

CITY OF NEW ORLEANS

MITCHELL J. LANDRIEU
MAYOR

CEDRIC S. GRANT
DEPUTY MAYOR

September 3, 2013

Ms. Cheryl Breaux
Director, CPD Division
U.S. Department of Housing and Urban Development
New Orleans Office, Southwest Region
Hale Boggs Building
501 Magazine Street, 9th Floor
New Orleans, LA 70130

RE: Action Plan Hurricane Isaac Disaster Community Development Block Grant

Dear Ms. Breaux:

The City of New Orleans is submitting the Final 2013 Action Plan (AP) for the Hurricane Isaac Disaster Community Development Block Grant to the U.S. Department of Housing and Urban Development (HUD). The AP illustrates how the \$15,031,000 HUD allocation will be used for necessary expenses related to disaster relief, long-term recovery, restoration of infrastructure, and housing and economic revitalization in the most impacted areas resulting from the Hurricane Isaac Disaster.

As you review the document, if you see a need for additions or revisions, please let us know. Thank you for your support of the New Orleans program.

If you need any additional information, please contact Brian E. Lawlor at 658-4280.

Sincerely,



Cedric S. Grant
Deputy Mayor
Facilities, Infrastructure, and Community Development

cc: Brian E. Lawlor, Director, Housing Policy & Community Development
Anthony M. Faciane, Director, Neighborhood Stabilization

Enclosures:

- 1) Action Plan
- 2) Certifications





City of New Orleans

ACTION PLAN

COMMUNITY DEVELOPMENT BLOCK GRANT – DISASTER RECOVERY

HURRICANE ISAAC RECOVERY PROGRAM

DATED: September 3, 2013

City of New Orleans
Hurricane Isaac Disaster Recovery Community Development Block Grant

ACTION PLAN

INTRODUCTION

The Disaster Relief Appropriations Act, 2013 (Pub. L. No. 113-2, approved January 29, 2013) allocated funding for the Community Development Block Grant program. These funds are for necessary expenses related to disaster relief, long-term recovery, restoration of infrastructure, and housing and economic revitalization in the most impacted areas resulting from a major disaster. On May 29, 2013, the United States Department of Housing and Urban Development (HUD) allocated \$15,031,000 to the City of New Orleans (the "City") to assist with its recovery from the impact of Hurricane Isaac.

Overview of City Of New Orleans and Impact of Hurricane Isaac

On Wednesday, August 29, 2012, Hurricane Isaac made landfall on the Louisiana Coast as a Category 1 Hurricane causing substantial and widespread wind damage and flooding in the City of New Orleans, leaving the majority of the city's residents, businesses, and streets without electrical power for days. The storm stalled over Southern Louisiana over a 48-hour period, at times moving as slowly as 6 miles per hour.

During the storm high winds and continuous rainfall produced by Hurricane Isaac caused significant damage to the City of New Orleans. The hurricane force winds downed power lines, trees, and light poles, and created massive disaster related debris within the City's rights of way. Storm surges caused serious damages to facilities and infrastructure located outside of the City's levee protection systems.

The City of New Orleans incurred significant expense in preparation, response, and recovery from the impacts of Hurricane Isaac. The City's efforts to repair the damage caused by Hurricane Isaac continue to date. Many of the actions have been stalled due to a lack of resources to pay for such activities and place the City at risk of experiencing similar damage in the event of another hurricane or tropical storm.

Summary of Unmet Need and Allocation of Funds

Hurricane Isaac was primarily a slow moving, heavy rain and high wind event. As a result, substantial costs were incurred in repairing damage to the City's drainage system, which had been clogged with debris from the storm, removing debris from roadways and public areas, collecting debris from private property, repairing water damage to public buildings, restoring street signals and street lights, and performing other repair and cleanup activities.

These activities were undertaken with the assistance of the Federal Emergency Management Agency (FEMA) which assisted in assessing damage and providing funding to begin the recovery process. Therefore, the bulk of the funds subject to this Action Plan will be utilized to meet the City's cost share

responsibilities to FEMA, to reimburse the City for eligible expenses of storm recovery, and to complete the activities that were not fully funded by FEMA funding.

NEEDS ASSESSMENT

SUMMARY:

The City of New Orleans has been engaged continuously with response and recovery to the impact of Hurricane Isaac. The City has fully evaluated and has been actively assisting individuals and families with housing needs and facilitating economic development throughout the City.

Our analysis of unmet need clearly demonstrates that the most significant unmet need resulting from the impact of Hurricane Isaac is in the area of infrastructure repair and improvement of water and drainage areas that failed or were negatively impacted during Hurricane Isaac. The City has worked closely with FEMA to identify areas and secure funds to address activities that required immediate attention; several activities are still under consideration by FEMA for additional assistance and discussions continue.

