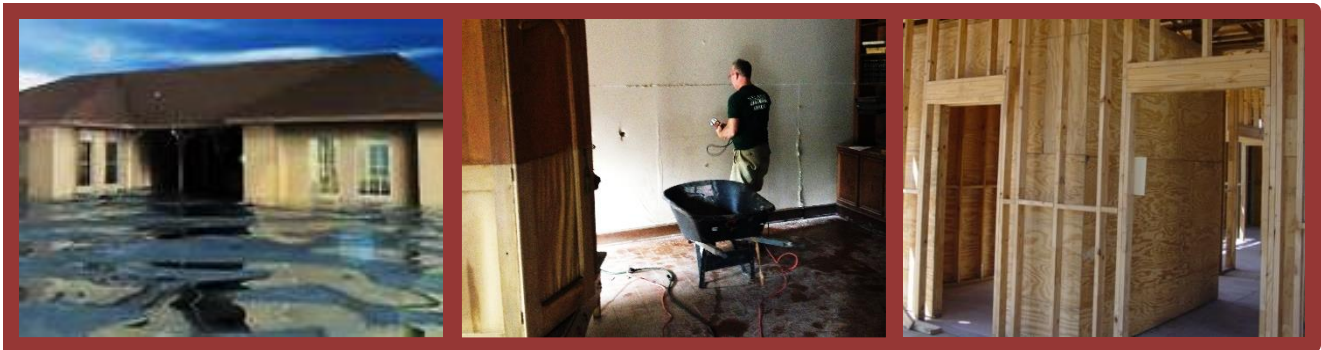


DISASTER RECOVERY INITIATIVE  
U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

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Allocations, Waivers and Alternative Requirements for Grantees Receiving Community Development Block Grant  
Disaster Recovery Funds in Response to Disasters Occurring in 2016  
*The Continuing Appropriations Act, 2017 (Public Law 114-223)*  
Federal Register Docket No. FR-5989-N-01

LOUISIANA OFFICE OF COMMUNITY DEVELOPMENT, DISASTER RECOVERY UNIT



**STATE OF LOUISIANA PROPOSED  
MASTER ACTION PLAN  
FOR THE UTILIZATION OF  
COMMUNITY DEVELOPMENT BLOCK GRANT FUNDS  
IN RESPONSE TO THE GREAT FLOODS OF 2016**

Public Comment Period: December 14, 2016 – January 3, 2017

[John Bel Edwards](#)

Governor

**Billy Nungesser**

Lieutenant Governor



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# 1. Executive Summary

In 2016, Louisiana had two separate events that qualified for appropriation under Public Law 114-223. The state experienced severe storms and flooding in both March (Disaster Number 4263) and August (Disaster Number 4277) 2016 – collectively referred to as the 2016 Severe Storms and Flooding – resulting in 56 of the state’s 64 parishes receiving a federal disaster declaration. From the March event, more than 16,462 homes have Federal Emergency Management Agency (FEMA) Verified Loss and 5,222 renters have FEMA Verified Loss (FVL), for a total of 21,684 households. The National Weather Service designated the August flooding event that dropped an unprecedented 7 trillion gallons of rainwater in South Louisiana as a “1,000-year” rainfall event. It resulted in the flooding of more than 68,380 homes with FVL and 23,248 renters with FVL, for a total of 91,628 households. The August storm claimed 13 lives.

## A. March Storm (DR-4263)

In early March 2016, a storm system brought heavy thunderstorms from west to east across most of Louisiana. In addition to wind damage, record flooding occurred along the Bogue Falaya River in Covington and Bayou Dorcheat at Lake Bistineau. Governor John Bel Edwards declared a state of emergency for several parishes and sent the National Guard to help with search-and-rescue missions.

The State of Louisiana estimates that this storm caused damage to more than 21,684 residences, forced 13,000 evacuations and 2,780 rescues, damaged another 6,143 structures, and caused numerous road closures. Road and bridge damage estimates totaled \$20 million. Agricultural losses totaled approximately \$15 million, with long-term impacts to farmers estimated at \$80 million. In addition, more than 40,000 citizens registered for FEMA Individual Assistance (IA).

Thirty-six Louisiana parishes were declared eligible for FEMA IA: Allen, Ascension, Avoyelles, Beauregard, Bienville, Bossier, Caddo, Calcasieu, Caldwell, Catahoula, Claiborne, DeSoto, East Carroll, Franklin, Grant, Jackson, LaSalle, Lincoln, Livingston, Madison, Morehouse, Natchitoches, Ouachita, Rapides, Red River, Richland, Sabine, St. Helena, St. Tammany, Tangipahoa, Union, Vernon, Washington, Webster, West Carroll and Winn. Seven of these parishes also flooded in August: Ascension, Avoyelles, Livingston, St. Helena, St. Tammany, Tangipahoa and Washington.

## B. August Storm (DR-4277)

In mid-August 2016, a slow-moving storm impacted multiple South Louisiana parishes with sustained heavy rain. In what was a 1,000-year flood, within two days more than two feet of rain was measured in some areas, causing extensive surface and river flooding. Both the Amite and Comite rivers overtopped, as well as numerous bayous, lakes and canals located within these drainage basins. Governor John Bel Edwards declared a state of emergency for several parishes and sent the National Guard to help with search-and-rescue missions.

An estimated 8,000 people were evacuated to emergency shelter sites. The American Red Cross, the state and faith-based organizations operated these sites. A state-operated medical site was established to serve individuals with medical needs. Roughly 30,000 search and rescues were performed, with 11,000 citizens sheltered at the peak of the flood.

The damage to infrastructure, businesses and homes across the southern region of the state was extensive. Large sections of state roads remained under water for extended periods. An estimated 30 state roads washed out and 1,400 bridges require inspection. Along with more than 200 highways that closed during the event, sections of Interstates 10 and 12 closed for multiple days due to floodwaters. Some stretches of I-10 remained closed for nearly a week, significantly interrupting interstate commerce.

More than 91,628 homes have documented damages to date, with the number expected to rise as FEMA registrations and inspections conclude. An estimated 31 percent of homes in the declared parishes were impacted by flooding, with only 11 percent of households in these areas carrying flood insurance. Based on current registration numbers and historic trends, it is estimated that more than 200,000 households will apply for IA, with an estimated housing unmet need in excess of \$2.44 billion.

Immediately following the August 2016 flooding event, the Louisiana Department of Economic Development partnered with Louisiana State University to conduct an assessment of economic losses resulting from the floods. Key details are:

- At the peak of the August event, 19,900 Louisiana businesses or roughly 20 percent of all Louisiana businesses were disrupted by the flooding event. FEMA has since referred approximately 22,000 businesses to SBA for recovery assistance.
- A disruption of 278,500 workers or 14 percent of the Louisiana workforce occurred at the peak of the flooding event.
- An economic loss estimated at roughly \$300 million in labor productivity and \$836 million in terms of value added during the period immediately surrounding the flood.
- Approximately 6,000 businesses experienced flooding.
- The LSU Ag Center estimates Louisiana agricultural losses of over \$110 million.

Twenty-two Louisiana parishes were declared eligible for FEMA IA: Acadia, Ascension, Avoyelles, East and West Baton Rouge, East Feliciana, Evangeline, Iberia, Iberville, Jefferson Davis, Lafayette, Livingston, Pointe Coupee, St. Helena, St. James, St. Landry, St. Martin, St. Tammany, Tangipahoa, Vermilion, Washington and West Feliciana. Seven of these parishes also flooded in March: Ascension, Avoyelles, Livingston, St. Helena, St. Tammany, Tangipahoa and Washington.

### C. Anticipated Unmet Needs Gap

During the October 10 Congressional Session, state government officials, including Gov. John Bel Edwards, traveled to Washington D.C. and worked collaboratively with Louisiana’s Congressional Delegation to secure long-term disaster recovery resources in response to DR-4263 and DR-4277. Working with limited disaster loss unmet need information, Louisiana’s delegation proposed a relief package of nearly \$3.8 billion. This package focused primarily on housing needs, as the state has prioritized housing as its most urgent and pressing recovery concern following the two flooding events. Through this Action Plan, the state now presents revised unmet need estimates based on current best available data. Over time, the state reserves the right to continue to update these estimates as additional assessments are made and more complete data becomes available.

Accounting for this initial \$437,800,000 appropriation for long-term recovery purposes, the state has calculated a remaining unmet need gap of \$5,590,809,214.

Summary of Total Unmet Needs			
Category	Losses/Gaps	Known Investments	Remaining Unmet Need
Owner-Occupied Housing	\$2,448,293,435		\$2,448,293,435
Homeowner Rehabilitation and Reconstruction (CDBG-DR)		(\$405,800,000)	(\$405,800,000)
Renter Housing	\$233,257,000		\$233,257,000
Rental Housing Rehabilitation (CDBG-DR)		(\$20,000,000)	(\$20,000,000)

Homeless Assistance	\$2,820,014		\$2,820,014
Agriculture Losses (DR-4277)	\$110,244,069		\$110,244,069
Agriculture Losses (DR-4263)	\$80,285,185		\$80,285,185
Business Structures	\$595,600,000		\$595,600,000
Business Equipment	\$262,800,000		\$262,800,000
Business Inventories	\$1,425,500,000		\$1,425,500,000
Business Interruption Loss	\$836,400,000		\$836,400,000
SBA Business/EIDL Loans		(\$147,296,500)	(\$147,296,500)
Business and Agriculture Recovery (CDBG-DR)		(\$12,000,000)	(\$12,000,000)
PA State Share	\$114,583,930		\$114,583,930
HMGP State Share	\$92,705,885		\$92,705,885
Resilience Gaps	\$600,000,000		\$600,000,000
NFIP Claim Totals		(\$626,583,804)	(\$626,583,804)
<b>Totals</b>	<b>\$6,802,489,518</b>	<b>(\$1,211,680,304)</b>	<b>\$5,590,809,214</b>

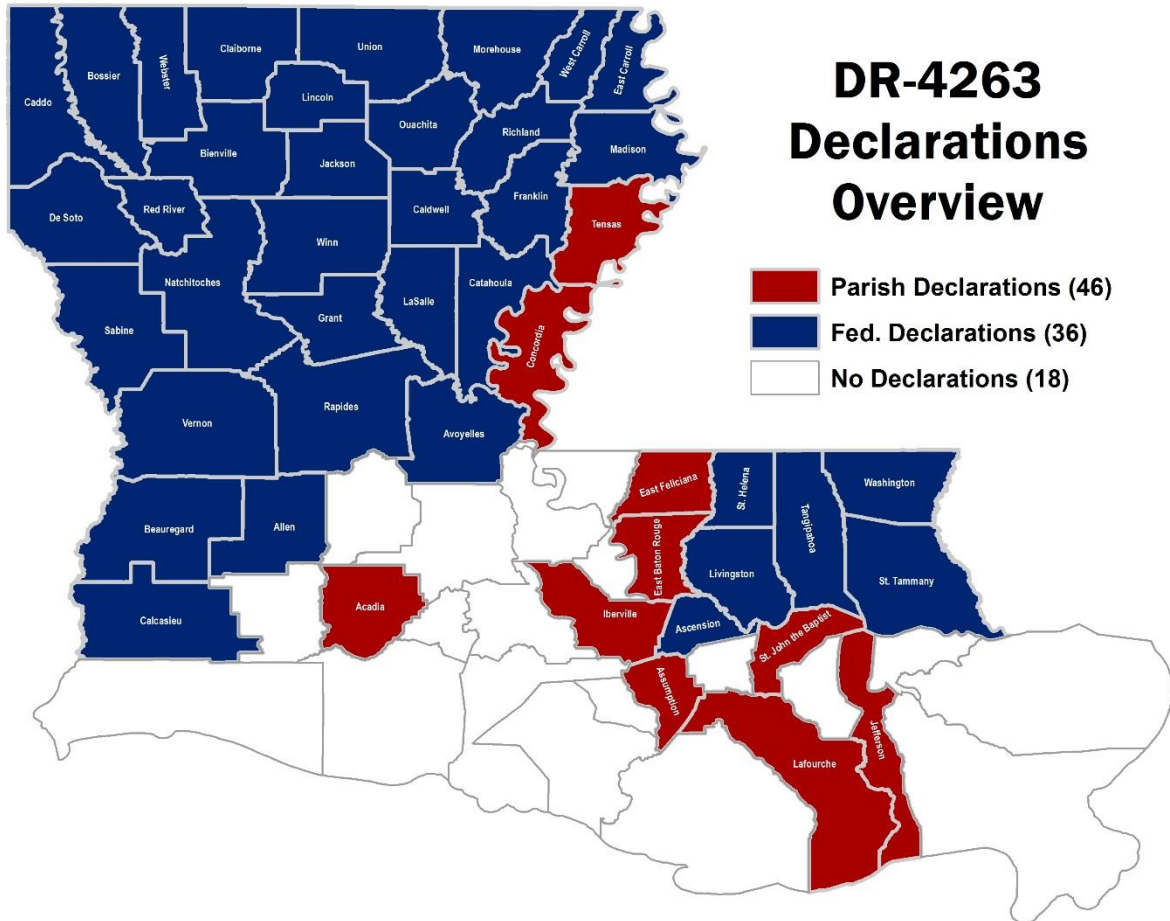
*\*CDBG-DR investments are inclusive of administration and program delivery costs.*

#### D. Conclusion

As a result of the 2016 Severe Storms and Flooding, the State of Louisiana received an allocation (Public Law 114-223) of Community Development Block Grant Disaster Recovery (CDBG-DR) funding. To fulfill the requirements of this allocation, the state must submit an Action Plan for Disaster Recovery that identifies its unmet recovery and resilience needs to the Department of Housing and Urban Development (HUD). Governor Edwards has designated the state Office of Community Development - Disaster Recovery Unit (OCD-DRU) as the administering agency for these recovery funds. On behalf of the State of Louisiana, OCD-DRU developed the following Action Plan to outline the proposed use of the CDBG-DR funds and eligible activities available to assist declared parishes to meet unmet housing, economic revitalization, public service, infrastructure, planning and other needs that arose as a result of these two storm events.

