating in temporary or damaged facilities.
  - > 15 recovery projects for Police Department facilities currently underway. The majority of projects are renovations of existing facilities.

#### **Fire Department Facilities**

- 21 Stations (including additional staging areas and temporary facilities)
  - > 33 recovery projects for Fire Department facilities currently underway. The majority of projects are renovations of existing facilities.

#### **Emergency Medical Service**

- 98 full-time employees
  - > 3 Board Certified Emergency Medical Physicians
  - > 60 paramedics
  - > 44 EMTs (Emergency Medical Technicians)
- Answered 50,000 calls in 2008

#### WHAT DOES IT MEAN?

- New Orleans is a city built around strong neighborhoods with the capacity for multiple community resources in each neighborhood.
- Many of our community facilities were heavily impacted by the storms.
- Significant progress has been made in bringing our community facilities back on line; however, there is still a long way to go to ensure all neighborhoods have equitable access to community facilities and services.
- New Orleans cannot be a functioning city without rebuilding the community facilities that are at the core of neighborhoods.
- Our historic pattern of clustering services within neighborhoods is an easily re-attainable sustainability strategy.

#### **Justice Facilities**

- Majority of existing law enforcement and court facilities were damaged or destroyed by Hurricane Katrina.
- The Justice Facilities Master Plan
  - > Redevelopment of the Israel M. Augustine, Jr. Criminal Justice Center (Tulane and Broad) facilities into a campus divided into three "zones" – Police, Courts, and Sheriff.
  - > The plan recommends reuse of existing facilities as well as new facilities to consolidate similar and compatible uses (ex. Consolidated Crime Lab, Coroner's Office, and Evidence Storage).
  - > Consolidation of the Courts system at the Tulane/Broad campus has received some resistance. Some prefer a consolidated facility at a downtown location instead.
- 19 recovery projects for justice facilities currently underway, ranging from replacement of mechanical systems to design and construction of new facilities.

#### Sources:

LPHI, PCASG-Funded Community-Based Health Care Centers, May 2008; New Orleans Food Policy Advisory Committee, Building Healthy Communities, January 2008; NOFD, Recovery and Reconstitution Planning Report, March 2006; Recovery Projects Information Report, August 2008; OPSB/RSD, August 2008; FEMA, September 2007; Orleans Parish School Board/Recovery School District, August 2008

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### FINDINGS

- New Orleans facilities and infrastructure were under-maintained and in need of upgrades before Hurricane Katrina.
- · Many of the city's community facilities were heavily damaged by hurricanes Katrina and Rita.
- Millions of dollars of recovery funds will be invested in public facilities all over New Orleans in the next few years.
- The water, sewer and drainage infrastructure requires billions of dollars in repairs and improvements.

#### CHALLENGES

- Restoring community facilities to serve residents and businesses in a coordinated way.
- Restoring community facilities to be more sustainable and cost-efficient than before the storm.
- · Coordinating diverse agencies to attain the historic pattern of clustering services within neighborhoods.
- Filling the financing gap to restore and enhance the City's sewer, water and drainage infrastructure.
- Establishing non-structural approaches to drainage, wastewater and other needs.

Acronyms							
To aid i	n reading this section, below is a list of acronyme	s used wit	thin the text:				
CAO	Chief Administrative Officer	MGD	Million Gallons per Day				
CPC	City Planning Commission	NOFD	New Orleans Fire Department				
EMS	Emergency Medical Services	NOPD	New Orleans Police Department				
EMT	Emergency Medical Technician	OPSB	Orleans Parish School Board				
FEMA	Federal Emergency Management Agency	RSD	Recovery School District				
GIS	Geographic Information Systems	S&WB	Sewerage and Water Board				

## **A** Introduction

ew Orleans' infrastructure and many community facilities, such as police and fire stations, libraries and community centers, were severely damaged or destroyed in the aftermath of Hurricane Katrina and federal funding is supporting millions of dollars in investments in new and rehabilitated facilities and infrastructure.

The Master Plan emphasizes co-location of community facilities and incorporation of resiliency, energy efficiency and green building techniques. Community-serving facilities should be combined, where possible, in centralized locations within neighborhoods—forming a nexus of community facilities and services. Many facilities can be designed for flexible uses: schools and police stations can have community meeting rooms; schools can share clinics with the surrounding neighborhood; libraries can accommodate adult learning centers. Renovation of existing facilities and construction of new ones should be executed to increase resiliency, mitigate future storm damage and reduce recovery time after a storm event or other emergency. Like older cities all over the country, New Orleans' aging infrastructure, some of which has elements nearly 100 years old, needed very costly improvements estimated at \$6 billion even before the storm. While many repairs and replacements require traditional hardened solutions, there are also opportunities to explore innovative non-structure solutions to enhance cost-efficient rehabilitation of the system.