It is clear that the infrastructure needs described under this action plan were caused or exacerbated by the tremendous amount of water and rain that occurred during Hurricane Isaac. These activities are of primary importance for the protection of life and property within the levee system. Failure to address these infrastructure needs jeopardizes any investment or future investment in vulnerable areas.

Emergency Storm Response

OFFICE OF EMERGENCY PREPAREDNESS

In anticipation of Hurricane Isaac making landfall, Mayor Landrieu declared a state of emergency on Sunday, August 26. The City of New Orleans Office of Homeland Security and Emergency Preparedness immediately activated its Emergency Operations Center (EOC) to coordinate disaster response and recovery resources with 45 City, State, Federal and Non-Profit agencies to ensure an effective and efficient response to Hurricane Isaac. Altogether over 150 personnel worked around the clock.

OFFICE OF COMMUNICATIONS

During that period, the City's emergency information website, ready.nola.gov, received a peak of 27,000 unique, external daily views. The City's 311 phone service received over 29,000 calls and registered an additional 1,500 residents for the City's Citizen Assisted Evacuation Program (CAEP). During the weather event, 34 full-time agents and the City's Office of Information Technology & Innovation (ITI) staff were on duty together with a dozen volunteers. Social media was fully utilized with over 1,500 tweets viewed through the City's two Twitter handles: @nolaready and @mayorlandrieu. There were also dozens of posts on Facebook and YouTube. The City hosted 10 press conferences that were viewed by 16,000 individuals and issued 37 press releases.

NEW ORLEANS POLICE DEPARTMENT (NOPD)

NOPD started to implement storm preparation plans days before Hurricane Isaac made landfall. On Tuesday, August 28, officers started to work 12-hour shifts with 550-600 officers on each shift. All 8 police districts reported 100% attendance. Furthermore, NOPD was supported by 1,400 Louisiana National Guard troops who conducted stationary and roving patrols as well as security at the Point of Distribution locations, Emergency Shelter locations, and Food Stamp distribution centers. Police received many tips from residents and thwarted numerous looting attempts, making 41 arrests for looting.

NEW ORLEANS FIRE DEPARTMENT (NOFD)

NOFD was all-hands-on-deck during Hurricane Isaac, with an average of 245 personnel on duty over each 24-hour period. NOFD personnel completed a windshield survey of the entire city (with the exception of Venetian Isles) by dusk on the evening after Hurricane Isaac made landfall; inspected hospitals, nursing homes, and other critical operations; identified blocked roadways and collapsed buildings ; and reported findings to the proper city entities. NOFD also provided search-and-rescue operations for areas outside of levee protection, bringing residents to dry ground. There were 24 working fires during the storm period, approximately four times the number of working fires during the same time period, on average, during normal City operations. Two of those fires were candle-related and two were generator-related.

LOUISIANA NATIONAL GUARD

The Louisiana National Guard deployed up to 1,400 personnel to New Orleans in response to Hurricane Isaac. Louisiana National Guard soldiers were deployed to every NOPD District to assist in patrolling the city to protect people and property during the storm. Six Points of Distribution (POD) sites were set-up and operated in the city where citizens were able to pick up critical supplies, including water, ice, and Meals-Ready-to-Eat (MREs).

NEW ORLEANS EMERGENCY MEDICAL SERVICES (NOEMS)

NOEMS had 137 full- and part-time EMTs and paramedics on duty throughout the storm and received 1,455 emergency medical calls for service from Sunday, August 26, to Tuesday, September 4. Of these calls, 263 were handled by state mutual aid EMS ambulances. NOEMS handled 3 calls related to carbon monoxide poisoning with a total of 16 patients transported by NOEMS. A baby boy was delivered in the ambulance by a state EMS unit. NOEMS worked closely with the City's Health Department to triage and transport patients to the medical special needs shelter. NOEMS assisted in set up of the special needs shelter and stationed ambulances at all city shelters for emergencies. NOEMS assisted in troubleshooting nursing home/assisted-living facility issues throughout the storm. These issues included: lack of oxygen, supplies, and gasoline, and generator difficulties. NOEMS coordinated with local hospitals for capacity, capabilities, and transports throughout the storm.