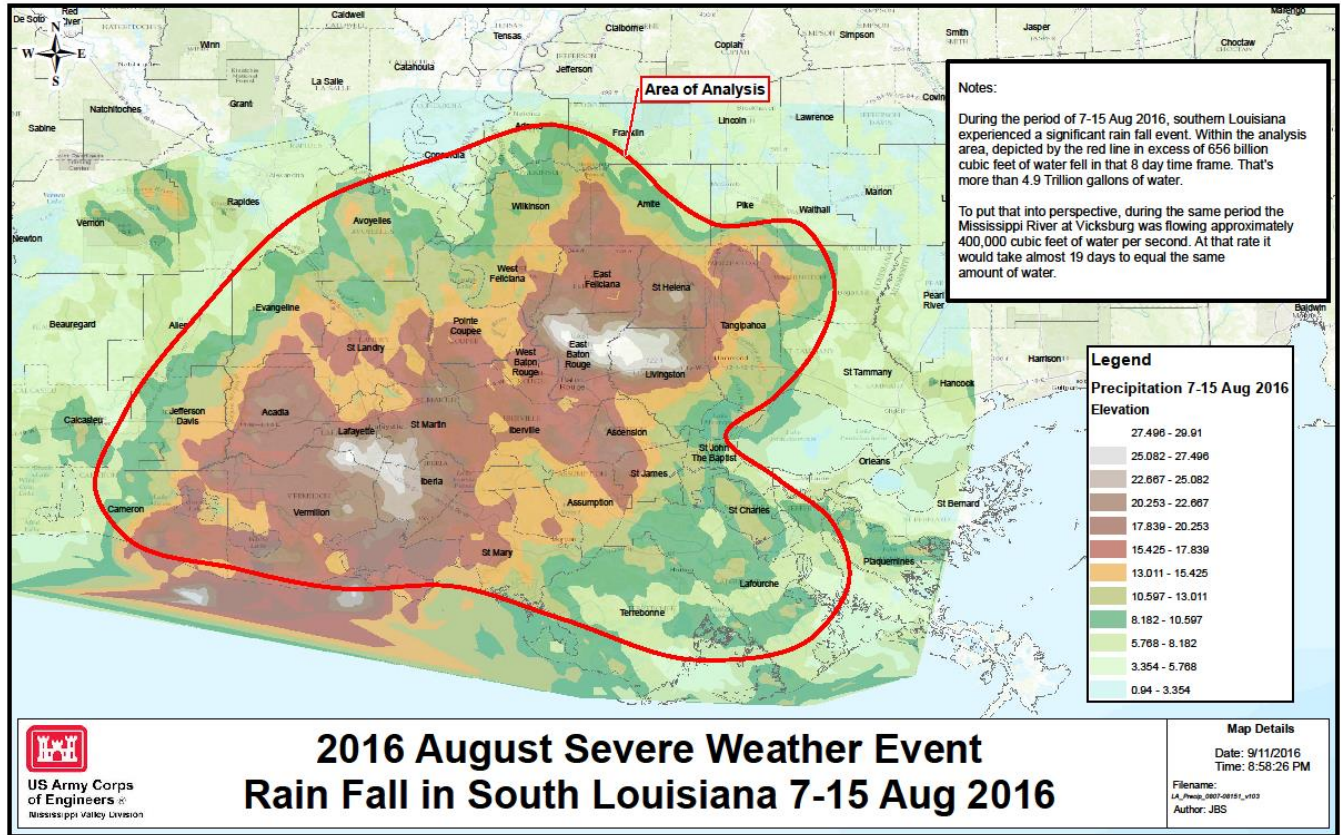
## E. Maps

### 1. FEMA Impacted Parishes and Federal Declarations: DR-4263 (March 2016 floods)





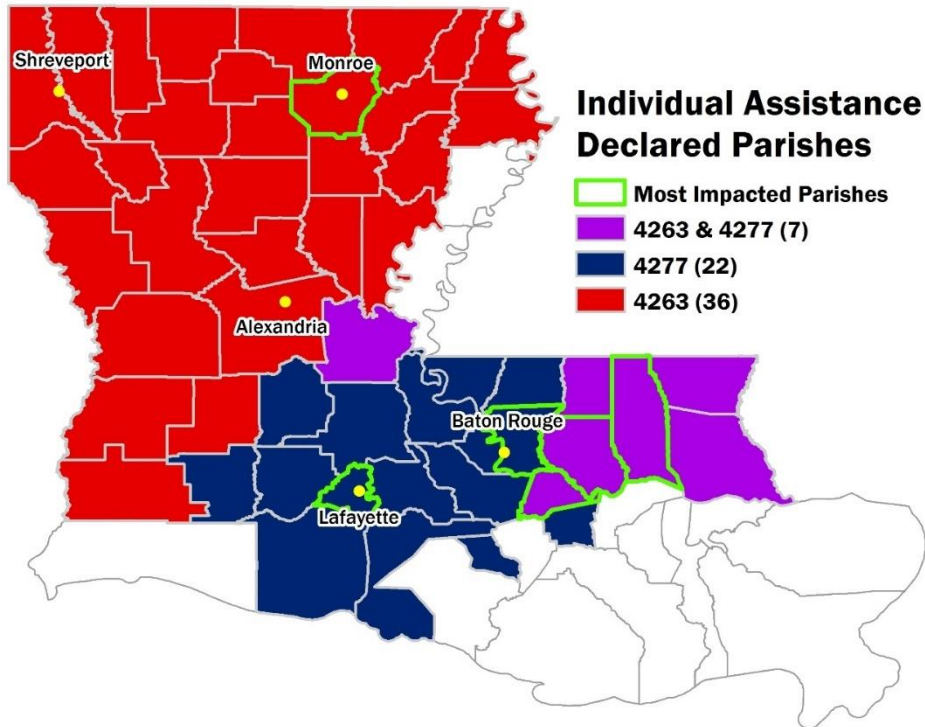
### 3. Army Corps of Engineers Map – August Deluge Amounts



## 2. Impact and Unmet Needs Assessment

### A. Background

In accordance with HUD guidance, the State of Louisiana completed the following unmet needs assessment to identify priorities for CDBG-DR funding allocated as a result of two separate significant rain and flooding events, DR-4263 in March and DR-4277 in August. Combined, these disasters affected 56 of the state's 64 parishes, with 51 parishes declared eligible for FEMA IA. The assessment below utilizes federal and state resources, including data provided by FEMA, HUD and the Small Business Administration (SBA), among other sources, to estimate unmet needs in three main categories of damage: housing, economy and infrastructure. HUD has identified the six most impacted parishes from these two events as Ascension, East Baton Rouge, Lafayette, Livingston, Ouachita and Tangipahoa. This unmet needs assessment focuses on statewide impacts, with specific sections detailing particular needs within the most impacted area, and where relevant, smaller geographic units.



### B. Housing Impact & Needs

#### 1. Demographic Profile of the Affected Areas

More than 72 percent of the state's population is located within the 51 IA parishes affected by DR-4263 or DR-4277 floods. Of this total, 36 percent of the population residing in the 51 IA parishes is located within one of the six parishes identified by HUD as most impacted, including three of the state's largest metropolitan areas, Baton Rouge, Lafayette and Monroe, as well as two parishes currently experiencing significant population growth, Ascension and Livingston. It is important to note that the population residing within the six most impacted parishes comprises roughly one quarter (25.98 percent) of the state's total population. Although the affected region tends to share similar demographic trends with the

state as a whole, there are several key areas (African-American population, education level, and poverty indicators) in which the data differ. Unless otherwise noted, all data cited in this section are from the Census Bureau's 2014 five-year estimates from the American Community Survey (ACS).

The six most impacted parishes have a slightly larger African-American population compared to the balance of state and the other IA parishes. By percentage, 32.31 percent of the population in the six most impacted parishes is African-American, which is roughly 1 percentage point more than that of the state as a whole (31.91 percent) and almost 2 percentage points more than that of the 51 IA parishes (30.67 percent). At the parish level, East Baton Rouge (45.20 percent) and Ouachita (37 percent) parishes have the largest proportion of African-American residents, while another most impacted parish, Livingston is only 6 percent African-American.

Within the six most impacted parishes, 27.74 percent of the population age 25 years or older had attained a bachelor's degree or higher. This number is roughly 5 percentage points more than both the statewide total (22.55 percent) and the 51 IA parishes (22.13 percent). This may be attributable to the presence of five major universities within the most impacted parishes. Louisiana State University (East Baton Rouge), Southern University (East Baton Rouge), the University of Louisiana at Lafayette (Lafayette), the University of Louisiana Monroe (Ouachita) and Southeastern Louisiana University (Tangipahoa) are five strategically important educational institutions as well as significant economic drivers for their regions and the state as a whole.

Of the six most impacted parishes, there are significant outliers worth noting in reference to educational attainment. For example, in Tangipahoa Parish 19.45 percent of the population aged 25 or older has a bachelor's degree or higher, proportionally 14.86 percentage points less than that of East Baton Rouge Parish and 8.29 percentage points less than the six most impacted parishes combined. Of the six most impacted parishes, East Baton Rouge had the highest proportion of population age 25 or older with a bachelor's degree or more at 34.31 percent.

Housing and income demographics also highlight differences between the 51 IA parishes and the state as a whole. For instance, the 51 IA parishes have a median owner-occupied housing unit value and median household income that are significantly lower than that of the state. The median value of owner-occupied housing units in the 51 IA parishes is \$91,225, \$49,175 less than the statewide total (\$140,400). Meanwhile, the most impacted parishes collectively have a higher median owner-occupied housing unit value than the statewide total. The median owner-occupied housing unit value for the six most impacted parishes is \$157,450, \$17,050 higher than statewide. The six most impacted parishes also have a larger proportion of renters than both the state and the other IA parishes. At 30.87 percent, the six most impacted parishes collectively are home to a renter population that is almost 3 percentage points higher than the other IA parishes (27.73 percent) and more than 1 percentage point higher than the statewide total (29.12 percent).

The 51 IA parishes have a median household income of \$39,347, \$5,644 less than the statewide median household income of \$44,991. In addition to a lower median household income, the 51 IA parishes have a per capita income that is significantly less than that of the state as a whole. The 51 IA parishes have a per capita income of \$21,456, \$3,319 less than the statewide per capita income of \$24,775.

Poverty indicators across the affected area also deviate from statewide totals. In the six most impacted parishes, the proportion of people with income below the poverty line is higher than the other IA parishes or statewide totals. 27.22 percent of households in the most impacted area have incomes below the

poverty line, 8.21 percentage points more than statewide totals and 7.89 more than the other IA parishes, respectively.

<b>Demographic Profile</b>						
<b>2010-2014 American Community Survey 5-Year Estimates</b>						
	<b>Louisiana</b>		<b>51 PDD Parishes</b>		<b>6 Most Impacted Parishes</b>	
<b>Demographics</b>	<b>Estimates</b>	<b>% of State</b>	<b>Estimates</b>	<b>% of 51 PDD</b>	<b>Estimates</b>	<b>% of 6 MI</b>
<b>TOTAL POPULATION:</b>	4,601,049	100.00%	3,317,519	100.00%	1,195,560	100.00%
Under 5 years	311,324	6.77%	227,206	6.85%	82,927	6.94%
65 years and over	593,807	12.91%	430,421	12.97%	135,832	11.36%
White alone	2,748,538	59.74%	2,084,305	62.83%	725,082	60.65%
Black or African American alone	1,468,208	31.91%	2,084,305	30.67%	386,237	32.31%
American Indian and Alaska Native alone	25,498	0.55%	13,542	0.41%	2,566	0.21%
Asian alone	74,878	1.63%	41,325	1.25%	21,165	1.77%
Native Hawaiian and Other Pacific Islander alone	1,604	0.03%	1,147	0.03%	164	0.01%
Two or more races	64,641	1.40%	45,508	0.99%	15,101	1.26%
Hispanic or Latino	210,524	4.58%	109,878	3.31%	43,807	3.66%
Population 16 years and over in civilian labor force	2,192,054	47.64%	1,555,399	46.88%	609,201	50.96%
	<b>Louisiana</b>		<b>51 PDD Parishes</b>		<b>6 Most Impacted Parishes</b>	
<b>Housing Demographics</b>	<b>Estimates</b>	<b>% of State</b>	<b>Estimates</b>	<b>% of 51 PDD</b>	<b>Estimates</b>	<b>% of 6 MI</b>
<b>TOTAL HOUSING UNITS:</b>	1,988,460	100.00%	1,410,498	100.00%	496,030	100.00%
Average Household Size	2.61	(X)	2.60	(X)	2.66	(X)
Owner-occupied	1,139,756	57.32%	836,710	59.32%	292,195	58.91%
Renter-occupied	579,120	29.12%	391,076	27.73%	153,107	30.87%
Median Value of owner-occupied housing units (in 2014 dollars)	\$140,400.00	(X)	\$ 91,225.00	(X)	\$157,450.00	(X)

Median gross rent (in 2014 dollars)	\$ 786.00	(X)	\$ 614.25	(X)	\$ 778.00	(X)
<b>TOTAL HOUSEHOLDS:</b>	1,718,876	100%	1,227,786	71%	445,302	26%
Civilian noninstitutionalized population without health insurance	747,454	16.25%	527,873	15.91%	186,540	15.60%
Estimate of noninstitutionalized population with a disability*	674,156	15%	495,017	15%	156,951	13%
Language other than English Spoken at Home, Over Age of 5*	369,719	9%	221,293	7%	85,588	8%
2015 Building Permits**	12,222	(X)	10,264	(X)	5,161	(X)
	<b>Louisiana</b>		<b>51 PDD Parishes</b>		<b>6 Most Impacted Parishes</b>	
<b>Income/Economic Demographics</b>	<b>Estimates</b>	<b>% of State</b>	<b>Estimates</b>	<b>% of 51 PDD</b>	<b>Estimates</b>	<b>% of 6 MI</b>
Median household income (in 2014 dollars)	\$ 44,991.00	(X)	\$ 39,347.75	(X)	\$ 49,970.50	(X)
Per capita income (in 2014 dollars)	\$ 24,775.00	(X)	\$ 21,456.25	(X)	\$ 26,533.00	(X)
Income in the past 12 months below poverty level:	874,638	19.01%	641,395	19.33%	325,457	27.22%
	<b>Louisiana</b>		<b>51 PDD Parishes</b>		<b>6 Most Impacted Parishes</b>	
<b>Education Demographics</b>	<b>Estimate</b>	<b>% of State</b>	<b>Estimate</b>	<b>% of 51 PDD</b>	<b>Estimates</b>	<b>% of 6 MII</b>
Population 25 years and over:	2,932,993	100.00%	2,081,554	100.00%	744,729	100.00%
Less than high school graduate	486,080	16.57%	333,637	16.03%	100,580	13.51%
High school graduate (includes equivalency)	991,471	33.80%	718,245	34.51%	230,095	30.90%
Some college, associate's degree	793,996	27.07%	568,935	27.33%	207,462	27.86%
Bachelor's degree or higher	661,446	22.55%	460,737	22.13%	206,592	27.74%

**Source:** U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

\*\*U.S. Census Bureau, 2015 Building Permits, Reported Units, <http://censtats.census.gov/bldg/bldgprmt.shtml>

TABLES: B17001, S1701, DP03, DP04, DP05

### *Social Vulnerability Index (SoVI®)*

SoVI® is a tool for assessing pre-existing vulnerabilities to environmental hazards. The index is a comparative metric that facilitates the examination of differences in social vulnerability at a certain level of geography. The index, in this iteration, synthesizes 27 socioeconomic variables, which, with support from research literature, can contribute to a reduction in a community's ability to prepare for, respond to and recover from hazards. The SoVI® built in this assessment is primarily derived from U.S. Census Bureau data.

The SoVI® created for the 51 IA parishes affected by DR-4263 or DR-4277 incorporates six general components synthesizing these 27 socioeconomic variables:

- Class and race
- Non-extractive (less rural)
- Age
- Ethnicity
- Gender
- Housing characteristics (persons per unit, renters, unoccupied units, female-headed households)

SoVI® has high utility as a decision-support tool for emergency management. The tool shows where there is uneven capacity for preparedness and response and where resources might be used most effectively to reduce the pre-existing vulnerability. The SoVI® metric turns historical disaster impact measures into actionable information for emergency managers, recovery planners, and decision makers as a whole. It empirically measures and visually depicts a population's inability and/or ability to adequately prepare for, respond to, and rebound from disaster events.

By coupling SoVI® with other data sources, such as the IA dataset, NFIP data and SBA data, the state is capable of identifying concentrations of greatest need for additional recovery resources. The state has collaborated with its counterparts in South Carolina, who used this methodology to plan long-term recovery efforts following its 2015 flooding events, to strategize how SoVI® can be an apolitical approach for distributing scarce disaster recovery dollars to provide optimal benefit to the places that were worst impacted and least able to recover on their own from this disaster.

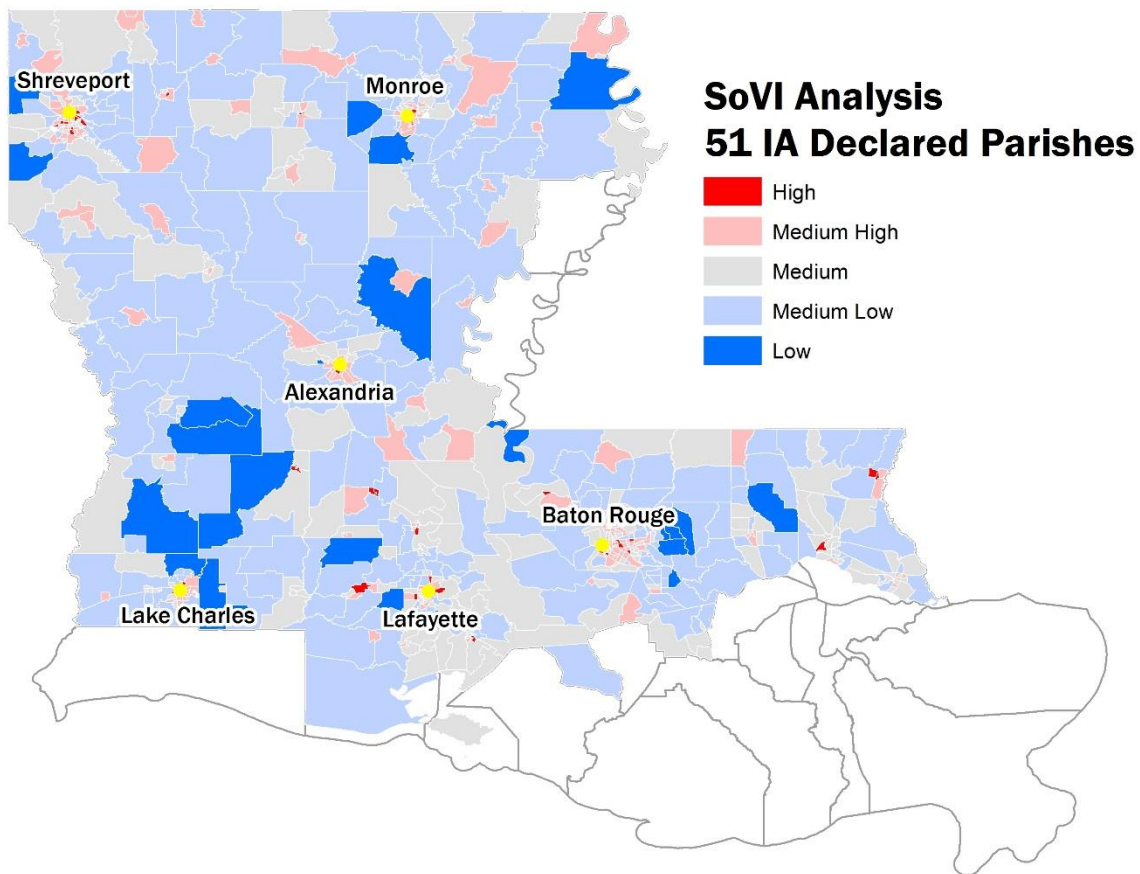
A SoVI® analysis of the 51 IA parishes indicates the areas with the highest levels of pre-existing social vulnerability are in the metropolitan areas of Alexandria, Baton Rouge, Lafayette, Lake Charles, Monroe and Shreveport. For example, there are total of 38 "high" SoVI® census tracts in these six metropolitan areas, representing more than 80 percent of the 47 "high" SoVI® census tracts across the total 51 IA parishes. This is significant due to large concentrations of damage found in a few of these areas, notably Baton Rouge, Lafayette and Monroe. Specifically, there are 18 "high" SoVI® tracts in these three impacted metropolitan areas. The six impacted metropolitan areas also have a high proportion of "medium high" SoVI® tracts. Of the 140 total "medium high" SoVI® tracts in the 51 IA parishes, 119 of those census tracts, or more than 66 percent, are within these six metropolitan areas. 66 of these "medium high" SoVI® tracts are located within Baton Rouge, Lafayette and Monroe.