Every neighborhood will see facility and infrastructure improvements as a result of the recovery-related capital improvement program, but the full value will depend on the City's capacity to maintain these investments over the long term. Establishment of an asset management system for City-owned properties is a high priority recommendation of the Master Plan.

## **B** Recommendations

A recommendations **Summary** linking goals, strategies and actions appears below and is followed by one or more early-action items under the heading **Getting Started**. The **Narrative** follows, providing a detailed description of how the strategies and actions further the goals. Background and existing conditions discussion to inform understanding of the goals, policies, strategies and actions are included in Volume 3, Chapter 10.

### **Summary**

		RECOMMENDED ACTIONS:					
GOAL	RECOMMENDED STRATEGIES	ном	WHO	WHEN	RESOURCES	FOR MORE INFORMATION, SEE PAGE:	
1. Water, sewer and drainage infra- structure repaired, upgraded, safe and	1. A. Rebuild the city's water, sewer and drainage system to add resiliency, improve	Continued needed improvements as provided for in the Sewerage and Water Board Master Plans.	Sewerage & Water Board (S&WB)	Long term	Federal; bonds; rate payers. Estimated \$6 B cost	10.15	
resilient	efficiency, and preserve public health.	2. Develop funding strategies combining federal, state, local bond and local rate financing.	S&WB possible consultants	First five years	S&WB resources	10.15	
		3. Establish a priority ranking system to resolve existing drainage problems and communicate the priorities and rationale to the public.	S&WB	First five years	Staff time	10.16	
		4. Pursue innovative, non structural solutions for treating effluent and managing storm water, including a storm water management unit.	S&WB	First five years	Staff time; grant funding; federal funds;	10.16	
		5. Review the tradition of providing free water to all government bodies.	S&WB, City Council	First five years	Staff time	10.16	

		RECOMMENDED ACTIONS:					
GOAL	RECOMMENDED STRATEGIES	ном	wно	WHEN	RESOURCES	FOR MORE INFORMATION, SEE PAGE:	
2. Public safety services and facili- ties that meet best practices standards for all areas of	<b>2.A.</b> Make all public safety facilities state of the art and with integrated services.	1. Improve facilities, infrastructure and service capacity, including design to withstand Category 5 storms at a minimum.	Mayor's Office; CAO; Public Safety Depart- ments; Project Delivery Unit	First five years	Non-recurring disaster funding	10.17	
the city		2. Replace faulty equipment .	Mayor's Office; CAO; Public Safety Depart- ments; Project Delivery Unit	First five years	Disaster funding; capitol budget	10.17	
		3. Apply for grants as a funding source for implementing necessary improvements.	Mayor's Office	First five years	Grants	10.17	
		4. Require mandatory interagency management teams and training for all first responders.	Mayor's Office; CAO	First five years	Staff time	10.17	
	2.B. Implement a more robust community policing program and overall communication with the public.	1. Continue to implement the Brown Report's Strategic Ac- tion Plan's recommendations on community policing.	Police Depart- ment	First five years	Federal grants; Staff time	10.17	
		2. Organize systems to assure support from other agencies for community policing efforts, such as code enforcement, liquor licensing, and so on, including ticketing for quality of life offenses.	Police Depart- ment; other agencies	First five years	Staff time	10.17	
		3. Continue to collaborate with other justice system entities in development information sharing and efficient communications.	Police Depart- ment and other justice system agencies	First five years	Staff time	10.17	
		4. Enhance the public communications office for more effective communication with the public.	Police Depart- ment	First five years	Staff time	10.18	
		5. Improve the quality and accessibility of information on the department's website.	Police Depart- ment	First five years	Staff time	10.18	