HOMELESS SERVICES

Homeless Services activated its sheltering plan on the morning of Monday, August 27, by convening all major shelters to ascertain capacity and coordinate outreach and shelter services that began that day. Outreach to homeless individuals and transport to shelters was conducted until the evening of Tuesday, August 28. The following organizations provided protection to homeless individuals and increased their capacity to accommodate homeless individuals during Hurricane Isaac: Covenant House, Ozanam Inn, New Orleans Mission, Salvation Army, Exodus House, St. Jude Community Center, and Bethel Colony Ministries. In total, 1,058 homeless individuals were served during this weather emergency. Most of the shelters released individuals on Thursday, August 30, and monitoring continued throughout the weekend. The State of Louisiana's Office of Community Development deployed their Permanent Supportive Housing Team to the City of New Orleans Special Needs Shelter at the Convention Center to arrange Permanent Housing for disabled individuals who were displaced or left homeless by the storm.

HEALTH DEPARTMENT

The City of New Orleans Health Department moved into hurricane emergency mode on Sunday, August 26. Forty (40) essential personnel worked an estimated 1,880 hours to decommission clinical and service sites, staff a special hotline established for hurricane related information about health, staff the medical special needs shelter, and provide site visits to at risk elders and disabled people in the community. The Health Department staffed the EOC from August 27 until September 4. The Health Department successfully arranged transport for 57 high-risk, medically needy individuals to the medical special needs shelter in Baton Rouge and assisted them with return; stood up a Medical Special Needs Shelter at the Convention Center in partnership with the State, federal agencies, and private partners to support 142 people, including patients and caregivers; and stood up two days of special Women Infants and Children services on August 31 and September 1. The City's health hotline ((504)-658-2500) fielded 574 calls. Additionally, the Health Department worked with the Dialysis Network to help local residents access the 14 area dialysis centers immediately after the storm. The Health Department stood up the urgent Care Center in New Orleans Friday, August 31 that has served 60 patients to date. The Health Department also worked with the State and private partners to monitor the status of 8 area hospitals and 17 area nursing homes. During the hurricane, visits were made to three nursing homes to assure safety and to high rises or group homes housing an estimated 2,500 high risk elderly or disabled residents. Eighty clients were individually assessed. The Health Department returned to full normal operations Tuesday, September 4.

ORLEANS PARISH SHERIFF'S OFFICE (OPSO)

OPSO facilities were fully staffed throughout storm. On Monday, August 27, OPSO transferred 1,037 inmates to State Department of Public Safety and Corrections facilities. Intake & Processing operated throughout the storm and coordinated with the courts to ensure first appearances. 1,064 inmates were transferred back to OPSO on Thursday, August 30.

STORM WATER MANAGEMENT

SEWERAGE & WATER BOARD OF NEW ORLEANS (SWB)

SWB had 345 employees on duty during Hurricane Isaac. The SWB Telephone Center received 1,279 customer calls ranging from fire hydrant issues to calls from customers in other parishes. During the storm, SWB operated 2 potable water purification plants, 2 waste water treatment plants, 24 drainage pumping stations, 2 power generation plants, 83 sewerage pumping and lift stations, and more than 100 miles of power transmission and distribution lines. SWB also provided support to Plaquemines Parish.

U.S. ARMY CORPS OF ENGINEERS (USACE)

The Hurricane and Storm Damage Risk Reduction System (HSDRRS) performed for the first time as designed. USACE employees were embedded in all local emergency operations centers before, during, and after Hurricane Isaac to maintain open and transparent communication. Of the total 500+ HSDRRS openings, USACE (with the City's partners) successfully closed all necessary navigable, roadway, and railroad access and drainage openings prior to Hurricane Isaac's landfall. All major structures were operated including the following: Interim Closure Structures at the outfall canals (17th, Orleans, London), Inner Harbor Navigation Canal Surge Barrier, Seabrook Floodgate Complex, Gulf Intracoastal Waterway West Closure Complex, and Harvey Sector Gate. The Inner Harbor Navigation Canal Lake Borgne Surge Barrier prevented the storm's 13.6-foot surge from entering the Gulf Intracoastal Waterway and the Inner Harbor Navigation Canal. (Hurricane Katrina's peak surge at this location was 15.5 feet.) At the London Avenue Outfall Canal, the water level at Lake Pontchartrain rose to 6.4 feet. The Interim Closure Structure at the mouth of the canal allowed USACE and SWB to keep the water below the maximum operating level of five feet.

SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY – EAST (SLFPA-E)

SLFPA-E called over 100 employees to duty from Sunday, August 26 to Thursday, August 30, logging approximately 6,500 man-hours. In less than 36 hours from the first signs of Hurricane Isaac making landfall in southeast Louisiana, SLFPA-E closed over 140 gates throughout the entire system. SLFPA-E employed new technologies including a text-alert system, Levee Information Management System (LIMS). No problems were associated with the Levee Protection System as it performed as designed and protected the City of New Orleans. The Orleans Levee District's new safe house served as the SLFPA-E's EOC; hosted four USACE employees embedded within SLFPA-E; and housed approximately 85 employees, including a crew of approximately 24 Louisiana National Guardsmen. During Hurricane Isaac, crews were dispatched to disprove rumors, coming from outside calls, that the London Avenue Outfall Canal had breached, to get "eyes" on areas where gauges were transmitting erroneous reports of water levels within canals (particularly the Orleans Avenue and 17th Street Canal gauges, which showed dangerous water levels inside of the canals), and to see if water was overtopping the Maxent Canal Levee, which did not occur.

SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY – WEST (SLFPA-W)

SLFPA-W activated its command center on Sunday, August 26, with a total of 47 staff members who remained for the duration and aftermath of the storm, representing 4,500 man hours. Prior to the storm, field personnel closed 124 gates, which were reopened as soon as conditions allowed. The majority of these structures provided a secondary line of defense for the West Bank and Vicinity System, which includes all of the City of New Orleans on the West Bank of the Mississippi River. The four main gates integral to our primary line of defense, including the Western Closure Complex, which protects Algiers and other areas of the West Bank, and features a 225-foot sector gate and the largest pump station in the world, were closed for 3 days. All structures operated as designed and there were no problems in coordinating interior pumping and drainage with SWB to the Western Closure Complex. On the Saturday and Sunday following the storm (September 1 and 2), SLFPA-W conducted a thorough levee damage assessment inspection. Only very minor problems, capable of being easily and quickly corrected, were discovered. The safe house and command center operated 24 hours per day throughout the storm and its aftermath and housed over 50 staff members, contractors, and personnel from other agencies. SLFPA-W was able to provide assistance to areas outside the HSDRRS. SLFPA-W provided over two hundred 3,000-lb. sand bags and hundreds of smaller sandbags to Lafitte, a community outside of Orleans Parish. After the storm passed, SLFPA-W provided over 200 meals per day for emergency response and clean-up crews and personnel in Lafitte for several days following the storm. SLFPA-W was also called upon to provide 3,000-lb. sand bags for Plaquemines Parish to close a breached levee.

STORM RECOVERY AND CLEAN UP

The impact of the storm required a comprehensive, regional, cross-sector response by numerous federal, state, and city departments, private contractors, and public and private partners to clear New Orleans of debris left behind by Hurricane Isaac. Local agencies and public partners participating in the clean-up included the City's Department of Parks and Parkways, the City's Department of Sanitation, SWB, the Downtown Development District, the City's contractors, and the National Guard, creating an aggregate workforce of 50 crews made up of 501 personnel dedicated to the clean-up effort. City workers hauled away nearly 10,000 cubic yards of debris and completed the first pass of clearing debris of primary and secondary streets by Sunday, September 7.

DEPARTMENT OF PUBLIC WORKS (DPW)

DPW employees were involved in Hurricane Isaac response and recovery operations including towing flooded vehicles, cleaning drainage catch basins, securing fallen streetlights and traffic signal lights, assessing and repairing damage to traffic signals and traffic signs, supporting debris-removal operations with equipment and operators, and making temporary repairs to streets. By Tuesday, September 5, power was restored to all 460 signalized intersections and damage assessments were completed. Crews have repaired hundreds of damaged and/or downed signals. Crews repaired hundreds of street signs, focusing first on safety-related signage (stop signs, one-way signs, turn signs, yield signs) and then on street-name signs. Crews picked up and secured knocked down or leaning streetlights, and DPW

completed a damage assessment of all of the street lights in the City. DPW deployed 3 vacuum trucks to clean out 140 catch basins and 16,850 feet of drain lines.

PROPERTY MANAGEMENT (PM)

PM's EOC participation was fully activated the evening of Monday, August 27 through Friday, August 31. Forty-six (46) essential personnel from PM manned City Hall, the Criminal Court engine room, Municipal Traffic Court engine room, and the City's uptown facilities. PM responded to and dispatched contractors to repair several HVAC related failures at NOPD headquarters, Civil District Court, City Hall, and Criminal District Court all due to electrical failures from power outages. PM dispatched work crews after the storm to clear the debris from the parking lots of City buildings and from the City cemeteries as well as remove all boarding from entrances and windows of City buildings. Property Management staff performed 26 City building assessments with FEMA to determine the extent of storm damage. Storm-related repair needs ranged from broken windows to roof damage at NOFD, NOPD, court buildings and multi-purpose centers yielding totals in excess of 70-85 after-storm repairs on which the department is making final assessments, gathering potential costs from vendors, and scheduling the repair work.