The state will use the information from the SoVI® analysis as a planning and implementation tool to ensure the most vulnerable populations are engaged in the programs. Understanding the locations of the "medium high" to "high" SoVI® census tracts will equip the state's outreach team with the information needed to further engage local governments, non-profits and other stakeholders representing these areas in order to coordinate efforts and understanding as how to best serve "medium high" to "high" SoVI® census tracts residents. Additionally, the state will be able to use the SoVI® analysis as a tool to ensure

robust engagement and participation of “medium high” to “high” SoVI® census tracts through the targeted efforts of the homeowner program manager who will ensure vulnerable populations are provided the support needed to access the program. Another way in which the SoVI® analysis will be deployed as a useful tool for program planning is in the state’s assessment and strategy for the development of affordable housing. Using the SoVI® bivariate analysis will allow the state to consider racial, ethnic and low-income concentrations in order to work to provide affordable housing in low-poverty, non-minority and low-risk areas.

**SoVI® Summary:**

- **Alexandria** – 3 “high” SoVI® tracts (6 percent of the IA parish total) and 13 “medium high” SoVI® tracts (7 percent of the IA parish total).
- **Baton Rouge** – 8 “high” SoVI® tracts (17 percent of the IA parish total) and 38 “medium high” SoVI® tracts (21 percent of the IA parish total).
- **Lafayette** – 5 “high” SoVI® tracts (11 percent of the IA parish total) and 16 “medium high” SoVI® tracts (9 percent of the IA parish total).
- **Lake Charles** – 2 “high” SoVI® tracts (1 percent of the IA parish total) and 14 “medium high” SoVI® tracts (8 percent of the IA parish total).
- **Monroe** – 5 “high” SoVI® tracts (11 percent of the IA parish total) and 12 “medium high” SoVI® tracts (7 percent of the IA parish total).
- **Shreveport** – 15 “high” SoVI® tracts (32 percent of the IA parish total) and 26 “medium high” SoVI® tracts (14 percent of the IA parish total).
- There are a total of 710 census tracts in the 51 IA parishes.
- There are 47 “high” SoVI® tracts in the 51 IA parishes.
- There are 180 “medium high” SoVI® tracts in the 51 IA parishes.



### *Housing Affordability*

The state is specifically concerned about housing affordability and the high proportion of households statewide and in the affected area considered to be “cost burdened.” The standard measurement of rental unaffordability considers any household that spends more than 30 percent of its pre-tax income on housing as having an affordability problem. Housing is considered “affordable” if the rent (including utilities) is no more than 30 percent of its pre-tax income. Households spending more than 30 percent are “cost burdened” or “rent-stressed,” and those spending more than 50 percent are labeled “severely cost burdened” or “severely rent-stressed.”

In a recent report released by the National Low Income Housing Coalition (NLIHC), in no state can a minimum wage worker afford a two-bedroom rental unit at the average fair market rent, working a standard 40-hour work week, without paying more than 30 percent of their income for housing. The minimum wage in Louisiana is \$7.25 per hour; however a household must earn \$15.81 per hour to avoid paying more than 30 percent of income on housing (and utilities) to afford a 2-bedroom unit at the fair market rent of \$822 per month.

According to ACS data, 46 percent of Louisiana renters and 21 percent of homeowners are cost burdened, while 25 percent of renters and 9 percent of homeowners are severely cost burdened. In total, 501,610 households statewide are cost burdened and 241,725 are severely cost burdened.

Within the 51 IA parishes, a similar percentage of renters experience cost burden (45 percent) or severe cost burden (23 percent) as compared to the state overall. Similarly, a comparable percentage of homeowners are cost burdened (19 percent) or severely cost burdened (8 percent) compared to the state overall. In total, 337,380 households in IA parishes are cost burdened, and 157,187 are severely cost burdened.

By comparison, renters in the six most impacted parishes experience cost burden (48 percent) and severe cost burden (26 percent) at slightly higher rates than the state or IA areas overall. Homeowners within the most impacted parishes experience similar levels of cost burden (20 percent) and severe cost burden (8 percent) compared to the IA parishes and state overall. In total, 132,545 households in the most impacted parishes are cost burdened, and 64,145 are severely cost burdened.

<b>Cost Burdened Renters and Owners</b>			
	<b>State of Louisiana</b>	<b>Presidentially Declared Disaster Areas</b>	<b>Most Impacted Parishes</b>
<b>Cost Burdened Renters</b>	267,146	174,938	72,958
<b>Percent of Renters with Cost Burden</b>	46%	45%	48%
<b>Severe Cost Burden Renters</b>	144,224	91,611	40,461
<b>Percent of Renters with Severe Cost Burden</b>	25%	23%	26%
<b>Cost Burdened Owners</b>	234,464	162,442	59,587
<b>Percent of Homeowners with Cost Burden</b>	21%	19%	20%
<b>Severely Cost Burdened Owners</b>	97,501	65,576	23,684
<b>Percent of Homeowners with Severe Cost Burden</b>	9%	8%	8%

*Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates  
Mortgage Status by Selected Monthly Owner Costs as a Percentage of Household Income in the Past 12 Months for Owner Occupied Housing*

*Gross Rent as a Percentage of Household Income in the Past 12 months*

*Note: Cost Burden is defined as renter or owner households spending over 30 percent of household income on rent or mortgage.*

## 2. Statewide Housing Damage and Loss Assessment

To articulate the extent of damage, the state compiled information to document damages across several different population stratifications, including owner-occupied and renter households, households without flood insurance, households located outside of the Special Flood Hazard Area (SFHA), households within the six most impacted parishes, Low and Moderate Income (LMI) households, households with Access and Functional Needs (AFN) and households with applicants aged 62 and older.

For the purposes of this analysis, the state used full applicant-level data collected through FEMA's IA program. DR-4263 IA data were pulled on 11/10/16 and DR-4277 IA data were pulled on 11/3/16. Unless otherwise noted, all housing summary data were compiled from these two datasets.

Furthermore, unless otherwise specifically noted, the state has defaulted to HUD’s definitions of unmet need for owner-occupied and renter households. For rental properties, to meet the statutory requirement of “most impacted,” homes are determined to have a high level of damage if they have damage of "major-low" or higher. That is, they have a FEMA personal property damage assessment of \$2,000 or greater or flooding over 1 foot. Furthermore, landlords were presumed to have adequate insurance coverage unless the unit is occupied by a renter with income of \$20,000 or less. Units occupied by a tenant with income less than \$20,000 were used to calculate likely unmet needs for affordable rental housing.

To calculate the level of damage for rental households, the state used the following criteria:

- **Minor-Low:** Less than \$1,000 of FEMA inspected personal property damage
- **Minor-High:** \$1,000 to \$1,999 of FEMA inspected personal property damage
- **Major-Low:** \$2,000 to \$3,499 of FEMA inspected personal property damage or more than 1 foot of flooding on the first floor.
- **Major-High:** \$3,500 to \$7,499 of FEMA inspected personal property damage or 4 to 6 feet of flooding on the first floor.
- **Severe:** Greater than \$7,500 of FEMA inspected personal property damage or determined destroyed and/or 6 or more feet of flooding on the first floor.

To calculate the level of damage for owner-occupied households, the state used the following criteria:

- **Minor-Low:** Less than \$3,000 of FEMA inspected real property damage
- **Minor-High:** \$3,000 to \$7,999 of FEMA inspected real property damage
- **Major-Low:** \$8,000 to \$14,999 of FEMA inspected real property damage and/or more than 1 foot of flooding on the first floor.
- **Major-High:** \$15,000 to \$28,800 of FEMA inspected real property damage and/or 4 to 6 feet of flooding on the first floor.
- **Severe:** Greater than \$28,800 of FEMA inspected real property damage or determined destroyed and/or 6 or more feet of flooding on the first floor.

The average cost for full home repair to code for a specific disaster within each of the damage categories noted above is calculated using the average real property damage repair costs determined by the SBA for its disaster loan program for the subset of homes inspected by both SBA and FEMA for 2011 to 2013 disasters. Because SBA inspects for full repair costs, it presumes to reflect the full cost to repair the home, which is generally more than FEMA estimates on the cost to make the home habitable.

For each household determined to have unmet housing needs, their estimated average unmet housing need less assumed assistance from FEMA, SBA, and Insurance was calculated at \$27,455 for major damage (low); \$45,688 for major damage (high); and \$59,493 for severe damage. Unless otherwise noted, when quoting an estimated total for unmet housing need, the state has relied on these estimates to calculate a specific dollar amount. Data is not currently available from HUD respective to estimated needs at the minor-high and minor-low categories.

Owner-Occupied Households Estimated Unmet Need Baseline	
Damage Category	Estimated Needs
Severe	\$ 59,493

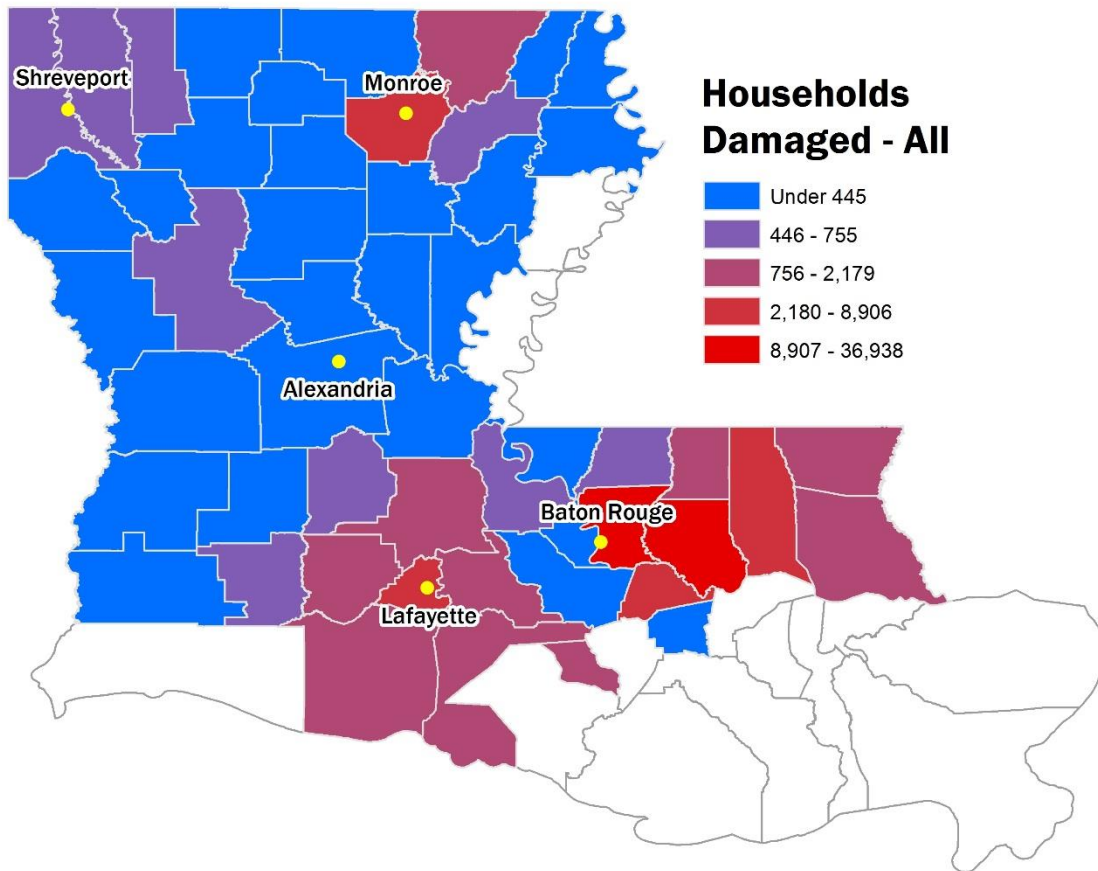
<b>Major-High</b>	\$	45,688
<b>Major-Low</b>	\$	27,455
<b>Minor-High</b>	\$	-
<b>Minor-Low</b>	\$	-

The state reserves the right to revisit this methodology, once it has conducted its own analysis specific to DR-4263 and DR-4277 comparing damages documented through FEMA’s real property inspections, inspections conducted in response to claims made to the National Flood Insurance Program (NFIP) and inspections conducted for the purposes of the SBA disaster loan program. Additionally, the state intends to use real-time unmet needs assessments gathered through its own program intake and inspection process to further inform this analysis over time.

*Total Impact (Owner-Occupied and Renter Households)*

The information below outlines the total household population with documented damages. For the purposes of this analysis, the state has concluded a household has documented damage if FEMA reported a FEMA FVL of greater than \$0. Across both disasters, 113,312 households were found to have some level of documented damage, including 84,842 owner-occupied and 28,470 renter households. While the majority of instances of housing damage can be attributed to DR-4277 (91,628 of 113,312, or 81 percent), the state is aware this is at least partially attributable to the fact DR-4277 generally affected larger population centers like Lafayette and metropolitan Baton Rouge, while DR-4263 generally affected more rural parishes and communities.

While these data validate HUD’s identification of the six most impacted parishes, the state is also concerned about levels of damage in several parishes just below this most impacted threshold, specifically Acadia, Iberia, Morehouse, St. Landry, St. Martin, St. Tammany, Vermilion and Washington parishes. The map below includes all documented instances of housing damage, irrespective of the level of damage.



Households with Damage				
Disaster	Parish	Owners	Renters	Total
<b>4263</b>	Ouachita	3,449	2,684	6,133
	Tangipahoa	2,378	769	3,147
	Washington	1,133	303	1,436
	Morehouse	1,021	290	1,311
	St. Tammany	933	178	1,111
	Caddo	594	120	714
	Bossier	612	78	690
	Natchitoches	613	76	689
	Richland	451	147	598
	Webster	533	50	583
	Livingston	453	72	525
	Union	412	33	445
	West Carroll	351	31	382
	St. Helena	342	25	367
	Vernon	320	34	354
Calcasieu	286	38	324	

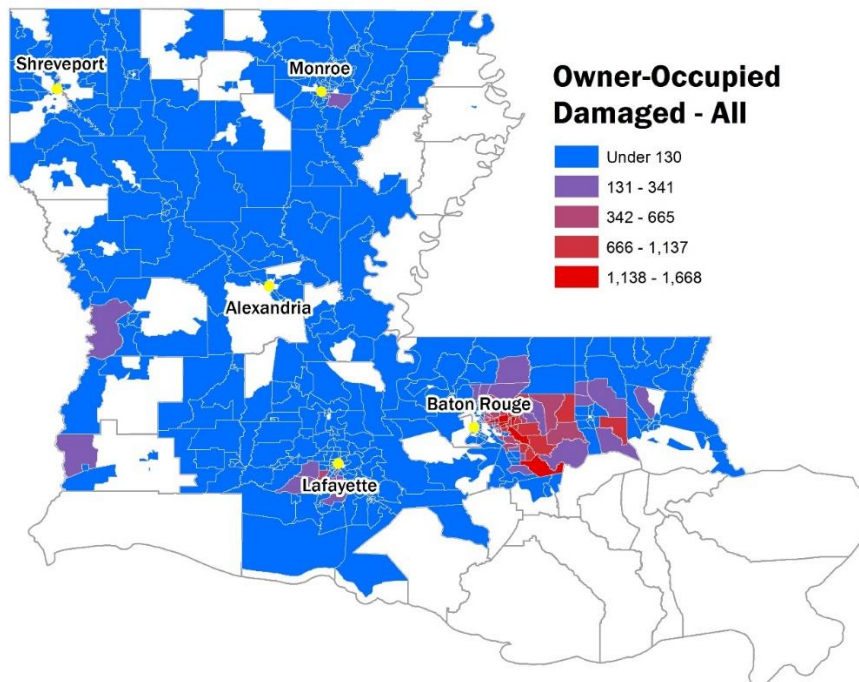
Households with Damage				
Disaster	Parish	Owners	Renters	Total
	Grant	296	27	323
	East Carroll	241	53	294
	Bienville	214	17	231
	Claiborne	203	23	226
	Winn	183	33	216
	Lincoln	156	17	173
	Rapides	151	21	172
	De Soto	145	14	159
	Caldwell	148	9	157
	Beauregard	127	17	144
	Ascension	109	21	130
	Sabine	102	2	104
	Madison	86	16	102
	Allen	77	6	83
	LaSalle	76	7	83
	Jackson	73	4	77
	Catahoula	74	1	75
	Franklin	62	3	65
	Red River	46	3	49
	Avoyelles	12	-	12
	<b>Total</b>	<b>16,462</b>	<b>5,222</b>	<b>21,684</b>
<b>4277</b>	East Baton Rouge	24,255	12,683	36,938
	Livingston	15,972	4,746	20,718
	Ascension	6,395	1,438	7,833
	Tangipahoa	4,655	1,104	5,759
	Lafayette	4,798	852	5,650
	Vermilion	1,819	360	2,179
	Acadia	1,555	445	2,000
	St. Landry	1,600	398	1,998
	Iberia	1,466	400	1,866
	St. Martin	1,339	120	1,459
	St. Helena	922	105	1,027
	East Feliciana	653	102	755
	Evangeline	531	142	673
	Jefferson Davis	507	62	569
	Pointe Coupee	451	100	551
	Iberville	356	39	395
	Avoyelles	262	75	337
	St. Tammany	216	18	234
	Washington	199	28	227