		RECOMMENDED ACTIONS:					
GOAL	RECOMMENDED STRATEGIES	ном	wно	WHEN	RESOURCES	FOR MORE INFORMATION, SEE PAGE:	
2. Public safety services and facilities that meet best	<b>2.C.</b> Continue to pursue implementation of the	Recruit highly qualified personnel, including multilingual candidates.	Fire Department	First five years	General fund	10.18	
practices standards for all areas of the city	Fire Department Master Plan.	2. Include the department in planning meetings for fire department facilities to ensure that renovated and new facilities meet the needs for the department	Fire Department; PDU; CPA	First five years	Staff time	10.18	
		3. Review training programs and procedures and rebuild the training facility adjacent to the NASA Michoud facility when funds are available.	Fire Department	First five years	General fund	10.18	
		4. Establish an apparatus lease program and increase the number of front line response apparatus.	Fire Department	First five years	General fund	10.18	
		5. Repair water hydrants to allow faster and more access to water supply.	S&WB Project Delivery Unit	First five years	Recovery funds; general fund	10.18	
		6. Meet best practice requirements for staff vehicles.	Fire Department	First five years	General fund	10.18	
	2.D. Enhance the EMS program.	Develop and operate a GIS mapping system or similar program and explore use of other software, such as electronic patient care reports.	EMS to work with Office of Technology	First five years	General fund	10.18	
		2. Consult other cities for EMS best practices, such as Washington and Boston.	EMS	First five years	Staff time	10.19	
		3. Create a 24/7 call center with an EMS supervisor to support EMTs in the field.	EMS	Medium term	State and local funds	10.19	
		4. Work with the New Orleans Fire department to create a more unified emergency response system and share facilities with them to reduce facilities costs.	EMS; Fire Department	First five years	Staff time	10.19	
		5. Help to foster a culture of personal and professional growth through providing advanced training opportunities.	EMS; Fire Department	Medium term	General fund	10.19	
		6. Partner with local universities to provide EMTs and paramedics with continuing education and training.	EMS; Fire Department	First five years	State and local funds	10.19	
		7. Provide advanced training and continuing education (through partnerships with local universities) and incentives for increased performance.	EMS	Medium term	State and local funds	10.20	
		8. Locate EMS stations strategically to provide appropriate care for each area of the city.	EMS	Medium term	State and local funds	10.20	

		RECOMMENDED ACTIONS:				
GOAL	RECOMMENDED STRATEGIES	ном	wно	WHEN	RESOURCES	FOR MORE INFORMATION, SEE PAGE:
2. Public safety services and facilities that meet best	2. E. Improve customer service and response tracking	Train 311 operators to answer common questions directly rather that refer callers to other departments.	311	First five years	Staff time	10.20
practices standards for all areas of the city	in the Community Information/311 office	2. Create a community information center interactive web site with frequently asked questions, links to departments and outside resources.	Office of Tech- nology	First five years	Staff time	10.20
		3. Provide a 311 e-mail form where citizens can select any city service, not just reporting potholes, code violations, debris and dumping.	Office of Tech- nology	First five years	Staff time	10.20
		4. Increase the 311 Call Center's capacity for emergency assistance.	311; Office of Emergency Preparedness	First five years	Federal and state funds	10.20
3. Cost, efficient, resource-efficient, well-maintained public facilities and services	<b>3.A.</b> Create a network of public facilities and service clusters to function as neighborhood civic centers.	Seek to co-locate city services with public schools, clinics, and similar services	CAO's office	First five years	Staff time	10.21
	<b>3.B.</b> Provide a library system accessible to all neighborhoods with libraries that function as centers of learning and centers of community.	Reference recommenda- tions from the Library Master Plan in neighborhood civic center planning.	CAO's office; Library system; Project Delivery Unit	First five years	Staff time	10.21
		2. Attract more patrons with a variety of services and amenities, such as conference rooms, multi-media facilities, etc., to attract more patrons.	Library system	First five years	Recovery funding; capital funds	10.21

		RECOMMENDED ACTIONS:						
GOAL	RECOMMENDED STRATEGIES	ном	WHO	WHEN	RESOURCES	FOR MORE INFORMATION, SEE PAGE:		
<b>3.</b> Cost, efficient, resource-efficient, well-maintained	<b>3.B.</b> Provide a library system accessible to	3. Seek partnerships and new funding sources to enhance facilities and services.	Library system; public -private partnerships	First five years	Foundations	10.21		
public facilities and services	all neighborhoods with libraries that function as centers of learning and centers of community.	4. Build capacity by increasing the print collection to meet peer standards, increasing the number of computers and non-print collection.	Library system; public -private partnerships	First five years	Foundations	10.21		
		5. Provide meeting and program spaces in all but the smallest locations.	Library system; CAO's office; Project Delivery Unit	First five years	Recovery funding; capital funds	10.21		
		6. Involve citizens in planning library design and operations.	Library System; Citizen Participation System	First five years	Staff time	10.21		
		7. Create a range of branch sizes, from storefront to community to main branch in order to create an optimal network.	Library Sys- tems; Project Delivery Unit	First five years	D-CDBG	10.22		
	<b>3.C.</b> Establish an asset management system for all city property and facilities, including streets, to be fully operating in 2015.	1. Make establishment and implementation of an asset management system, including training and ongoing upkeep of the system, a high priority.	Mayor's Office; CAO	First five years	General fund	10.22		
<b>4.</b> State of the art public school campuses and facilities accessible to all neighborhoods	4.A. Promote collaboration among city agencies, community and neighborhood groups, and the school board in implementation of the School Facilities Master Plan.	1. Where feasible, combine school facilities with other community-serving functions like libraries and health centers.	School District; CAO's office	First five years	Staff time	10.22		
		2. Ensure that elementary schools are within walking distance of neighborhoods and high schools have access to public transit.	School District	First five years	School funds	10.22		
		3. Dispose of excess school property for adaptive reuse.	School District	First five years	Staff time	10.22		
		4. Ensure city and community input in planning for projects to expand school land or facilities, or adaptive reuse of school lands or facilities no longer needed.	School District; CPC; Citizen Participation Program	First five years	School district funds	10.23		