CAPITAL PROJECTS ADMINISTRATION (CPA)

CPA, with the assistance of the New Orleans Recreation Development Commission (NORDC), performed preliminary damage assessments at all City Buildings and Park Facilities and coordinated other damage assessments with various City Departments (e.g., NORDC, NOFD, PM) to maximize man power and to gain knowledge of facilities to identify Hurricane Isaac damage. A significant amount of downed high-mast lighting poles and fencing were reported at parks throughout the City.

REGIONAL TRANSIT AUTHORITY (RTA)

RTA implemented its disaster action plan on Monday, August 27. RTA provided full service to residents of the City until 4 a.m. on Tuesday, August 28. On the morning of Thursday, August 30, RTA returned transit service on a limited basis while RTA began to assess and mitigate damages sustained to its facilities and assets. On Monday, September 3, the agency restored service to 100% to its lines and routes. All bus and streetcar line service returned to its normal schedule on Thursday, September 6, 2012.

LOUIS ARMSTRONG NEW ORLEANS INTERNATIONAL AIRPORT (the "Airport")

The Airport entered into hurricane emergency mode at 8 a.m. on Monday, August 27. Fifty-five (55) essential personnel manned the airport along with 15 Jefferson Parish Sheriff's Office officers. The staffing included electricians, carpenters, mechanics, operations, dispatchers, central plant, and information technology personnel. The Airport EOC was fully activated on Monday when wind speeds above 40 mph were eminent. The Airport maintained daily contact with its stakeholders including airlines, TSA, tenants, and FAA via conference calls, in-person meetings, email, and cellular telephone. Airlines ceased operations with their last scheduled departures on Monday, August 27. The Airport lost commercial power at 6:30 p.m. on Tuesday, August 28. Power was restored to the terminal at 4:00 p.m.

on Thursday, August 30. The airfield was reopened at 7 p.m. on Thursday, August 30, after wind speeds subsided. Scheduled airline service resumed at 10:00 a.m. on Friday, August 31. Full normal operations resumed by Saturday, September 1.

RECOVERY ASSISTANCE

Local Business Assistance

ECONOMIC DEVELOPMENT OFFICE (EDO)

The Mayor's Economic Development Office began making contact with local businesses on Monday, August 27, regarding Hurricane Isaac and business continuity plans. On Wednesday, August 29, EDO staff focused outreach to businesses critical to quick recovery -- grocery stores, pharmacies, gas stations, and home repair stores -- about their plans to reopen and any issues that could expedite or inhibit openings. After the storm passed, EDO began tracking all store openings and publishing a list of open businesses to the EOC, ready.nola.gov, and the 311 system. For the next several days, EDO continuously monitored the activity of more than 100 businesses and published updated lists of openings to EOC, ready.nola.gov, and 311. EDO remained in constant communication with businesses regarding status and remained available to troubleshoot issues such as loss of power, security, road access, impact of curfews, and shortages. By Tuesday, September 4, EDO had surveyed open businesses and identified that nearly all critical businesses were no longer operating on generator power, that supply levels were good, and that the critical businesses had stabilized.

NEW ORLEANS HOSPITALITY AND TOURISM INDUSTRY

The majority of New Orleans's hospitality industry, mainly hotels, continued to operate during Hurricane Isaac, taking care of the needs of visitors in town during the storm as well as residents who sought housing during and following the storm, when most residents were still without power. Reaching a high in occupancy of 98% over the weekend of Labor Day (September 1-3, the weekend after the storm), the city's hotels and restaurants, as well as attractions, continued to operate in face of power and service challenges. Many if not all were back on line by the end of the Labor Day weekend. The New Orleans Metropolitan Convention and Visitors Bureau, in coordination with the New Orleans Marketing and Tourism Corporation, executed an emergency strategy that began well before Hurricane Isaac approached the city. A national public relations campaign has been launched to mitigate brand damage about the destination, clarify misperceptions about flooded areas, and preserve the tourism industry that creates 74,000 local jobs and drives the New Orleans economy. Convention and leisure sales teams have been in constant contact with customers, providing personal updates and positive information about New Orleans.

Housing Assistance

OFFICE OF COMMUNITY DEVELOPMENT (OCD)

Immediately after the storm passed, the City's Office of Community Development inspected all the properties in the City's inventory, including public buildings and housing units under long term

compliance obligations. No publicly funded housing units suffered severe damage and no persons living in those units were displaced by the storm. OCD participated in efforts with the New Orleans Redevelopment Authority (NORA) to identify available temporary housing for families and individuals who were impacted by the storm.