Households with Damage				
Disaster	Parish	Owners	Renters	Total
	West Feliciana	160	11	171
	St. James	159	10	169
	West Baton Rouge	107	10	117
	Calcasieu	2	-	2
	Rapides	1	-	1
	<b>Total</b>	<b>68,380</b>	<b>23,248</b>	<b>91,628</b>
	<b>Grand Total</b>	<b>84,842</b>	<b>28,470</b>	<b>113,312</b>

*Impact on Owner-Occupied Households*

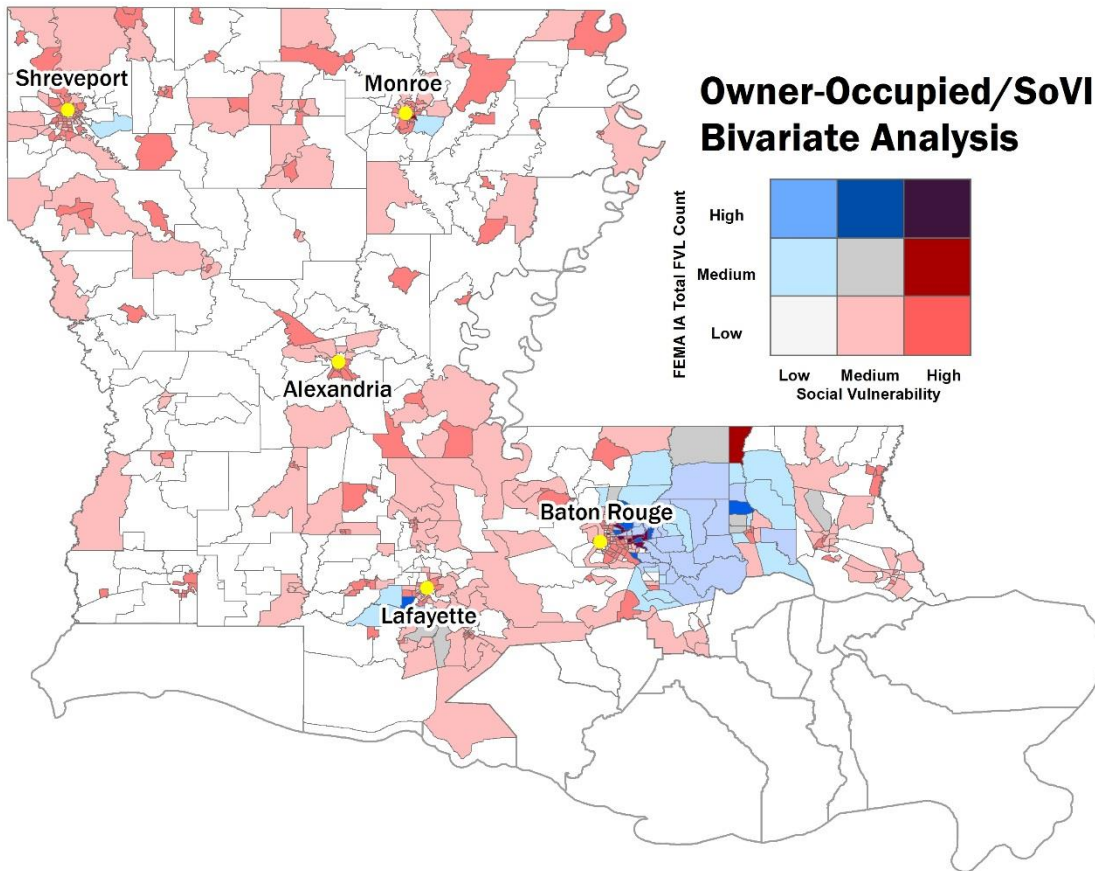
By far, the greatest number of instances of significant owner-occupied housing damage occurred in the Baton Rouge Capital Region, specifically in East Baton Rouge, Livingston, Ascension and Tangipahoa parishes. Other population centers around Monroe (Ouachita Parish) and Lafayette (Lafayette Parish) also experienced significant owner-occupied housing damages. Finally, the state is mindful of two additional pockets of significant damage along the Sabine River, in Calcasieu and Vernon parishes, respectively.

For the purposes of this section, the state includes all documented damages to the owner-occupied household population at all levels of damage in tabular format. For mapping purposes, this analysis only includes those households with “major-low,” “major-high” and “severe” levels of damage at the census tract. This map illustrates those housing units with significant and likely unmet needs.



<b>Owner-Occupied Households with Damage</b>		
<b>Disaster</b>	<b>Damage Category</b>	<b>Households</b>
<b>4263</b>	Severe	675
	Major-High	2,276
	Major-Low	3,979
	Minor-High	1,503
	Minor-Low	8,029
	<b>Total</b>	<b>16,462</b>
<b>4277</b>	Severe	11,249
	Major-High	24,270
	Major-Low	15,182
	Minor-High	3,849
	Minor-Low	13,830
	<b>Total</b>	<b>68,380</b>
	<b>Grand Total</b>	<b>84,842</b>

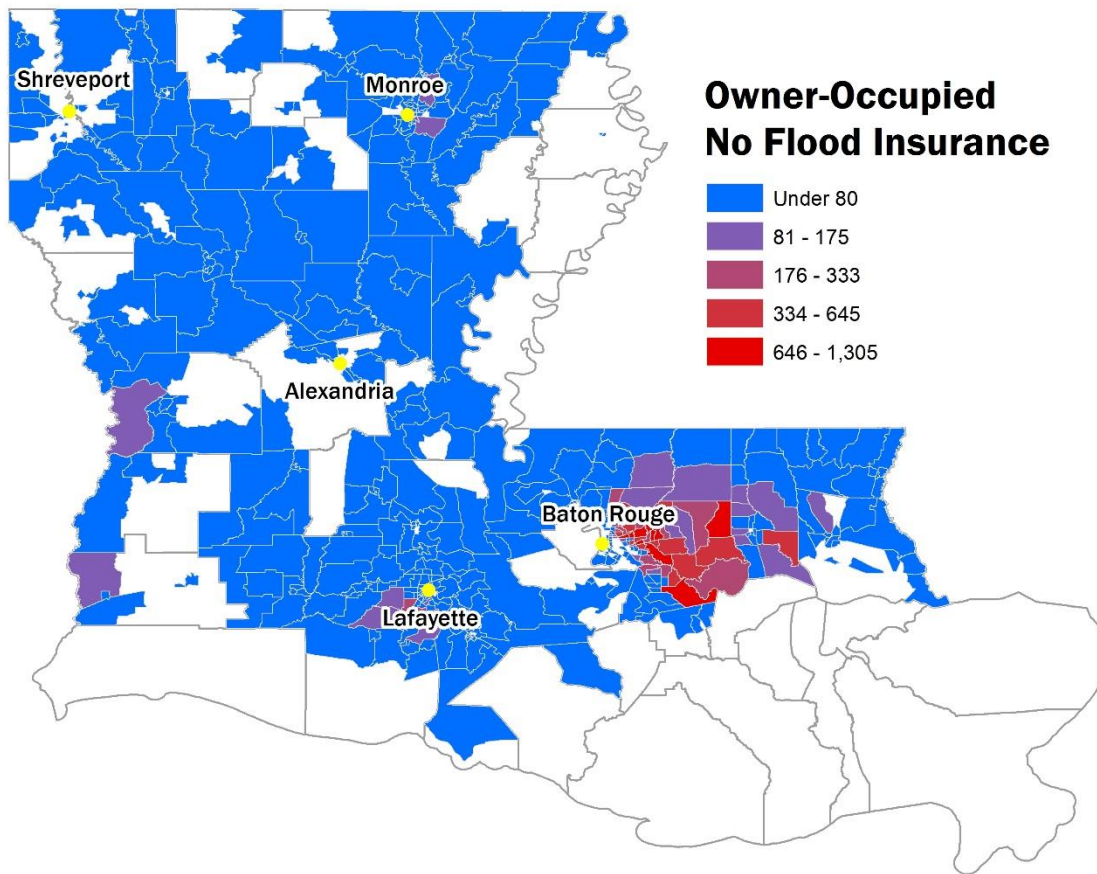
This analysis generally assumes areas with greatest need are going to be those that have both high concentrations of damage as well as a high level of pre-existing social vulnerability. Utilizing this bivariate approach identifies specific corridors of concern. For owner-occupied household populations, a concentration of need is found in corridors throughout the Baton Rouge Capital Region. There are a total of six census tracts in the 51 IA declared parishes classified as having high levels of damage as well as high levels of social vulnerability. All six of these census tracts are located within the Capital Region. Five of the census tracts are located within East Baton Rouge Parish, specifically, and one is located in Livingston Parish. These census tracts are all within a five-mile area and five of the six census tracts are located in a line along the I-12/Florida Boulevard corridor that runs between Baton Rouge and Denham Springs. The state will note these particular areas of interest as it conducts programmatic outreach and intake.



<b>Owner-Occupied Households with Damage (SoVI Designation)</b>		
<b>Disaster</b>	<b>SoVI (5-Class)</b>	<b>Households</b>
<b>4263</b>	High	659
	Medium-High	4,122
	Medium	3,743
	Medium-Low	7,515
	Low	423
	<b>Total</b>	<b>16,462</b>
<b>4277</b>	High	895
	Medium-High	10,335
	Medium	18,994
	Medium-Low	32,424
	Low	5,732
	<b>Total</b>	<b>68,380</b>
	<b>Grand Total</b>	<b>84,842</b>

Of particular concern is the high proportion of owner-occupied households with damage who did not report carrying insurance through the National Flood Insurance Program (NFIP). In total, 72 percent of all impacted owner-occupied households, or 61,069, did not report having insurance. This represents a unique situation for the state, as in previous significant disaster events – hurricanes Katrina, Rita, Gustav, Ike and Isaac - there was a reasonable anticipation some damages may have been attributable to wind or other events that may have been covered by a homeowner’s hazard insurance policy. As these events were flood-exclusive, the state has no such reasonable anticipation any of the losses incurred by this population were met by other insurance policies.

Additionally, it is important to note the high instances of owner-occupied households with significant levels of damage who were uninsured. 36,510 households of the 61,069 uninsured total had damage levels of “major-low,” “major-high” or “severe,” accounting for more than 59 percent of the affected and uninsured owner-occupied population.

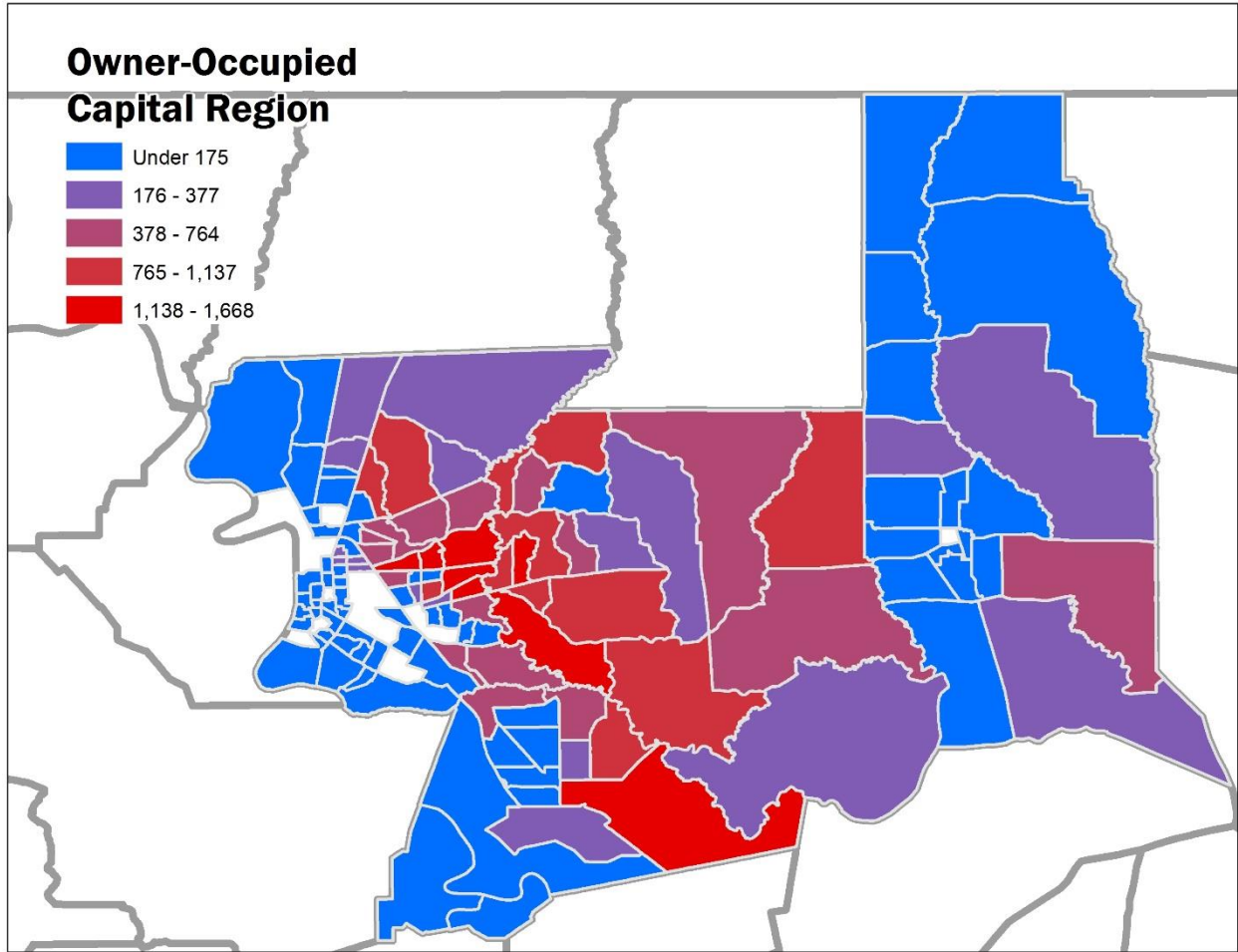


<b>Owner-Occupied Households with No Flood Insurance</b>			
<b>Disaster</b>	<b>Damage Category</b>	<b>Households</b>	<b>Percent of Total Damaged</b>
<b>4263</b>	Severe	481	71%
	Major-High	1,448	64%
	Major-Low	3,079	77%
	Minor-High	1,258	84%
	Minor-Low	7,563	94%

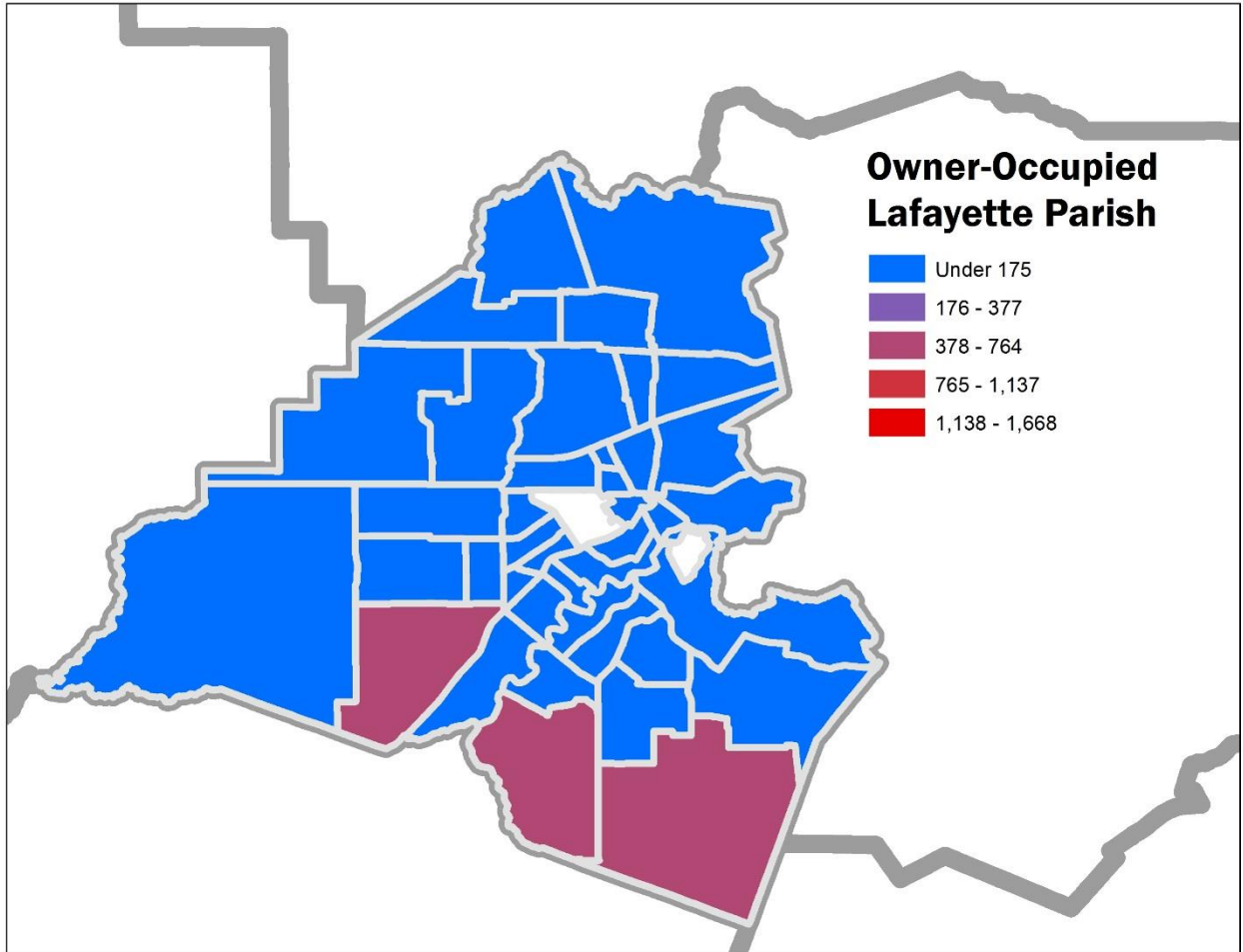
<b>Owner-Occupied Households with No Flood Insurance</b>			
<b>Disaster</b>	<b>Damage Category</b>	<b>Households</b>	<b>Percent of Total Damaged</b>
	<b>Total</b>	<b>13,829</b>	<b>84%</b>
<b>4277</b>	Severe	6,071	54%
	Major-High	14,470	60%
	Major-Low	10,961	72%
	Minor-High	3,130	81%
	Minor-Low	12,608	91%
	<b>Total</b>	<b>47,240</b>	<b>69%</b>
	<b>Grand Total</b>	<b>61,069</b>	<b>72%</b>

To drilldown on affected owner-occupied populations in the six-parish most impacted area, the state prepared the following detailed maps illustrating instances of owner-occupied household damages at the census tract. As the state conducts housing program intake, it will attempt to coordinate outreach efforts in accordance with locales with high-levels of documented damages.