		RECOMMENDED ACTIONS:					
GOAL	RECOMMENDED STRATEGIES	ном	WHO	WHEN	RESOURCES	FOR MORE INFORMATION, SEE PAGE:	
<b>5.</b> Up to date justice system facilities and programs that include a focus	<b>5.A.</b> Rebuild and expand justice facilities in ways the contribute to commercial district and	Keep Civil Courts down- town in order to contribute to downtown's health as an office and civic center.	Civil Courts	First five years	Staff time	10.23	
on the rehabilita- tion of offenders for re-entry into society	neighborhood vitality.	2. Continue to establish and expand best practice programs of alternative sentencing and rehabilitative justice.	Sheriff's Office	First five years	Grants; federal, state and local fund- ing	10.23	
		3. Continue efforts to enhance communications and information sharing within the justice system.	All justice system groups	First five years	Staff time	10.23	
<b>6.</b> Energy efficiency and utility service reliability	6.A. Reorganize incentives to utilities and to households and business to emphasize conservation, reliability and reasonable cost.	Expand implementation of the Energy Smart New Orleans Plan.	City Council	First five years	Grants	10.23	
and reasonable cost		2. Adopt a regulatory system that de couples utility revenue from electric consumption.	City Council	First five years	Staff time	10.23	
		3. Adopt a Renewable Portfolio Standard.	City Council	First five years	Staff time	10.23	
		4. Adopt an energy efficient portfolio standard.	City Council	First five years	Staff time	10.23	
		5. Explore options for a long-term plan to harden transmission lines and bury overhead utilities.	City Council; Energy Coordi- nator	First five years	Staff time	10.24	
		6. Continue to make citywide upgrades to the underground gas infrastructure to replace low-pressure lines with high-pressure lines.	Entergy	First five years	Utility receipts	10.24	

		RECOMMENDED ACTIONS:					
GOAL	RECOMMENDED STRATEGIES	ном	WHO	WHEN	RESOURCES	FOR MORE INFORMATION, SEE PAGE:	
7. State of the art telecommunications infrastructure, including broadband, fiber	<b>7.A.</b> Enact regulations and pursue contracts that result in the highest level of cost-efficient service for businesses and	1. Make capital investments and implement strategies to ensure the resilience of the city's communications and telecommunications.	Mayor's Office; CAO	First five years	Staff time	10.24	
optic, wireless and cable	individuals	2. Determine feasibility, cost, funding sources and implementation schedule for housing, staffing and maintaining production facilities for digital public communication between the city and its citizens.	Mayor's Office; CAO	First five years	Staff time; Consultant	10.24	
		3. When possible, work with public and private schools, universities, libraries and non-profit organizations to share facilities and avoid duplicating the costs associated with equipment and operations	RSD; OPSB; Library System; non profits	First five years	Staff time; Consultant	10.24	
		4. Develop policies that will recoup and allocate funds from cable and video service providers and allocate new funding mechanisms to support government, educational, public programming for video-based communication with the city's residents.	Mayor's Office	First five years	Staff and volunteer time	10.24	
		5. Transmit government, educational, public programming through all feasible means available for citizens' access, including cable, digital video services and public web sites.	Mayor's Office	First five years	Staff time	10.25	
		6. Implement a strategy for monitoring and acting on FCC policies surrounding new interactive technologies for providing wireless communications.	Mayor's Office; Utility providers	First five years	Staff time	10.25	
		7. Promote "fiber to the home; upgrades of broadband technology.	Mayor's Office; Utility providers	First five years	Staff time	10.25	

### **Getting Started**

This item is a short-term action that will help lay the groundwork for the longer-term actions that follow.