NEW ORLEANS REDEVELOPMENT AUTHORITY (NORA)

On the day after the storm passed, NORA's inspectors issued a report that six (6) NORA properties were identified as being in "imminent danger of collapse" as a result of Hurricane Isaac. Within a week after the storm, 24 properties were demolished that either collapsed or were in imminent danger of collapse. A total of 68 houses have been demolished as a result of irreparable damage suffered during Isaac and 46 remain to be completed. NORA worked with OCD and community organizations to find suitable temporary housing for families and individuals who were impacted by the storm.

HOUSING AUTHORITY OF NEW ORLEANS

Although the Housing Authority incurred expense in evacuating and sheltering residents and in repairing damage caused to its inventory, all issues and damages caused by Hurricane Isaac have been addressed.

POST STORM ECONOMIC/HOUSING RESOURCES

DATA Provided by FEMA and HUD

Approved SBA Loans - Orleans Parish

Disaster / Event Numbers : 'LA-00048'; Damaged State:
'LA'

| ORLEANS | Apps Received | Apps Approved | Amount Approved | # Loans with R/E Amt | R/E Amount Approved | # Loans with Non-R/E Amt | Non-R/E Amount Approved | # Loans with EIDL Amt |
|---------|---------------|--|-----------------|----------------------|---------------------|--------------------------|-------------------------|-----------------------|
| TOTALS | 3,170 | Owner Occupied Housing- 812 Rental Housing - 47 BUSINESS - 59 Not for profit -4 | See below | 854 | ##### | 566 | ##### | 16 |

812 Owner Occupied Loans - \$15,421,000
 47 Rental Housing Loans - \$ 294,400
 59 Business Loans- \$ 1,900,100
 4 Not for Profit Loans- \$ 167,000

Damage Data

FEMA ESTIMATE OF DAMAGED RENTAL UNITS

| ORLEANS PARISH | Moderate | Major | Substantial | Destroyed | Grand Total |
|--------------------|-------------|------------|-------------|-----------|-------------|
| Grand Total | 2750 | 154 | 533 | 4 | 3441 |

HUD ESTIMATE OF DAMAGE TO OWNER OCCUPIED PROPERTIES

| Damage Category | Count | Total Loss | Average Loss |
|--------------------|-------------|--------------------|-----------------|
| Minor-Low | 7876 | \$ 5,412,345 | \$ 687 |
| Minor-High | 471 | \$ 2,151,139 | \$ 4,567 |
| Major-High | 52 | \$ 533,275 | \$10,255 |
| Major-Low | 74 | \$ 793,167 | \$10,718 |
| Severe | 25 | \$ 802,434 | \$32,097 |
| Grand Total | 8498 | \$9,692,359 | \$ 1,141 |

| Damage Level (FEMA Verified Loss in \$\$) | | | | | | | | | |
|---|-------------|------------|------------|-----------|-----------|----------|----------|----------|-------------|
| ORLEANS PARISH | LT 3k | 3-5k | 5-10k | 10-20k | 20-30k | 30-40k | 40-50k | 50k+ | Grand Total |
| Grand Total | 7900 | 330 | 191 | 52 | 15 | 5 | 1 | 3 | 8497 |

| | Total | LMI | % LMI | Total Flooded | LMI Flooded | % LMI | % Flooded |
|--------------------------|------------|------------|------------|---------------|-------------|------------|------------|
| Home and Flood Insurance | 285 | 124 | 44% | 109 | 43 | 39% | 38% |
| Home Insurance Only | 82 | 54 | 66% | 13 | 6 | 46% | 16% |
| Flood Insurance Only | 45 | 30 | 67% | 8 | 4 | 50% | 18% |
| No Insurance | 185 | 155 | 84% | 12 | 10 | 83% | 6% |
| TOTAL | 597 | 363 | 61% | 142 | 63 | 44% | 24% |

PROPOSED USE OF FUNDS, UNMET NEEDS AND LONG TERM RECOVERY

Summary of Proposed Use of Funds:

The Small Business Administration and FEMA have made substantial funding available to Businesses, Homeowners, Rental Property Owners, and Not for Profits to deal with the impacts of Hurricane Isaac. The City will continue to utilize other available funds in a manner that takes into account any unmet housing and economic development needs and encourages development and rehabilitation which will protect people and property from future harm and mitigate hazard risk.

The greatest need and best use of the CDBG-DR funds is to assist in recovery from the effects of Hurricane Isaac in a strategy that mitigates the impact of future storms by completing the infrastructure work necessitated and exacerbated by Hurricane Isaac. The City will carry out those activities directly.