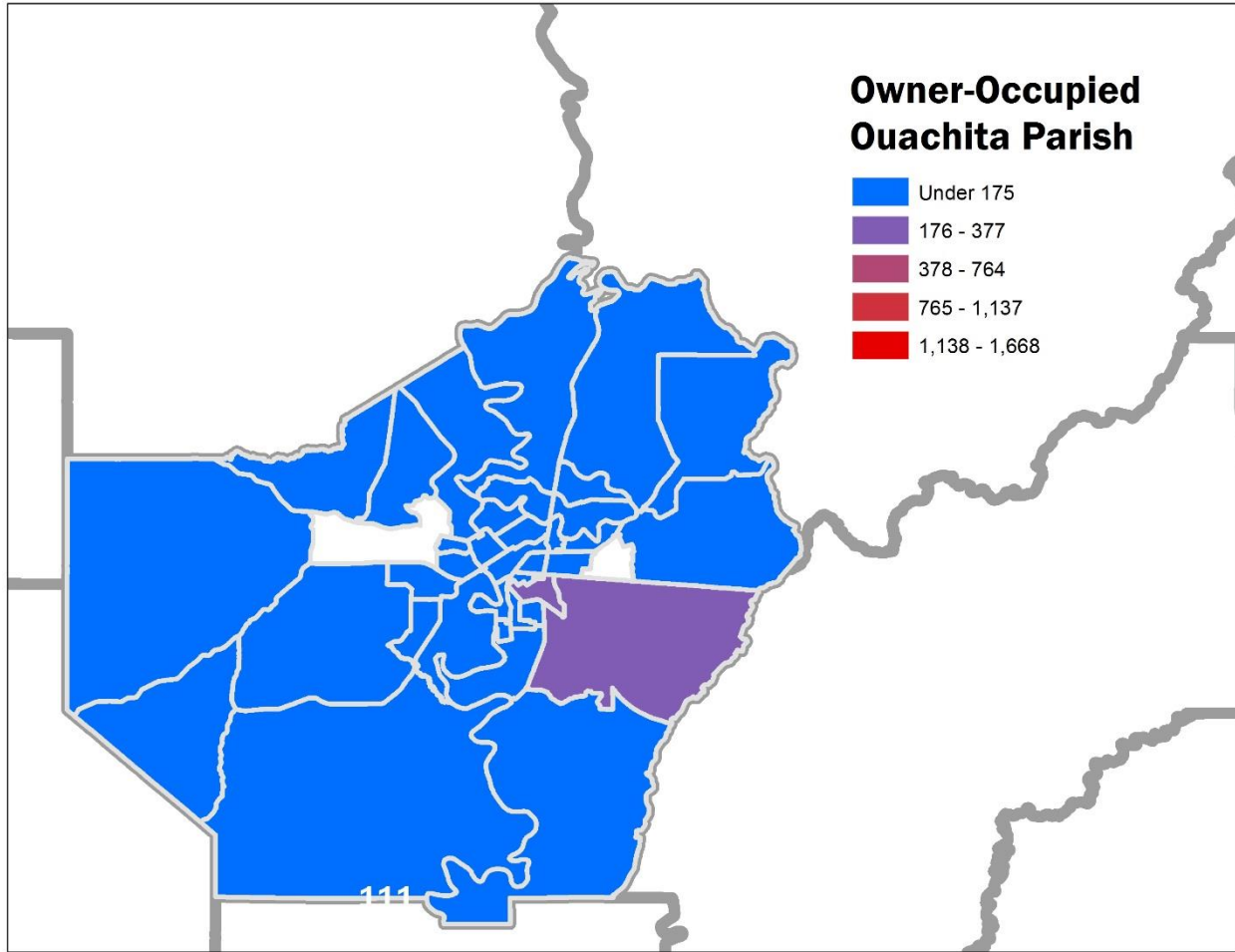
It is important to note 62,464 of the total 84,842 owner-occupied households with damage are located within the six-parish most impacted area, representing more than 73 percent of the total. Additionally, 48,796 households within that population are likely to have unmet needs, with damage levels at “major-low,” “major-high” or “severe.” This population represents more than 84 percent of the 57,631 affected owner-occupied households likely to have unmet needs.



*Represents households with “major-low,” “major-high” and “severe” levels of damage.*



*Represents households with "major-low," "major-high" and "severe" levels of damage.*

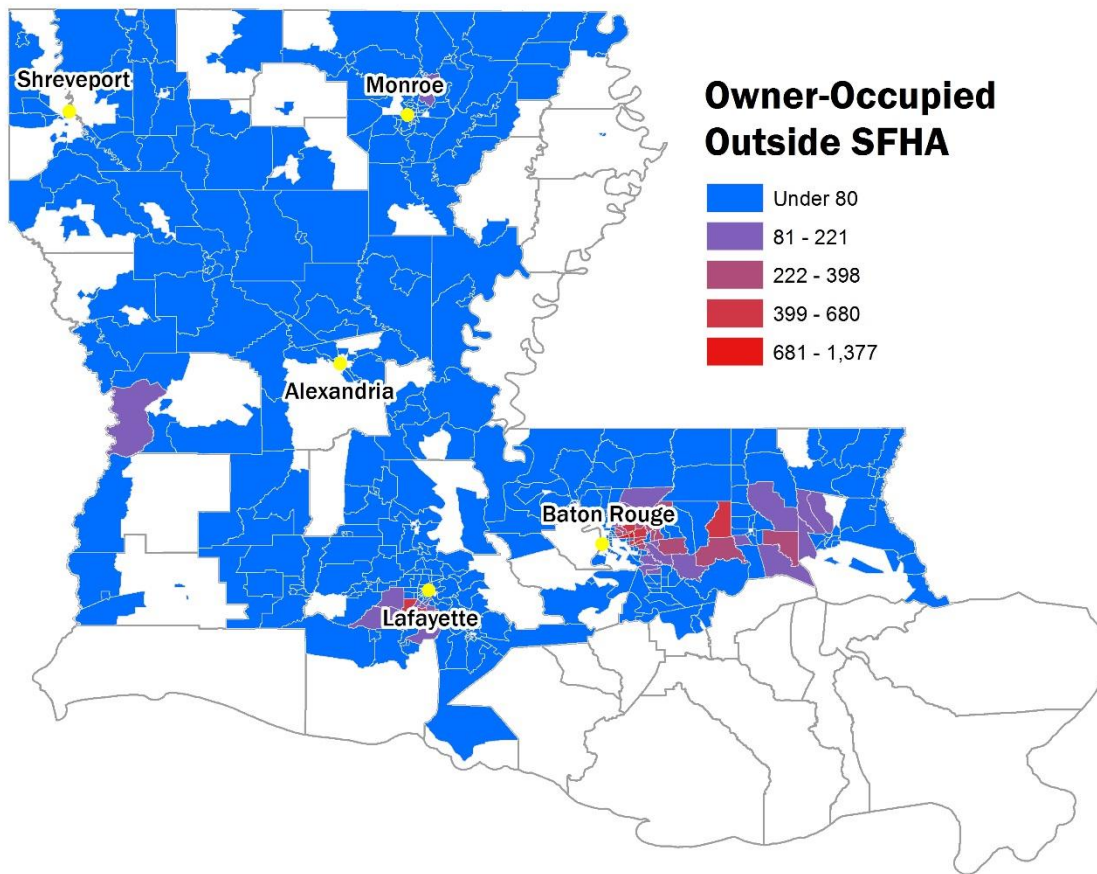


*Represents households with “major-low,” “major-high” and “severe” levels of damage.*

<b>Owner-Occupied Households in Most Impacted Parishes</b>		
<b>Disaster</b>	<b>Damage Category</b>	<b>Households</b>
<b>4263</b>	Severe	119
	Major-High	952
	Major-Low	1,722
	Minor-High	697
	Minor-Low	2,899
	<b>Total</b>	<b>6,389</b>
<b>4277</b>	Severe	11,037
	Major-High	23,151
	Major-Low	11,788
	Minor-High	2,583
	Minor-Low	7,516
	<b>Total</b>	<b>56,075</b>
	<b>Grand Total</b>	<b>62,464</b>

The rainfall events associated with DR-4263 and DR-4277 were each considered to be, in some areas, “one in 1,000 year” events, or events with an annual expected occurrence rate of 0.001 percent. As a result, an unusually high proportion of affected owner-occupied households were located outside of the 100-year floodplain, or the Special Flood Hazard Area (SFHA). Accordingly, these households were not required to carry flood insurance if they had a mortgage. Combined with the high proportion of affected households without flood insurance, the state believes these factors have exacerbated housing unmet needs relative to past disasters.

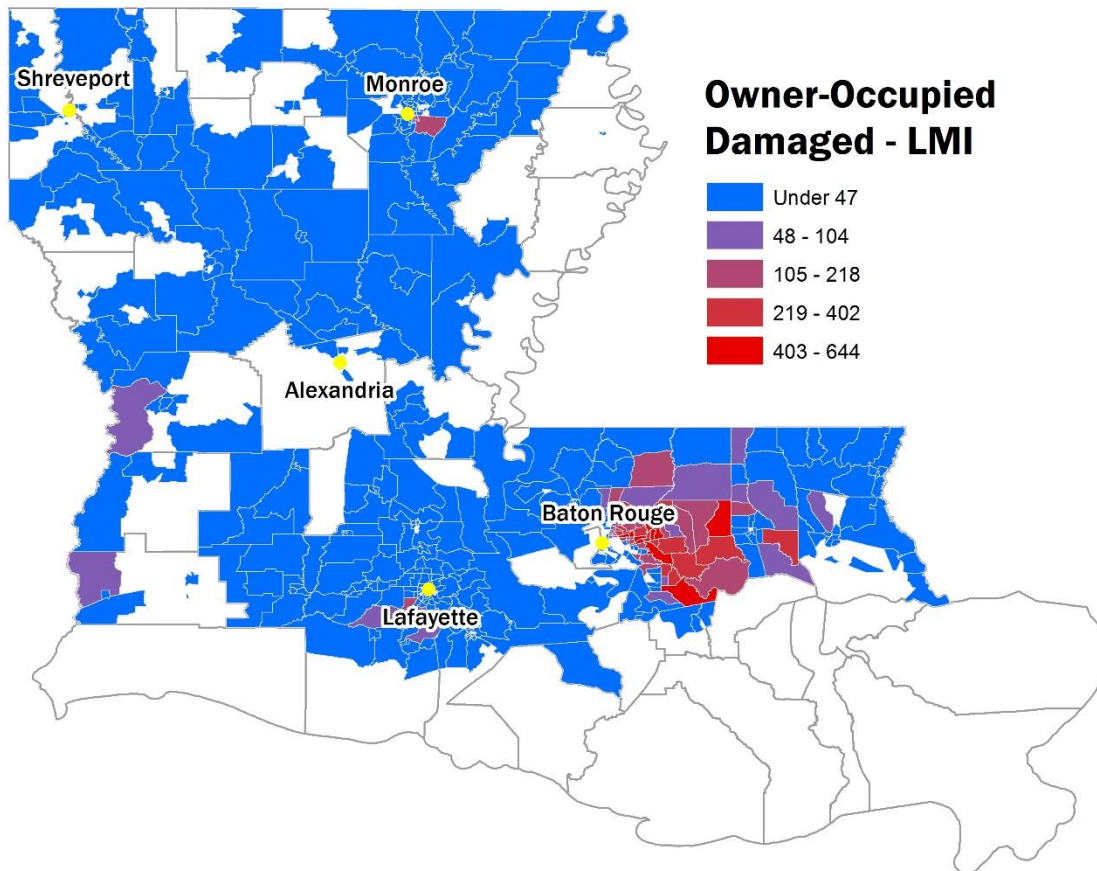
Specifically, 46,016 impacted owner-occupied households were located outside of the SFHA, representing more than 54 percent of the total affected owner-occupied household population. Additionally, 24,615 of these households are likely to have unmet housing needs, with damage levels of “major-low,” “major-high” or “severe.” This represents more than 42 percent of the owner-occupied population likely to have unmet needs.



Owner-Occupied Households Outside SFHA		
Disaster	Damage Category	Households
4263	Severe	292
	Major-High	1,043
	Major-Low	2,116
	Minor-High	1,031

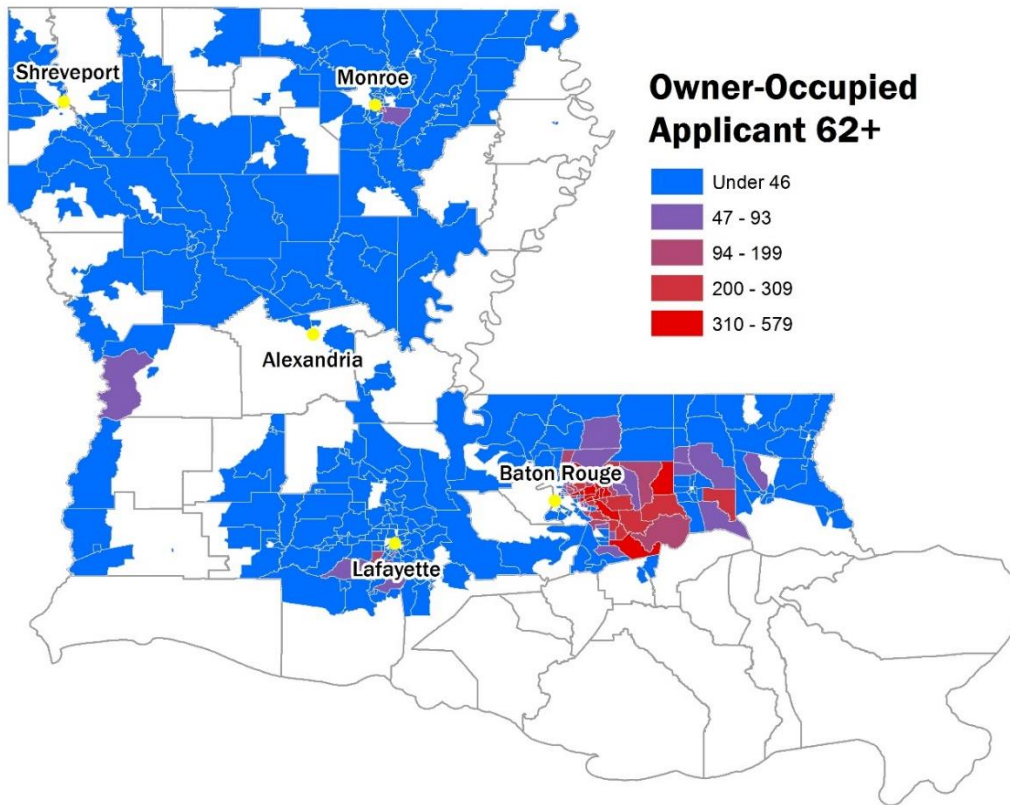
	Minor-Low	6,800
	<b>Total</b>	<b>11,282</b>
<b>4277</b>	Severe	2,896
	Major-High	10,395
	Major-Low	7,873
	Minor-High	2,513
	Minor-Low	11,057
	<b>Total</b>	<b>34,734</b>
	<b>Grand Total</b>	<b>46,016</b>

Given HUD requirements associated with this CDBG-DR allocation, the state must expend at least 70 percent of its allocation toward the benefit of LMI populations. 43,643 affected owner-occupied households are LMI, or more than 51 percent of the total affected owner-occupied population. Additionally, only 25,157 of this total are households expected to have remaining unmet needs (based on HUD’s methodology), with damage levels of “major-low,” “major-high” or “severe.” This represents approximately 43 percent of the affected population likely to have remaining unmet needs. As such, in the event the state receives substantially greater resources to address unmet needs in a more comprehensive fashion, it anticipates it may face a challenge in meeting its requirement to expend at least 70 percent of its CDBG-DR allocation toward the benefit of LMI populations.