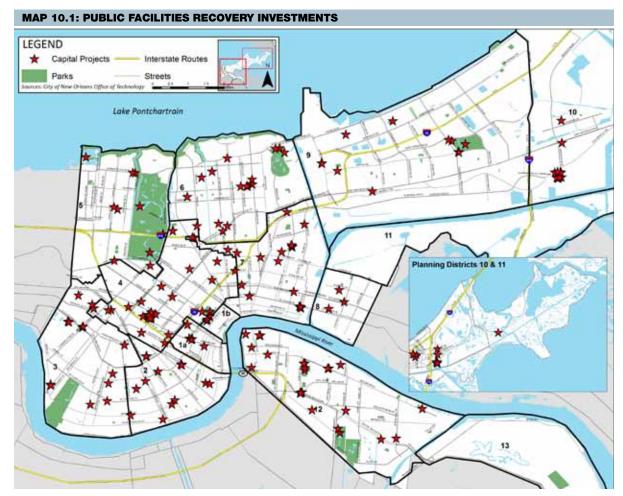
· Establish an asset-management system for all City property and facilities, including streets.

### **Narrative**

In the aftermath of Hurricane Katrina, the City of New Orleans will see the investment of many millions of dollars of federal funds in city facilities and infrastructure, both for new construction and for renovation. This is a tremendous opportunity to upgrade community facilities, many of which were in poor condition or obsolete at the time of the storm, so that they meet contemporary standards.

As noted in previous chapters, community-serving facilities should be combined, where possible, in centralized locations within neighborhoods—forming a nexus of community facilities and services. Many facilities can be designed for flexible uses. Schools and police stations can have community meeting rooms, schools can share clinics with the surrounding neighborhood, libraries can accommodate adult learning centers. Energy efficiency and green building techniques can be incorporated to make new investments more cost-effective over the long term.

In addition, both the new construction of facilities as well as the renovation of existing facilities should be executed to increase resiliency, mitigate future storm damage, and increase recovery time after a storm event or other community emergency. While building these shared-use community facilities makes sense from a neighborhood services perspective, they should also be designed for potential use as storm shelters



and be built for a more sustainable future. By building community facilities in locations that can be easily mitigated in the event of a natural disaster or other community emergency, a neighborhood's recovery time could be dramatically reduced. If every neighborhood were to have these facilities central to the community, they could serve as centers of refuge, care, and supplies for the neighborhood immediately surrounding them.

Like older cities all over the country, New Orleans' aging infrastructure needed very costly improvements even before the storm. While many repairs and replacements require traditional hardened solutions, there are also opportunities to explore innovative non-structural solutions to enhance cost-efficient rehabilitation of the systems.

#### GOAL 1

## Water, sewer, and drainage infrastructure repaired, upgraded, safe and resilient

## 1.A Rebuild the city's water, sewer and drainage system to add resiliency, improve efficiency, and preserve public health.

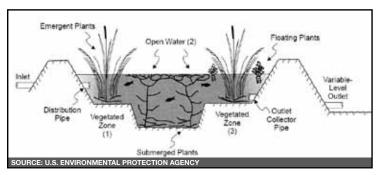
#### **RECOMMENDED ACTIONS**

1. Continue needed structural improvements as provided for in Sewerage and Water Board Master Plans by comprehensively rebuilding water and sewer infrastructure to reduce leaks, improve groundwater quality, and replace outmoded infrastructure.

Who: S & WB When: Long term

**Resources:** Federal: bonds; rate pares. Estimated \$6 B cost

- > Rebuild underground water and sewer infrastructure more robustly to account for subsidence and hedge against future damage to underground pipes.
- > Improve the water purification and sewerage treatment plants to increase efficiency and resiliency.
- > Develop alternative fresh water sources in case of contamination of the drinking water supply.
- 2. Develop funding strategies including seeking federal funding for water and sewer infrastructure repairs and replacement. The city should secure adequate federal, state, and local funding streams to comprehensively replace underground infrastructure. For greater efficiency, water and sewer





Constructed wetlands are artificial ponds planted with aquatic plants that are used to treat waste water, and have been successfully utilized in several municipalities throughout the U.S. The New Orleans Sewerage and Water Board is developing a project to restore degraded wetlands as a way of treating effluent from the East Bank wastewater treatment plant. If successful, this project could obviate the need for expensive infrastructure investments.

replacements should be coordinated with road rebuilding projects to reduce costs and increase efficiency.

Who: S & WB; possible consultants When: First five years Resources: S & WB resources

In addition, it is necessary to review the sewer and water rate system and the tradition of providing free water to government bodies. Free water discourages habits of conservation. Even if New Orleans has an abundant source of raw water in the Mississippi River, the cost of processing water that is then provided free or wasted is not an efficient use of resources. The city and the S&WB should develop a proper balance of reasonable rates for ratepayers and elimination of "free" water provision in exchange for a contribution if not full rate payment by government.

3. Establish a priority ranking system to resolve existing drainage problems and communicate the priorities and rationale to the public.

Who: S & WB When: First five years Resources: Staff time

4. Pursue innovative, where feasible, non structural solutions for treating effluent, such as wetlands restoration, and for managing storm water, such as natural drainage, thereby reducing the need for more expensive structure approaches.