The proposed activities are set forth below:

Catch Basin Cleaning (URGENT COMMUNITY DEVELOPMENT NEED)

During Hurricane Isaac, persistent rain and high wind caused debris to collect in the catch basins throughout the City of New Orleans. This caused a significant amount of clogging in the City's drainage infrastructure. The clogging of the City's drainage system components caused the drainage system to be hindered in performing its function of dispersing the water from the streets and neighborhoods. This caused a significant increase in risk of continued flooding post-Isaac from future rain events. The City preformed a significant drainage system cleaning project to ensure that all Hurricane Isaac debris was cleared from the catch basins and the drain lines. It is estimated that the City had to clean 24,900 catch basins and clear 1,800,000 linear feet of drain lines due to the effects of Hurricane Isaac. Although a portion of this project will be funded by FEMA, there is anticipated to be a significant amount of this work that will not be funded by FEMA as well as a cost share associated with the FEMA funded portion.

Following an event of the magnitude of Hurricane Isaac the only feasible, and typically the most cost effective, means to determine and locate potential hazards due to debris is to clean the entire system. Visual inspection is not feasible, and video inspection is generally not cost effective to identify and pinpoint storm-related debris. Based on 311 (the City's non-emergency phone center) records street flooding due to clogged inlets was evident, and occurred at various locations throughout the City. Based on historical evidence from previous events and initial findings following Hurricane Isaac, the City proceeded with cleaning efforts within 35 designated areas established based on the 311 system calls and verbal communications from EOC operations and personnel on the ground, prioritizing the most impacted areas. (The 35 designated areas do not encompass the entire City.)

According to the National Weather Service the rainfall total for the course of Tropical Storm/Hurricane Isaac for New Orleans as of 7 p.m., August 30, was 20.08 inches, with hourly amounts in excess of the system's pumping capacity. Wind speeds were reported to be as high as 80 mph, with gusts in excess of 100 mph.

The cleaning services performed, and to be performed, generally include the use of vacuum and water jetting equipment to remove sediment, debris and other waste materials from obstructed storm sewer pipes and structures. The purpose of the cleaning services is to help reduce flooding, prevent structural failures, and keep the City's drainage system in an operational condition.

The City storm sewer cleaning contract, utilized pre-Isaac and post-Isaac, is based on a per "each" unit price basis for the cleaning of structures and a per "linear foot" unit price basis for the cleaning of drain lines. The amount of debris removed is not the basis of this contract.

The risks associated with flooding, especially during significant rain events in New Orleans, due to potentials obstructed inlets and/or foreign materials in the storm sewer system is significant. Generally, debris contained within drain lines in a closed system is not visually detectable or apparent. Even the smallest obstructions and/or reductions in capacity due to debris within a storm sewer system can result in additional flooding and undue harm to residents.

Debris Removal and Monitoring (URGENT COMMUNITY DEVELOPMENT NEED)

Hurricane force winds and heavy rainfall from Hurricane Isaac resulted in massive debris scattered throughout the City. The debris was deposited within the City's rights of way, roads, public parks, and other locations for which the City is responsible to remove debris. This debris, consisting of vegetative material, loose construction materials, spoiled or damaged household goods, marsh grass and mud, was a threat to the health and safety of the citizens of the New Orleans and was expeditiously removed in order to eliminate the danger. The City performed a minor amount of the debris removal work itself, but also had to procure and engage debris removal contractors and debris monitoring experts to perform the massive debris removal program. The amount of Hurricane Isaac debris totaled over 200,000 cubic yards.

City Infrastructure Permanent Work (URGENT COMMUNITY DEVELOPMENT NEED)

Hurricane Isaac caused significant damages to the City's infrastructure. The hurricane force winds caused damage to over 2,000 street lights, uprooted trees throughout the City causing damage to sidewalk and roads in approximately 35 locations, and ripped tens of street signs from poles throughout the City.

Force Account Labor/Materials/Equipment (URGENT COMMUNITY DEVELOPMENT NEED)

In order to prepare and respond properly to Hurricane Isaac, the City provided Force Account Labor (FAL) and Force Account Equipment (FAE) to perform emergency protective measures during the event. The City had personnel from the New Orleans Office of Homeland Security and Emergency Preparedness, NOFD, NOPD, NOEMS, the Department of Sanitation, the Health Department, and DPW, among others, work on keeping the citizens of New Orleans and the City's assets safe during and immediately after Hurricane Isaac. The City's emergency personnel set up and operated the EOC,

performed safety patrols, responded to Hurricane related emergency scenarios, helped citizens in need find shelter, oversaw a massive debris removal effort, and performed other emergency response duties. In performing these duties, the City used its police cruisers, fire trucks and pumpers, EMS equipment, backhoes, tractors, flatbeds, and other equipment.