<b>LMI Owner-Occupied Households</b>		
<b>Disaster</b>	<b>Damage Category</b>	<b>Households</b>
<b>4263</b>	Severe	282
	Major-High	999
	Major-Low	2,293
	Minor-High	909
	Minor-Low	5,934
	<b>Total</b>	<b>10,417</b>
<b>4277</b>	Severe	4,088
	Major-High	9,495
	Major-Low	8,000
	Minor-High	2,116
	Minor-Low	9,527
	<b>Total</b>	<b>33,226</b>
	<b>Grand Total</b>	<b>43,643</b>

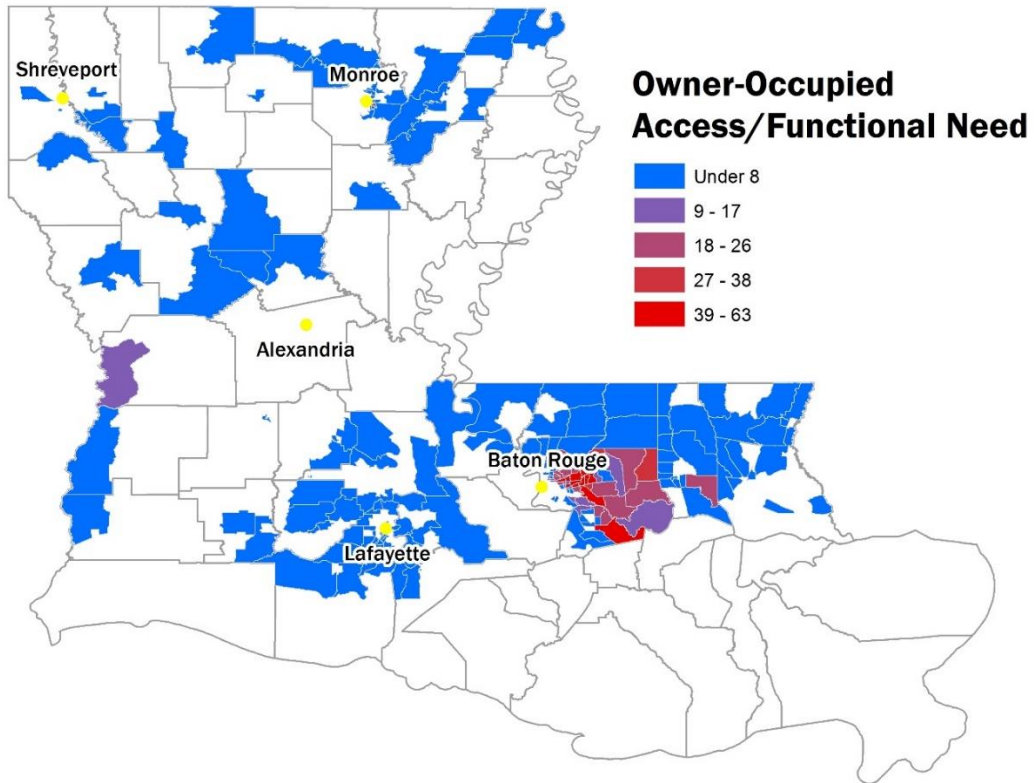
As the state attempts to prioritize the expenditure of CDBG-DR resources that are dwarfed by the total anticipated unmet needs from DR-4263 and DR-4277, one area of prioritization will be elderly households as it conducts program intake. There are at least 26,783 households with members aged 62 or older in the impacted owner-occupied population, accounting for the limitation that IA data only includes date of birth for the applicant representing the entire household. Using this figure as a baseline, however, at least 31 percent of the affected owner-occupied household population has a member that is 62 or older. Isolating just those households likely to have unmet needs, at least 18,997 have a household member aged 62 or older. This is at least 32 percent of the owner-occupied household population likely to have unmet needs.



<b>Owner-Occupied Households with Applicant Aged 62+</b>		
<b>Disaster</b>	<b>Damage Category</b>	<b>Households</b>
<b>4263</b>	Severe	262
	Major-High	927
	Major-Low	1,363
	Minor-High	478
	Minor-Low	2,491
	<b>Total</b>	<b>5,521</b>
<b>4277</b>	Severe	4,069
	Major-High	8,132
	Major-Low	4,244
	Minor-High	1,139
	Minor-Low	3,678
	<b>Total</b>	<b>21,262</b>
	<b>Grand Total</b>	<b>26,783</b>

In addition to those households with a member aged 62 or older, the state will also prioritize those households with persons with disabilities, as identified initially by those households that indicated they had access and/or functional needs through their IA applications. According to the FEMA data, there are 2,590 owner-occupied households with documented access and/or functional needs, representing more than 3 percent of the total impacted owner-occupied household population. 1,900 of these households

have levels of damage indicating they likely have remaining unmet needs, accounting for more than 3 percent of the total owner-occupied household population likely to have unmet needs.

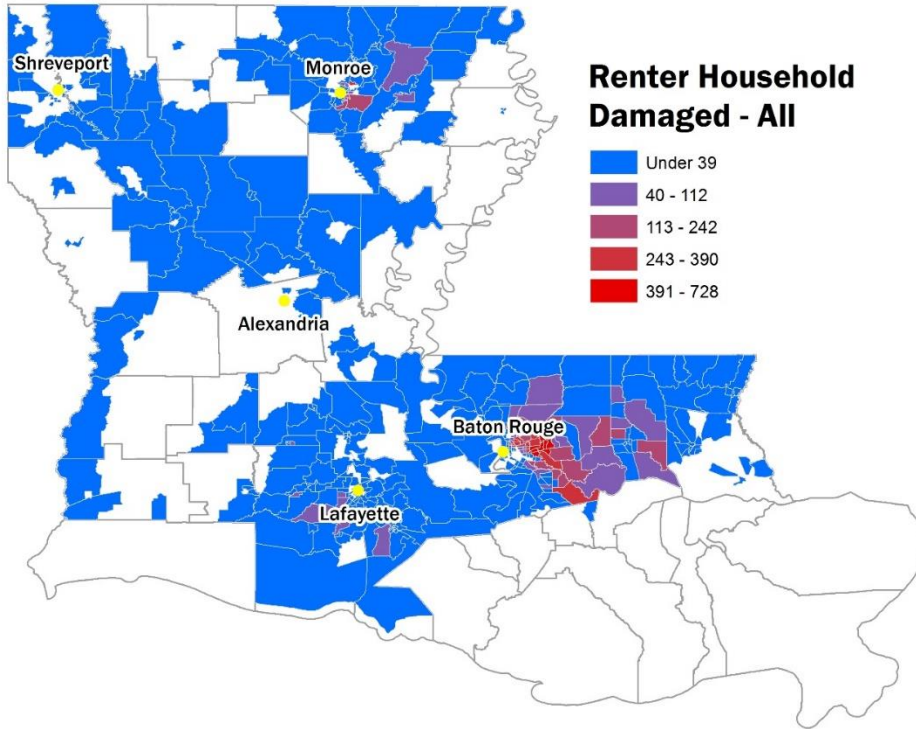


<b>Owner-Occupied Households with Access/Functional Needs</b>		
<b>Disaster</b>	<b>Damage Category</b>	<b>Households</b>
<b>4263</b>	Severe	28
	Major-High	77
	Major-Low	108
	Minor-High	33
	Minor-Low	176
	<b>Total</b>	<b>422</b>
<b>4277</b>	Severe	474
	Major-High	835
	Major-Low	378
	Minor-High	95
	Minor-Low	386
<b>Total</b>	<b>2,168</b>	
<b>Grand Total</b>	<b>2,590</b>	

*Impact on Renter Households*

The greatest number of instances of renter household damages occurred in Ouachita (DR-4263), East Baton Rouge and Livingston (both DR-4277) parishes. Other parishes with significant impacts to renter populations include Ascension and Tangipahoa parishes.

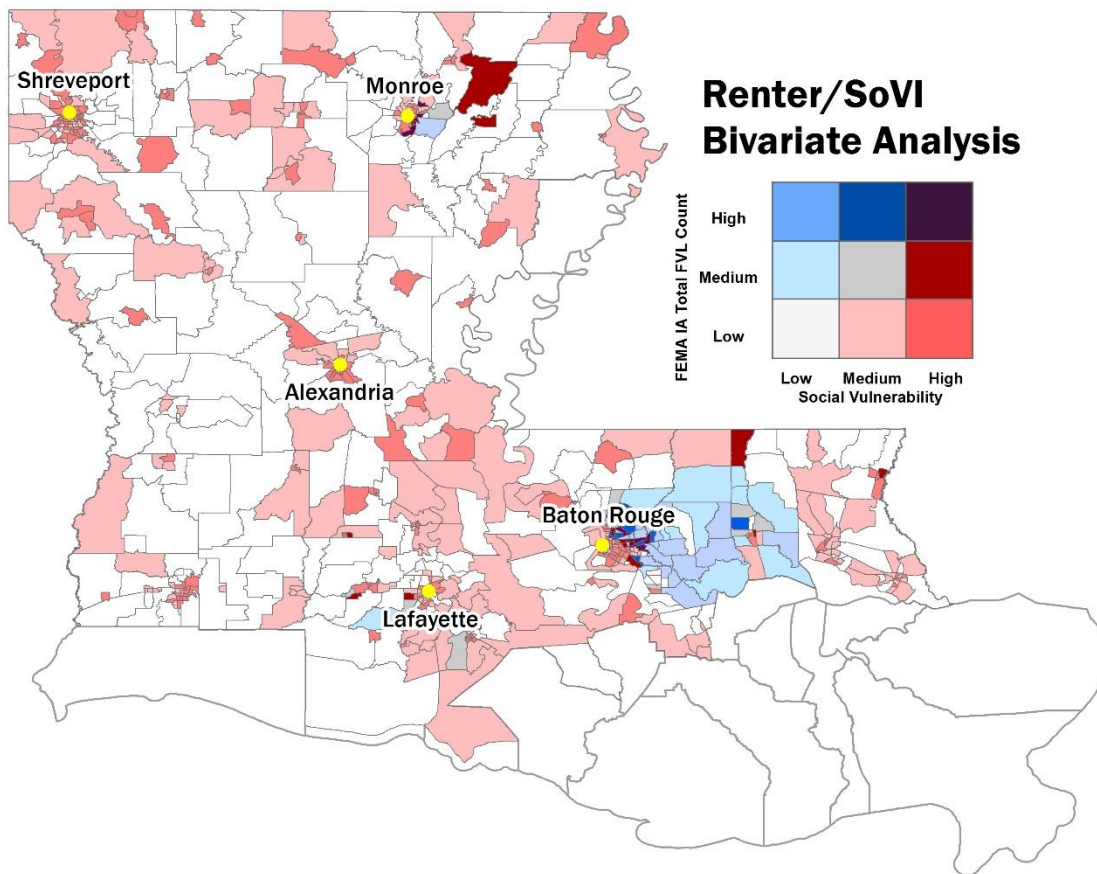
For the purposes of this section, the state has included all documented damages to the renter household population at all levels of damage in tabular format. For mapping purposes, this analysis only includes those households with “major-low,” “major-high” and “severe” levels of damage.



Renter Households with Damage		
Disaster	Damage Category	Households
<b>4263</b>	Severe	279
	Major-High	1,204
	Major-Low	1,309
	Minor-High	876
	Minor-Low	1,554
	<b>Total</b>	<b>5,222</b>
<b>4277</b>	Severe	3,838
	Major-High	8,097
	Major-Low	6,182
	Minor-High	1,818
	Minor-Low	3,313
	<b>Total</b>	<b>23,248</b>
	<b>Grand Total</b>	<b>28,470</b>

This analysis generally assumes areas with greatest need are going to be those that have both high concentrations of damage as well as a high level of pre-existing social vulnerability. Utilizing a bivariate approach for rental household populations and SoVI census tracts, the Baton Rouge Capital Region and the Monroe metropolitan area have large concentrations of damage as well as areas with notably high levels of social vulnerability. In the Capital Region, there are a total of nine census tracts (8 in East Baton Rouge and 1 in Livingston) classified as having high levels of both damage and social vulnerability. Most of these census tracts are located within a five-mile area in a line along the I-12/Florida Boulevard corridor that runs between Baton Rouge and Denham Springs; however, there are two census tracts meeting these characteristics in northern Baton Rouge. Both are located south of the Baton Rouge Metropolitan Airport, one of which is in a neighborhood west of Howell Park and the other is located west of Airline Highway between the Airline Highway and I-110 and the Airline Highway and Prescott Road intersections.

In the Monroe metropolitan area, there are five total census tracts classified as having both high concentrations of rental household damage as well as high levels of social vulnerability. Three of these census tracts are within a three-mile area. These tracts run north and south along Highway 165 from south of the University of Louisiana Monroe at the intersection of Martin Luther King Jr. Drive (Highway 165) and DeSiard Street down to Richwood. The other two census tracts are outliers, but still within six miles of each other. One of the outliers is located between Glenwood Regional Medical Center and the Ouachita River. For reference, West Monroe High School is roughly the center point of this census tract. The second outlier is located north of the University of Louisiana Monroe. It is bounded by Sterlington Road (Highway 165) to the west, Chauvin Bayou to the south, and the winding Bayou DeSiard to the north, northeast, and east. The state will note these particular areas of interest as it conducts programmatic outreach and intake.

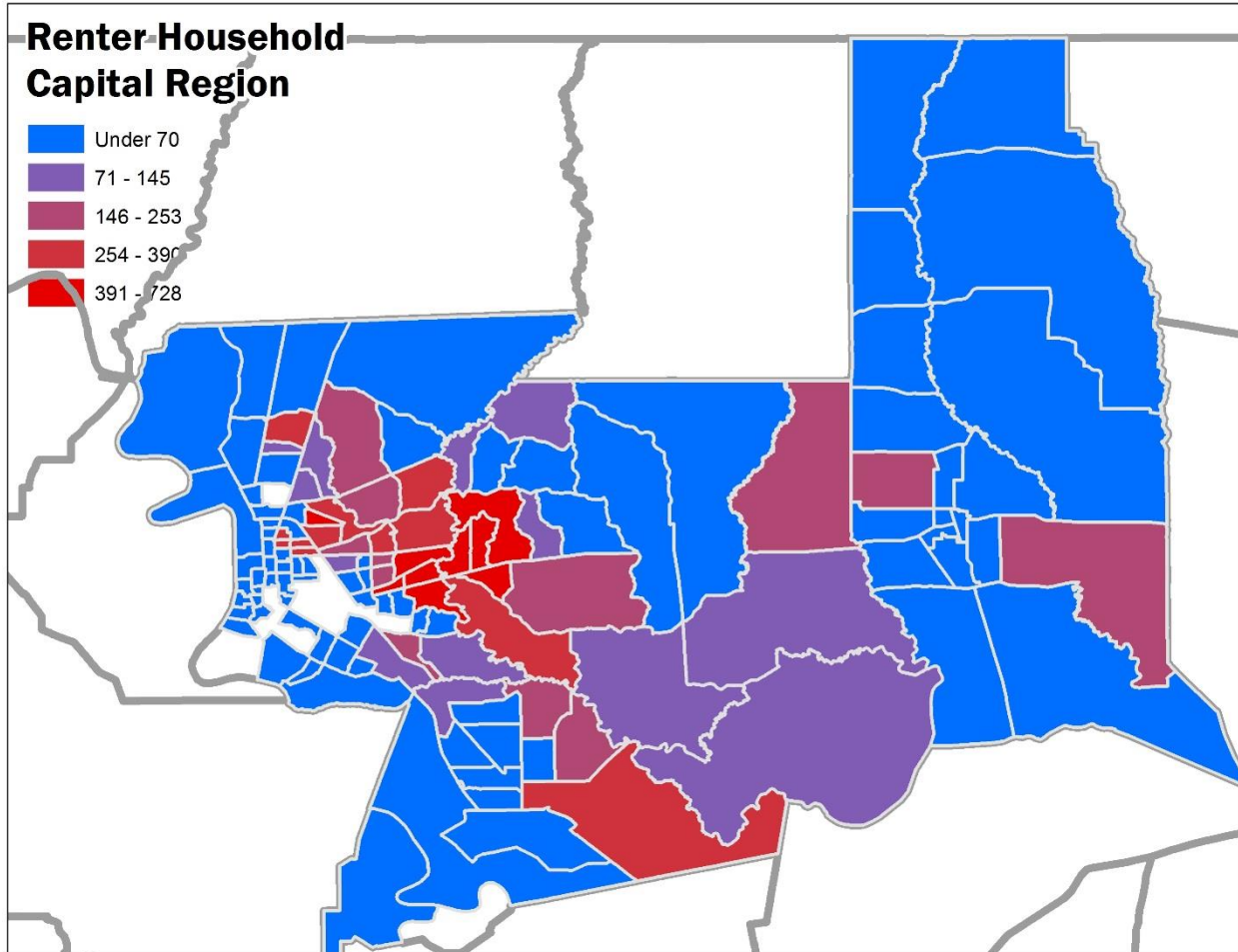


Renter Households with Damage (SoVI Designation)		
Disaster	SoVI (5-Class)	Households
<b>4263</b>	High	555
	Medium-High	2,343
	Medium	1,076
	Medium-Low	1,193
	Low	55
	<b>Total</b>	<b>5,222</b>
<b>4277</b>	High	659
	Medium-High	6,543
	Medium	6,973
	Medium-Low	8,066
	Low	1,009
	<b>Total</b>	<b>23,250</b>
	<b>Grand Total</b>	<b>28,472</b>