**Who:** S & WB **When:** First five years

Resources: Staff time; grant funding; federal funds

- > Modify regulations to promote and implement strategies that encourage infiltration of storm water such as pervious surface, directing rooftop runoff to rain gardens, swales, and richly vegetated public spaces, where feasible.
- 5. Review the tradition of providing free water to all government bodies.

Who: S & WB; City Council When: First five years Resources: Staff time

Cities across the nation have been searching for alternatives to traditional hardscape solutions in solving their storm drainage problems. Common approaches include vegetated swales, rain gardens and protection and enhancement of wetlands and riparian buffers. These approaches are even more effective when implemented along with strategies that keep storm water runoff out of the storm sewer system, such as pervious pavement and directing rooftop runoff to vegetated areas. These approaches reduce the amount of storm water runoff, recharge the groundwater and prevent subsidence, reduce urban temperatures, improve urban aesthetics and community livability and save capital costs.

The cities of Portland (OR) and Seattle (WA) have pioneered using natural drainage systems within urbanized areas. With its



Upgraded police and fire stations will provide more reliable service in case of emergencies and can also serve as emergency shelters during storm events.

numerous neutral grounds, neighborhood streets that lack curbs and drains, and, while the city is rebuilding, vacant lots, New Orleans is well-positioned to become a leader in incorporating natural drainage systems. The city will always need structural drainage systems, but by promoting natural drainage in new development, renovations and public projects, the city will help alleviate subsidence and reduce the need for expansion of structural systems.

### GOAL 2

Public safety services and facilities that meet best practices performance standards for all areas of the city and can continue to function during 1-in-500-year storm events

### 2.A All public safety facilities should be state of the art and with integrated services.

#### **RECOMMENDED ACTIONS**

 Improve facilities, infrastructure, and service capacity, including design to withstand Category 5 hurricanes.

Who: Mayor's Office; CAO; Public Safety Departments; Project Delivery Unit

When: First five years

Resources: Non-recurring disaster funding

2. Replace faulty equipment.

Who: Mayor's Office; CAO; Public Safety Departments; Project Delivery Unit

When: First five years

Resources: Disaster funding; Capital budget

3. Apply for grants as a funding source for implementing necessary improvements.

Who: Mayor's Office When: First five years Resources: Grants

4. Require mandatory interagency management teams and training for all first responders.

Who: Mayor's Office; CAO When: First five years Resources: Staff time

## 2.B Implement a more robust community policing program and overall communication with the public.

### **RECOMMENDED ACTIONS**

1. Continue to implement the Brown Report's Strategic Action Plan's recommendations on community policing.

Who: Police Department When: First five years Resources: Grants; Staff time

2. Organize systems to assure support from other agencies for community policing efforts, such as code enforcement, liquor licensing, and so on.

Who: Police Department; other agencies

When: First five years Resources: Staff time

3. Continue to collaborate with other justice system entities in developing information sharing and

efficient communications.

Who: Police Department; other Justice system agencies

When: First five years Resources: Staff time

4. Enhance the public communications office to assist in communication with the public.

Who: Police Department When: First five years Resources: Staff time

5. Improve the quality and accessibility of information on the department's web site.

Who: Police Department When: First five years Resources: Staff time

### 2.C Continue to pursue implementation of the Fire Department Master Plan

#### RECOMMENDED ACTIONS

1. Recruit highly qualified personnel, including multilingual candidates. Consider incentive programs to attract candidates.

Who: Fire Department When: First five years Resources: General fund

2. Include the department in planning meetings for fire department facilities to ensure that renovated and new facilities meet the needs of the department.

**Who:** Fire Department; PDU; CPA **When:** First five years

Resources: General fund; Staff time

3. Review training programs and procedures—rebuild the training facility adjacent to the NASA Michoud facility.

Who: Fire Department When: First five years Resources: General fund

4. Establish an apparatus lease program and increase the number of front line response apparatus.

Who: Fire Department When: First five years Resources: General fund

5. Repair water hydrants to allow faster and more access to water supply.

Who: S&WB; Project Delivery Unit

When: First five years

Resources: Recovery funds; general fund

6. Meet best practice requirements for staff vehicles.

Who: Fire Department When: First five years Resources: General fund

### 2.D Enhance the EMS program

### **RECOMMENDED ACTIONS**

1. Develop and operate a GIS mapping system or other program such as Live MoveUPModule

(LiveMUM) for tracking emergency response requests, and explore use of other programs like electronic patient care reports (ePCRs), etc.

Who: EMS to work with Office of Technology

When: First five years Resources: General fund

2. Consult officials in other cities with successful EMS systems such as Washington, D.C., and Boston for best practices and programs.