Facility Permanent Repairs (URGENT COMMUNITY DEVELOPMENT NEED)

The hurricane force winds from Hurricane Isaac caused major damage to the City's facilities. The damages mostly consisted of wind-driven rain penetrating building envelopes causing water damage to building interiors and high winds damaging the buildings' roofing, glazing, and cladding. The following is a list of the significant damage to City facilities:

- a. New Orleans Museum of Art
Wind-driven rain penetrated the NOMA exterior envelope causing water damage to the basement's interior finishes.
- b. New Orleans Museum of Art Warehouse
High winds caused significant roof damage allowing massive water penetration which caused water damages to the interior including mold.
- c. Criminal District Court
Wind driven rain penetrated the building envelope causing significant damage to interiors.
- d. DPW Warehouse
High winds caused a collapse of a storage warehouse for the City's Department of Public Works. This building was in an unsafe condition and was demolished.
- e. Municipal Yacht Harbor
A small portion of the City's assets are located outside of the City's levee protection systems. One of these facilities is the City's Municipal Yacht Harbor. Hurricane Isaac created storm surges in excess of 10 feet high. This surge caused significant damage to the Municipal Yacht Harbor pier and dock systems.
- f. High Mast Lighting and Park Fencing
High winds caused structural failure of high mast lighting and fencing through the City park and playground facilities.
- g. Wind Damages to Multiple City Facilities
High winds and torrential rains caused many other miscellaneous less severe damages to numerous City facilities such as damages to electrical components due to power surges, minor rain water penetration and broken windows.

Residential Demolitions (ADDRESSING SLUM AND BLIGHT)

Due to the high winds of Hurricane Isaac, several private residential structures sustained damage to an extent that they became Imminent Dangers of Collapse (IDC) and were an immediate threat to the public. The City of New Orleans is responsible eliminating these public threats by demolishing the

structures declared as IDC's. Following Hurricane Isaac, the City of New Orleans determined that 63 structures were IDC's and had them demolished; 46 remain to be demolished.

Drainage Point Repairs (URGENT COMMUNITY DEVELOPMENT NEED)

The City has located 618 damaged drain lines throughout the City that will require point repairs. The poor condition of these drainage points was exacerbated by Hurricane Isaac. These drain lines are the primary way that the City fights flooding. Damaged drain lines compromise the integrity of the City's storm water drainage system by preventing water from draining as designed, causing unnecessary flooding and allowing storm water to infiltrate into the roadway foundation, creating sinkholes and undermining the structural integrity of the roadway and damaging water, sewer, and other underground utility lines. These repairs will restore drainage system capacity and repair damaged roadway foundations in the area of the drain line failure to reduce the potential of the type of flooding that was experienced during Hurricane Isaac. These repairs will allow storm water to drain off streets quicker in future storms and reduce flooding. They will prevent future damage to roadways, waterlines, and sewer lines due to settlement and erosion from water leaks in the drain lines.

A properly sized and functioning storm water drainage system is essential to the protection of the public, property, and infrastructure of any metropolitan area. This is especially true in the City of New Orleans, where a significant portion of the city is at or below sea level. This topography presents a unique challenge for storm water drainage.

The City's storm water drainage system is one of the most extensive and complex systems in existence. It consists of approximately 117,770 drainage manholes, catch basins, and inlets, 2,700 miles of underground drainage pipes and canals, 90 miles of open canals, 13 underpass pumping stations, and 22 drainage pumping stations. When it rains, the system is designed to drain an inch of rainfall off the streets in the first hour, and then an additional half-inch of rainfall each additional hour. Rain fall is intended to drain off the streets along curbs gutters and open ditches into catch basins which flow into small drainage pipes that are less than 18 inches in diameter. The small drainage pipes drain the water into larger drainage pipes and canals which take the water to pumping stations. There are two West Bank pumping stations and two stations in Eastern New Orleans that pump rainwater into the Intracoastal Waterway and the Industrial Canal.

Damage to the catch basins and/or small drainage pipes that are designed to drain rainwater off neighborhood streets and into larger drainage pipes and canals so that it can be pumped out of the City has been identified in 618 locations city-wide. This damage consists of cracked, partially collapsed, or fully collapsed drainage pipes and/or catch basins. This damage prevents water in these areas from draining as rapidly as possible, causing unnecessary and prolonged flooding of streets and property. In the underground drainage pipes themselves, cracks in the pipes allow water to seep out into the foundation of the roadway, causing it to weaken and erode, creating voids underneath the roadways and eventually causing sinkholes to form and/or other catastrophic damage to occur. On the surface, damaged drainage pipes can cause cracks in the pavement and settlement in the pavement and on