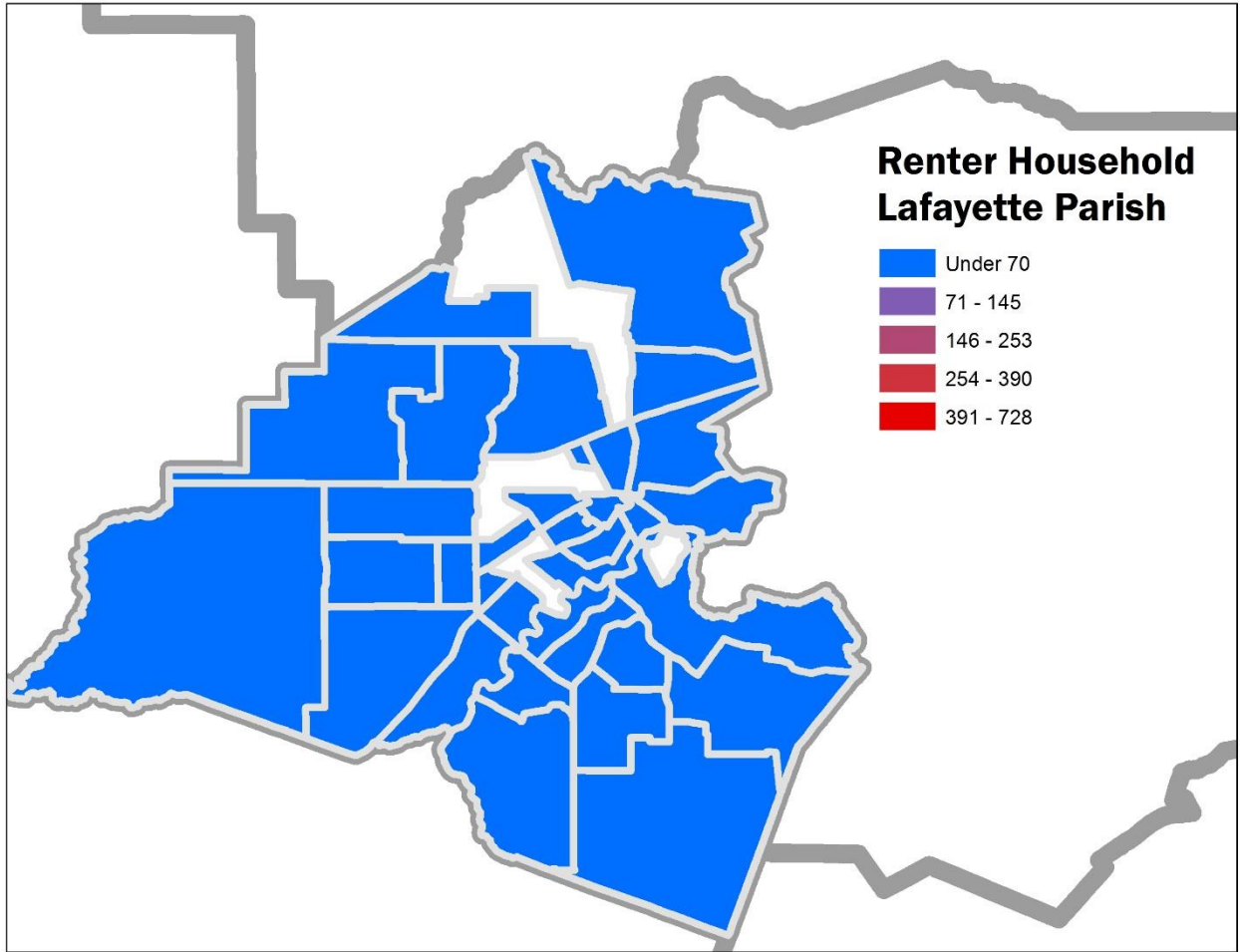
To drilldown on affected renter populations in the six-parish most impacted area, the state has prepared the following detailed maps illustrating instances of renter household damages at the census tract level.

As the state conducts housing program intake, it will attempt to coordinate outreach efforts in accordance with locales with high-levels of documented damages.

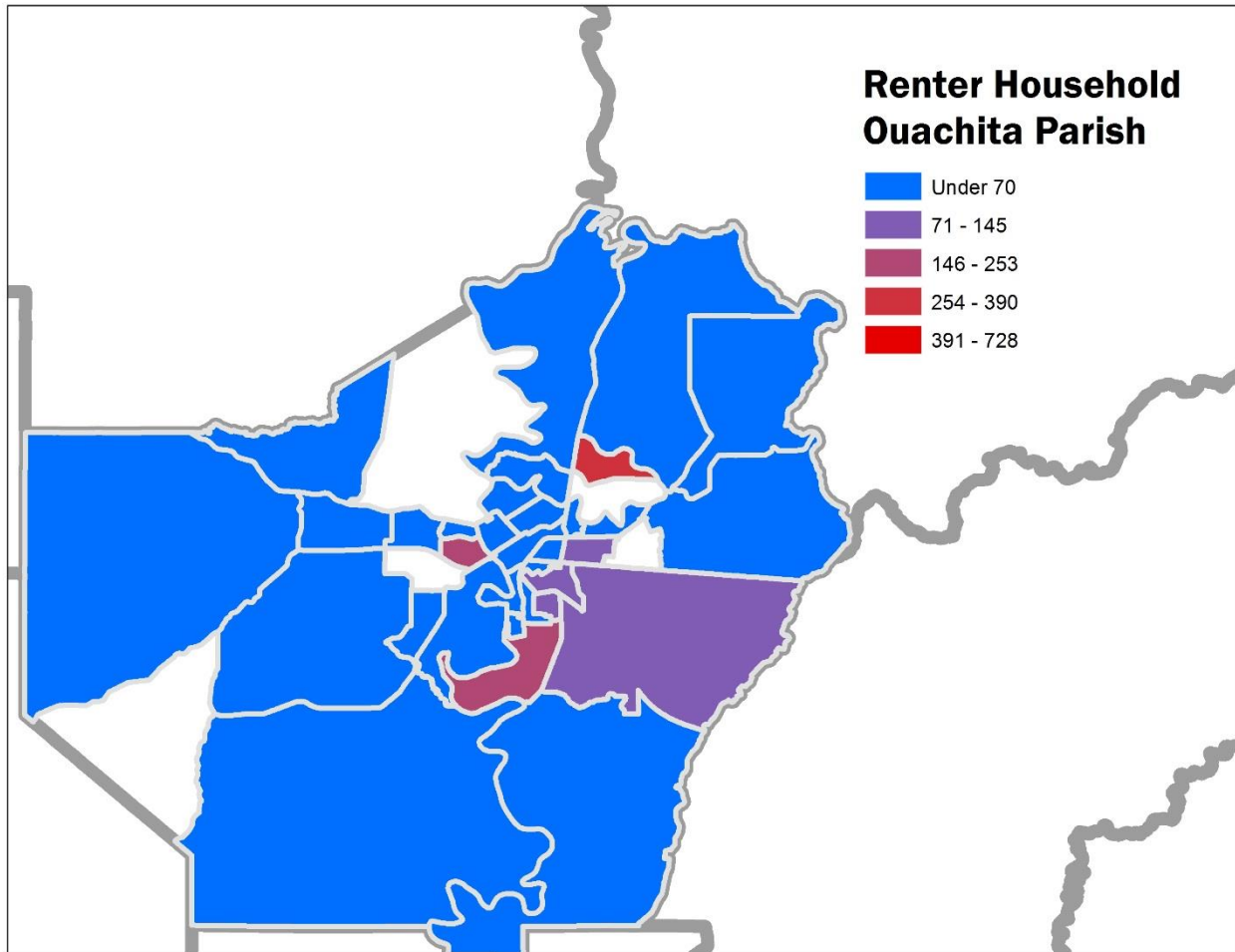
It is important to note 24,369 of the total 28,470 renter households with damage are located within the six-parish most impacted area, representing more than 85 percent of the total.



*Represents households with "major-low," "major-high" and "severe" levels of damage.*



*Represents households with "major-low," "major-high" and "severe" levels of damage.*

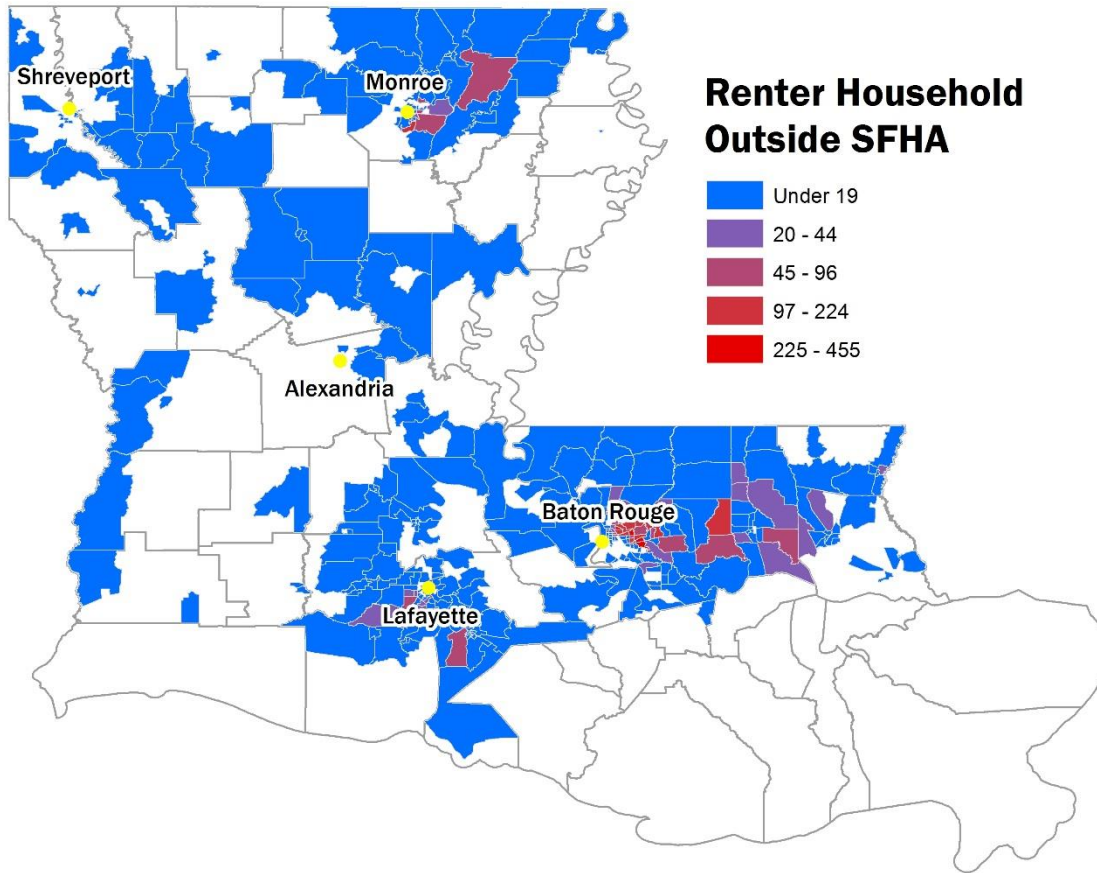


*Represents households with “major-low,” “major-high” and “severe” levels of damage.*

<b>Renter Households in Most Impacted Parishes</b>		
<b>Disaster</b>	<b>Damage Category</b>	<b>Households</b>
<b>4263</b>	Severe	175
	Major-High	853
	Major-Low	925
	Minor-High	627
	Minor-Low	966
	<b>Total</b>	<b>3,546</b>
<b>4277</b>	Severe	3,748
	Major-High	7,719
	Major-Low	5,572
	Minor-High	1,372
	Minor-Low	2,412
	<b>Total</b>	<b>20,823</b>
	<b>Grand Total</b>	<b>24,369</b>

Like the owner-occupied household population, an unusually high proportion of affected renter households were located outside of a Special Flood Hazard Area (SFHA). As such, while this may not inherently indicate exacerbated need for the renter population itself, it may indicate an enhanced need for landlords who may not have carried flood insurance. Furthermore, as has been discussed previously, there was a lack of affordable housing stock prior to the 2016 flooding events. The impacts described below have further exacerbated the need for an increase in affordable housing options across the state.

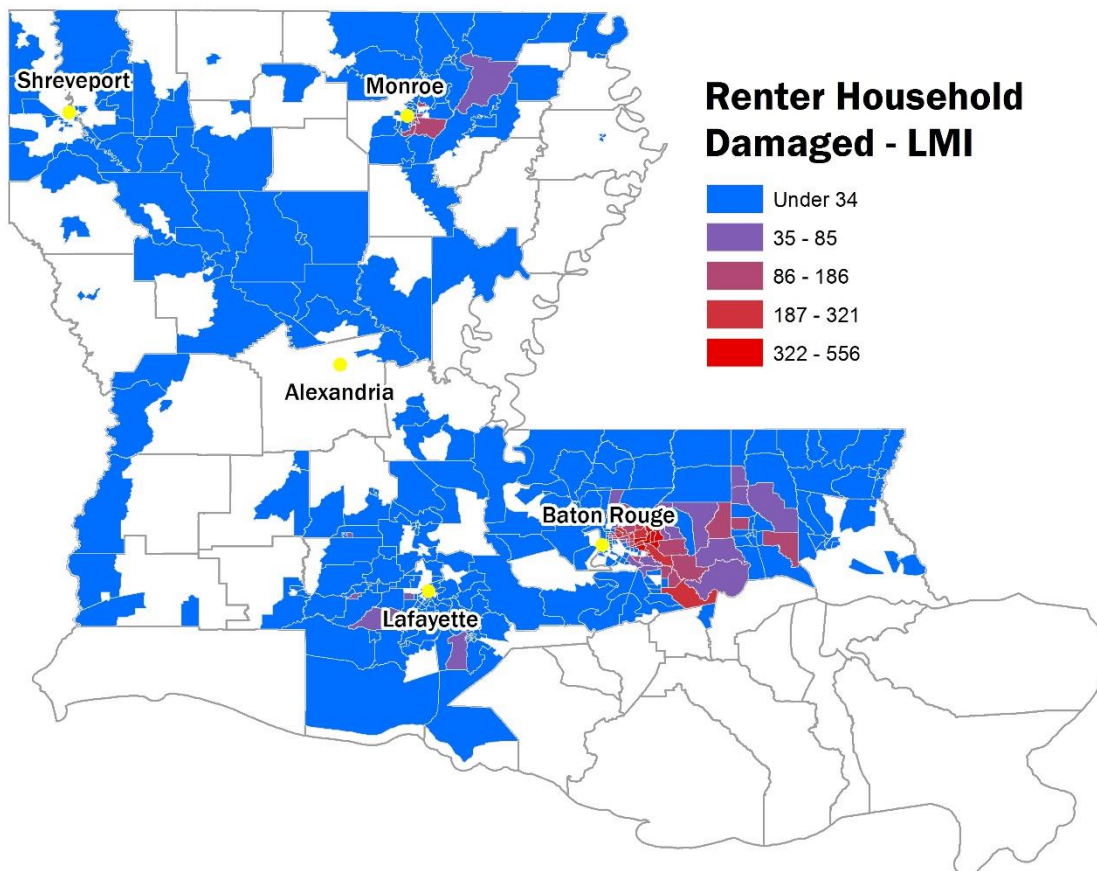
Specifically, 12,921 impacted renter households were located outside of the SFHA, representing more than 45 percent of the total affected renter household population.