Who: EMS

When: First five years Resources: Staff time

3. Create a 24/7 call center with an EMS supervisor to provide assistance to EMTs in the field, manage the distribution of EMS-transported patients among area hospitals to avoid over-loading, and communicate with hospitals to manage their capacity to take EMS-transported patients.

Who: EMS to work with Office of Technology

When: Medium term

Resources: State and local funds

4. Work with the New Orleans Fire Department to create a more unified emergency response system and share facilities with them to reduce facilities costs.

Who: EMS; Fire Department When: First five years Resources: Staff time

5. Help to foster a culture of personal and professional growth through providing advanced training opportunities, option of acting as an EMT and fire fighter, and create a merit-based raise system to encourage increased performance.

Who: EMS

When: Medium term Resources: General Fund

6. Partner with local universities to provide EMTs and paramedics with continuing education and trainings.

**Who:** EMS; Mayor's Office **When:** First five years



Community-based planning for the Andrew Wilson School in Broadmoor will culminate in a state-of-theart educational facility complimented by services and amenities for all area residents. Future decisions on the fate of school properties should be grounded in a thorough community planning process. **Resources:** State and local funds

7. Provide an adequate number of EMS supervisors around-the-clock to ensure top performance and oversight of the system.

Who: EMS

When: Medium term

**Resources:** State and local funds

8. Locate EMS stations strategically to provide appropriate care for each area of the city.

Who: EMS When: Medium term

Resources: State and local funds

## 2.E Improve customer service and response tracking in the Community Information/311 office.

#### **RECOMMENDED ACTIONS**

1. Train 311 call center employees to be able to answer many common questions without having to direct residents to other departments.

Who: 311

When: First five years Resources: Staff time

2. Create a community information center interactive web site for residents with answers to many common questions, links to other departments, and links to outside resources like non-profits. Look at other cities for ideas on how to model the most effective website.

Who: Office of Technology When: First five years Resources: Staff time

3. Provide a 311 e-mail form where residents can select any city service, not just reporting potholes, code violations, debris, and illegal dumping.

Who: Office of Technology When: First five years Resources: Staff time

4. Increase the 311 Call Center's capacity for emergency assistance:

Who: 311; Office of Emergency Preparedness

When: First five years

Resources: State and Federal funds

- > Train staff to answer questions on event-specific information including closures and reopenings, evacuation routes and their status, and support-services provided by the city, the state, and non-profits.
- > Provide an alternative number during times of increased demand as not to overload the 311 system.
- > Create a system for 311 operators to continue work even when evacuated from the city (such as providing operators with an internet phone they can use in any location on the same

number as they do in New Orleans).

#### GOAL 3

### Cost-efficient, resource-efficient, well maintained public facilities and services

## 3.A Create a network of public facilities and service clusters to function as neighborhood civic centers designed to fit into neighborhood character.

(See Chapters 5 and 8 for more information on delivery of neighborhood services.)

#### **RECOMMENDED ACTIONS**

1. Seek to co-locate city services with public schools, clinics, and similar services.

Who: CAO's office When: First five years Resources: Staff time

## 3.B Provide a library system accessible to all neighborhoods with libraries that function as centers of learning and centers of community.

#### RECOMMENDED ACTIONS

1. Reference the recommendations from the Library Master Plan in neighborhood civic center planning through consultation with the CPC and other city agencies and with community groups.

Who: CAO's office; Library system; Project Delivery Unit

When: First five years Resources: Staff time

2. Attract more patrons with a variety of services and amenities, such as full-service conference rooms, computers with internet access, interior enterprises zones, and other additional amenities such as courtyards and innovative lecture spaces and multi-media facilities.

Who: Library system When: First five years

**Resources:** Recovery funding; capital funds

3. Seek partnerships and new funding sources to enhance facilities and services.

Who: Library system; public-private partnerships

When: First five years Resources: Foundations

4. Build capacity by increasing the print collection to meet peer standards, increasing the number of computers, and the non-print collection.

**Who:** Library system; public-private partnerships

When: First five years Resources: Foundations

5. Provide meeting and program spaces in all but the smallest locations, including spaces for workforce, youth and other programs.

Who: CAO's office; Library system; Project Delivery Unit

When: First five years Resources: Staff time

6. Involve citizens in planning library design and programs through design charrettes.

Who: Library system; Citizens Participation System

**When:** First five years

Resources: Staff time

7. Create a range of branch sizes, from storefront to community to main branch in order to create an optimal network.

Who: Library System When: First five years Resources: D-CDBG

## 3.C Establish an asset management system for all city property and facilities, including streets, to be fully operating by 2015.

#### RECOMMENDED ACTION

1. Make establishment and implementation of asset management and training for employees a high priority.

Who: Mayor's Office; CAO When: First five years Resources: General fund

An asset management program is essential to make sure that the investments in new facilities being made in the next five years and beyond will be maintained and provide many years of life to New Orleans residents.

### GOAL 4

# State of the art public school campuses and facilities accessible to all neighborhoods

## 4.A Promote collaboration among city agencies, community and neighborhood groups, and the school board in implementation of the School Facilities Master Plan.

#### RECOMMENDED ACTIONS

1. Where feasible, combine school facilities with other, community serving functions like libraries and community health centers.

Who: School District; CAO office

When: First five years Resources: Staff time

2. Ensure that elementary schools are within walking distance of all neighborhoods and that high schools are sufficiently convenient and accessible by public transit.

Who: School District When: First five years Resources: School funds

3. Dispose of excess school property for adaptive reuse.

Who: School District When: First five years Resources: Staff time

4. Ensure city and community input in planning for projects to expand school land or reuse school lands or facilities no longer needed.

Who: School District; CPC; Citizen Participation Program

When: First five years

Resources: Štaff time; School district funds

#### GOAL 5

# Up-to-date justice system facilities and programs that include a focus on the rehabilitation of offenders for re-entry into society

## 5.A Rebuild and expand justice facilities in ways that contribute to commercial district and neighborhood vitality.

#### RECOMMENDED ACTIONS

1. Keep Civic Courts downtown in order to contribute to downtown's health as an office and civic center.

Who: Civil Courts When: First five years Resources: Staff time

2. Continue to establish best practice programs of alternative sentencing and rehabilitative justice.

Who: Sheriff's office When: First five years

Resources: Grants; federal, state and local funding

3. Continue efforts to enhance communications and information-sharing within the justice system.

Who: All justice system groups When: First five years

Resources: Staff time

### GOAL 6

### Energy efficiency and utility service reliability and reasonable cost

## 6.A Reorganize incentives to utility company and to households and businesses to emphasize conservation, reliability and reasonable cost.

### **RECOMMENDED ACTIONS**

1. Expand implementation of the Energy Smart New Orleans Plan.

Who: City Council When: First five years Resources: Grants

2. Adopt a regulatory system that de couples utility revenue from electric consumption

Who: City Council When: First five years Resources: Staff time

3. Adopt a Renewable Portfolio Standard to require a percentage of utility generation resources to come from renewable energy resources.

Who: City Council When: First five years Resources: Staff time

4. Adopt an energy efficient portfolio standard for the utility to reduce energy use.

Who: City Council

When: First five years Resources: Staff time

Explore options for a long-term plan to harden transmission lines and bury overhead utilities.

Who: City Council; Entergy Coordinator

When: First five years Resources: Staff time

6. Continue to make citywide upgrades to the underground gas infrastructure to replace low-pressure lines with high-pressure lines.

Who: Entergy When: First five years Resources: Utility receipts

### GOAL 7

# State of the art telecommunications infrastructure, including broadband, fiber optic, wireless, and cable

## 7.A Enact regulations and pursue contracts that result in the highest level of cost-efficient service for businesses and individuals.

#### **RECOMMENDED ACTIONS**

1. Make capital investments and implement strategies to ensure the resilience of the city's communications and telecommunications.

Who: Mayor's Office; CAO When: First five years Resources: Staff time

2. Determine feasibility, cost, funding sources, and implementation schedule for housing, staffing, and maintaining production facilities for digital public communication between the city and its citizens.

Who: Mayor's Office; CAO When: First five years

Resources: Staff time; Consultant

3. When possible, work with public and private schools, universities, libraries, and nonprofit organizations to share facilities and avoid duplicating the costs associated with equipment and operations.

Who: RSD; OPSB; Library System; non profits

When: First five years Resources: Staff time

4. Develop policies that will recoup and allocate funds from cable and video service providers and allocate new funding mechanisms to support government, educational, public programming for video-based communication with the city's residents.

Who: Mayor's Office When: First five years

Resources: Štaff and volunteer time

5. Transmit government, educational, public programming through all feasible means available for citizens' access, including cable, digital video services, and public web sites. Look into the ability to keep programming available to residents through a digitally based cache or library.

Who: Mayor's Office When: First five years Resources: Staff time

6. Implement a strategy for monitoring and acting on FCC policies surrounding new interactive technologies for providing wireless communications. Integrate the advent of public communications technologies with other plans to underground utilities.

Who: Mayor's Office; Utility providers

When: First five years Resources: Staff time

7. Promote "fiber to the home: upgrades of broadband technology.

Who: Cox; Utility providers When: First five years Resources: Staff time