Renter Households Outside SFHA		
Disaster	Damage Category	Households
<b>4263</b>	Severe	119
	Major-High	532
	Major-Low	619
	Minor-High	541
	Minor-Low	1,160
	<b>Total</b>	<b>2,971</b>
<b>4277</b>	Severe	940
	Major-High	2,802

Renter Households Outside SFHA		
Disaster	Damage Category	Households
	Major-Low	2,728
	Minor-High	1,148
	Minor-Low	2,332
	<b>Total</b>	<b>9,950</b>
	<b>Grand Total</b>	<b>12,921</b>

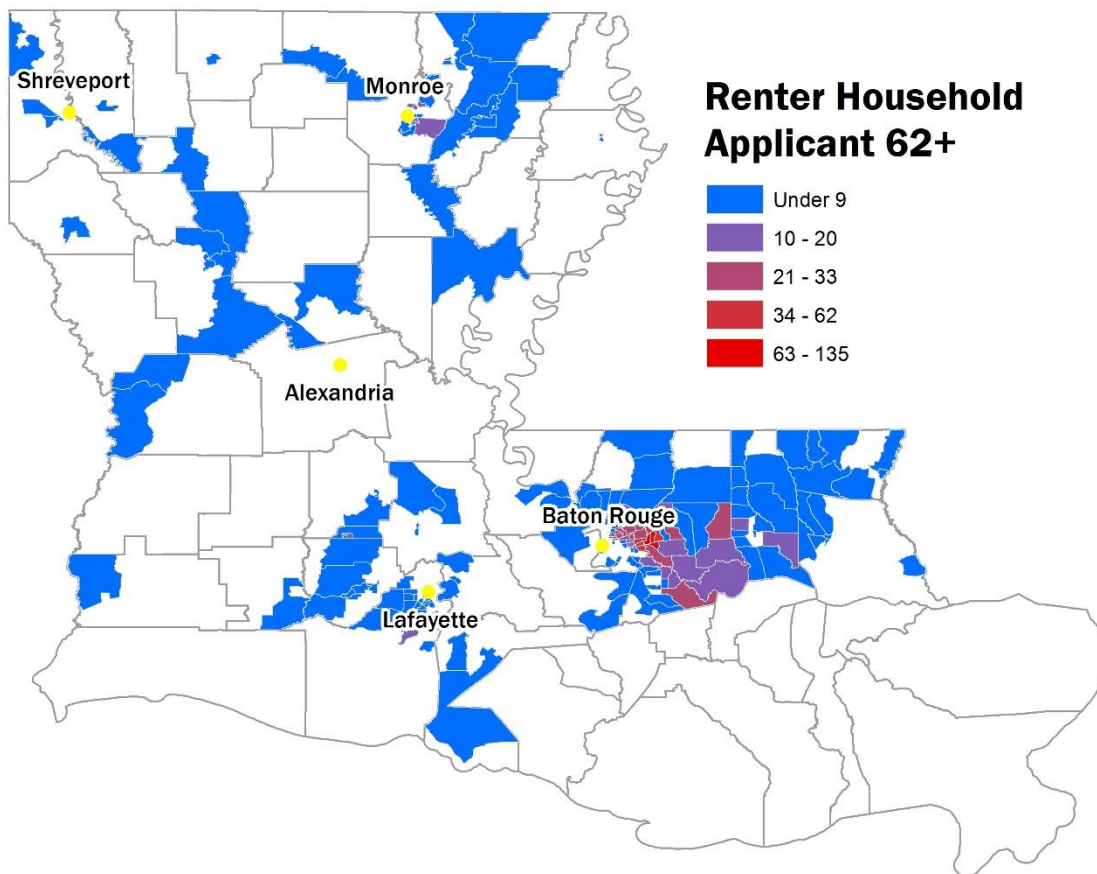
Per HUD requirements associated with this CDBG-DR allocation, the state must expend at least 70 percent of its allocation toward the benefit of LMI populations. 21,806 affected renter households are LMI, or more than 76 percent of the total affected renter population.



LMI Renter Households		
Disaster	Damage Category	Households
<b>4263</b>	Severe	205
	Major-High	916
	Major-Low	1,037
	Minor-High	737
	Minor-Low	1,350

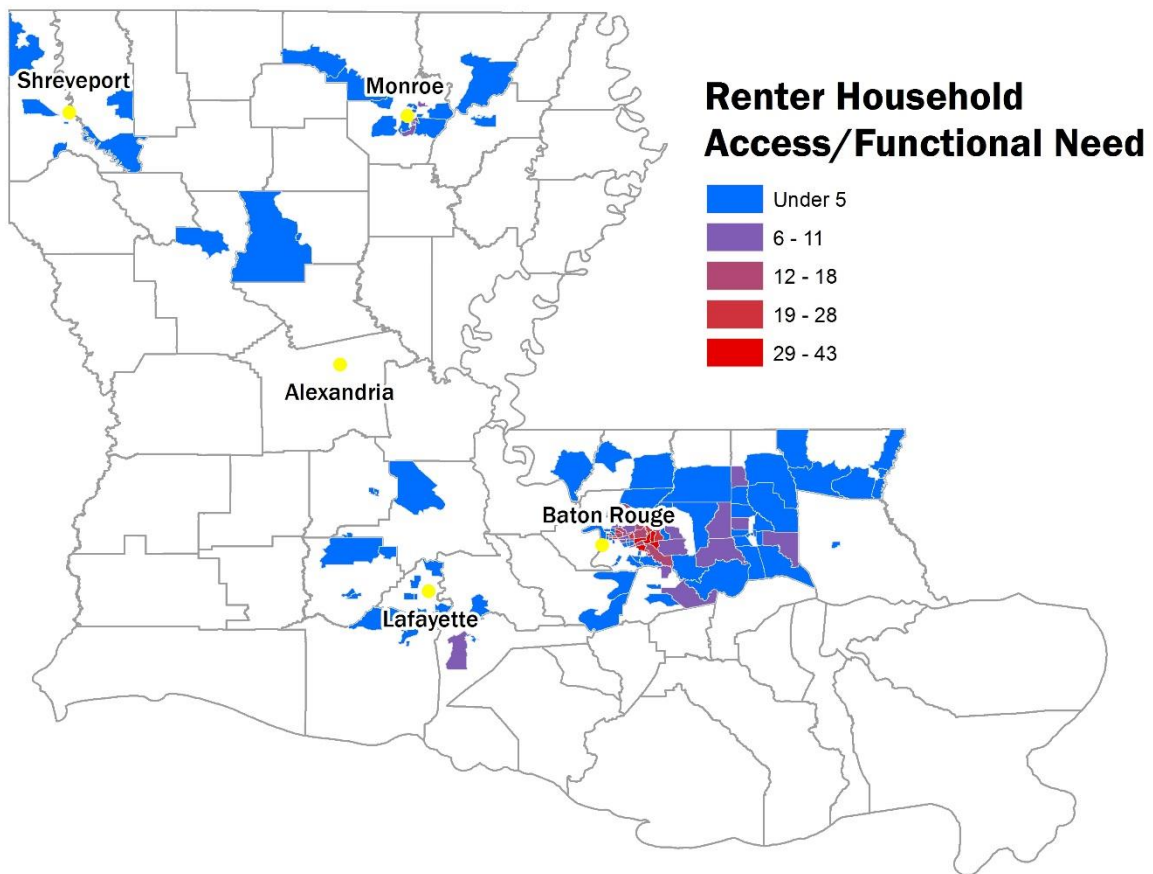
LMI Renter Households		
Disaster	Damage Category	Households
	<b>Total</b>	<b>4,245</b>
<b>4277</b>	Severe	2,850
	Major-High	5,822
	Major-Low	4,717
	Minor-High	1,441
	Minor-Low	2,731
	<b>Total</b>	<b>17,561</b>
	<b>Grand Total</b>	<b>21,806</b>

As the state prioritizes the expenditure of CDBG-DR resources that are dwarfed by the total anticipated unmet needs from DR-4263 and DR-4277, it may prioritize elderly households as it conducts program intake. There are at least 2,642 households with applicants aged 62 or older in the impacted renter population, accounting for the limitation that IA data only includes data of birth for the applicant representing the entire household. Using this figure as a baseline, however, at least 9 percent of the affected renter household population has a member that is 62 or older.



<b>Renter Households with Applicant Aged 62+</b>		
<b>Disaster</b>	<b>Damage Category</b>	<b>Households</b>
<b>4263</b>	Severe	15
	Major-High	121
	Major-Low	130
	Minor-High	76
	Minor-Low	117
	<b>Total</b>	<b>459</b>
<b>4277</b>	Severe	265
	Major-High	951
	Major-Low	575
	Minor-High	146
	Minor-Low	246
	<b>Total</b>	<b>2,183</b>
	<b>Grand Total</b>	<b>2,642</b>

In addition to those elderly households, the state may also prioritize those populations with access and/or functional needs to prioritize how it will assist the affected population. There are 1,268 renter households with documented access and/or functional needs, representing more than 4 percent of the total impacted renter household population.



<b>Renter Households with Access/Functional Needs</b>		
<b>Disaster</b>	<b>Damage Category</b>	<b>Households</b>
<b>4263</b>	Severe	12
	Major-High	54
	Major-Low	57
	Minor-High	38
	Minor-Low	55
	<b>Total</b>	<b>216</b>
<b>4277</b>	Severe	197
	Major-High	407
	Major-Low	233
	Minor-High	70
	Minor-Low	145
	<b>Total</b>	<b>1,052</b>
	<b>Grand Total</b>	<b>1,268</b>

*Impact on Public Housing Authorities*

The Louisiana Housing Corporation (LHC), in conjunction with HUD’s New Orleans Field office, has remained in constant contact with Public Housing Authorities (PHAs) throughout the impacted area. In total, 13 of the state’s 102 PHAs reported some disaster impact, impacting 132 households and displacing 95 households. Additionally, 16 Housing Choice Voucher (HCV) properties were affected, impacting 864 households and displacing 850 households.

<b>Public Housing Assessment (Statewide)</b>			
	<b>Public Housing</b>	<b>Housing Choice Vouchers</b>	<b>Total</b>
<b>Total Properties/PHAs</b>	102	91	193
<b>Units</b>	19,988	54,357	74,345
<b>Properties/PHAs Impacted</b>	13	16	29
<b>Households Impacted</b>	132	864	996
<b>Households Displaced</b>	95	850	945

Seven multifamily public housing developments reported damage attributable to DR-4263 or DR-4277. These facilities hold 619 total units, of which 300 were damaged. Two facilities, Livingston Manor and Charleston Oaks, suffered damage to all of their units, while a third development, Tangi Village, suffered damage to all but four units. Tangi Village, in particular, is notable as it was impacted by both disaster events (DR-4263 and DR-4277). Also notable, Cypress Gardens tested positive for mold, and will need to be remediated. With the exception of Cypress Gardens, all units are expected to be back online by Q2 2017.

<b>Multifamily Assessment (Statewide)</b>			
	<b>Total Units</b>	<b>Total Damaged</b>	<b>Percent Damaged</b>
<b>Bacmonila Gardens</b>	150	35	23%
<b>Tangi Village</b>	96	92	96%
<b>Livingston Manor</b>	45	45	100%
<b>St. Edwards Subdivision</b>	98	38	39%
<b>Charleston Oaks</b>	30	30	100%
<b>Cypress Gardens</b>	100	4	4%
<b>Shady Oaks</b>	100	56	56%
<b>Total</b>	<b>619</b>	<b>300</b>	<b>48%</b>

The multi-family developments noted above are utilizing a number of funding sources to repair damaged units, including flood insurance, USDA Rural Development loans, and HOME (via LHC). LHC is working directly with the property management firms to determine where funding gaps exist and how to fill those gaps.

Going forward, the LHC will make direct calls to the PHAs in the impacted areas to ensure that the outreach efforts were as exhaustive as possible and that the state is aware of all disaster related damages. In addition, LHC will coordinate with the Louisiana Housing Council to send email surveys to potentially impacted PHAs to further supplement the completed and planned outreach efforts and collect specifics on the total number of units damaged, the total cost of the damages, and the amount of unmet recovery and rebuilding needs.

The state is committed to continued coordination with PHAs, particularly with respect to assessing the unmet repair and rebuilding needs not otherwise covered by insurance or FEMA. In addition, the state is committed to working with PHAs to develop and implement measures that will make their units more resilient in the wake of future storms. With an understanding that many of the individuals who reside in subsidized housing represent the most vulnerable residents of our state, it is of the utmost importance to ensure that impacted PHAs are provided the tools and resources they need to rebuild effectively and sustainably.

*Impact on Homeless Populations*

The Point-in-time count is an annual count of sheltered and unsheltered homeless persons on a single night conducted by Continuums of Care (CoC) across the United States. Louisiana has nine Continuums of Care, which are regional planning bodies that coordinate housing and services for homeless families and individuals. The list below provides the name of each CoC in the state, along with parishes and major cities included within each CoC (<http://www.dhh.louisiana.gov/assets/docs/OAAS/publications/regional-continuum-of-care-list.pdf>).

- **Lafayette/Acadiana CoC** - City of Lafayette, Acadia, Evangeline, Iberia, Lafayette, St. Landry, St. Martin, St. Mary, Vermillion
- **Shreveport/Bossier/Northwest Louisiana CoC** - City of Shreveport, Bossier City, Bienville, Bossier, Caddo, Claiborne, DeSoto, Natchitoches, Red River, Sabine, Webster
- **New Orleans/Jefferson Parish CoC** - City of New Orleans, Orleans, Jefferson, St. John, St. Charles, St. James, Metairie
- **Baton Rouge CoC** - East Baton Rouge, Ascension, West Baton Rouge, East and West Feliciana, Iberville, Pointe Coupee
- **Monroe/Northeast Louisiana CoC** - City of Monroe, Caldwell, East and West Carroll, Franklin, Jackson, Lincoln, Madison, Morehouse, Ouachita, Richland, Tensas, Union
- **Alexandria/Central Louisiana CoC** - City of Alexandria, Avoyelles, Catahoula, Concordia, Grant, LaSalle, Rapides, Vernon, Winn
- **Houma-Terrebonne, Thibodaux CoC** - Lafourche, Terrebonne, Assumption
- **Louisiana Balance of State CoC** – Remaining Parishes

According to the January 25, 2016, Point-in-time count, a total of 3,994 people were counted as homeless, with 1,444 counted in emergency shelters, 1,409 in transitional housing and 1,141 unsheltered.

To understand the homeless population prior to flooding within IA parishes and the most impacted parishes, this analysis counts CoCs that contain at least one IA or most impacted parish. Eight CoC’s contain IA parishes, with a total of 3,848 people counted as homeless (1,414 in emergency shelters, 1,296 in transitional housing, and 1,138 unsheltered). Four CoCs contain most impacted parishes, with a total of 1,398 people counted as homeless (422 counted in emergency shelter, 719 in transitional housing, and 257 unsheltered). 96 percent of people counted as experiencing homelessness on January 25, 2016 were within IA parishes, and 35 percent of the state’s total people experiencing homelessness were within most impacted parishes.

2016 Point in Time Count			
Type of Shelter	State of Louisiana	Continuums of Care Containing IA Parishes	Continuums of Care Containing Most Impacted Parishes
Emergency Sheltered	1,444	1,414	422

Transitional Housing	1,409	1,296	719
Unsheltered	1,141	1,138	257
<b>Total Homeless Persons</b>	<b>3,994</b>	<b>3,848</b>	<b>1,398</b>

Source: Department of Housing and Urban Development, CoC Housing Inventory Count Reports, 2016  
<https://www.hudexchange.info/programs/coc/coc-housing-inventory-count-reports/>

To respond to DR-4263 and DR-4277, the LHC deployed staff of the Louisiana Housing Authority (LHA) into disaster shelters to assist with closing those shelters without leaving affected populations homeless. In response to the need of those who were pre-disaster homeless and precariously housed before the flooding events, LHC/LHA set up two different programs that can be expanded to meet the needs of other households that may find themselves in similar situations.

- **HOME TBRA** – LHC allocated \$500,000 of HOME funds to provide Tenant-Based Rental Assistance (TBRA). To be eligible for assistance, households must be elderly or disabled, 30 percent Area Median Income (AMI) or below and lack the financial resources to obtain the necessary housing. There are currently 58 households issued a voucher. In order to provide these households with a year of rental assistance and case management services, an additional **\$356,396** in unmet need remains. There are 23 households currently on the waiting list for HOME TBRA. \$1,355,332 is the total budget to assist all 81 households with a year of rental assistance and case management services, or **\$855,332** in unmet need. However, HOME TBRA allows up to two years of rental assistance, requiring a total budget of \$2,710,663, an unmet need gap of **\$2,210,663**.
- **Rapid Re-Housing** – LHC allocated \$320,000 of Emergency Solution Grant (ESG) funds to provide a Rapid Re-Housing (RRH) program for pre-disaster homeless and precariously housed flood survivors. All households must have income at or below 30 percent AMI. There are currently 48 households issued a voucher for rental assistance and 23 households on a waiting list. LHC will assist the 48 households with RRH for five months with the \$320,000 allocation. Due to the lack of r in the affected region, five months is an insufficient amount of time to provide assistance. LHC anticipates adding an additional \$200,000 from its FY2016 allocation to the RRH program. Even with the addition of these funds, there is still an unmet gap of **\$609,351** to assist all 69 households for a 12-month period.

Daily phone calls and emails from flood impacted households that are now experiencing homelessness continue to occur. The households that have reached out to LHC are actively added to the waiting list. Other organizations assisting in flood recovery are also getting emails and phone calls. Additionally, the number of households in need of RRH will continue to rise once FEMA's Transitional Sheltering Assistance (TSA) ends. As of November, 28, 2016, there were 1,761 households checked in to the TSA program. Households that are currently staying with family and friends are another population that are at risk of homelessness as are households that are living in flooded and moldy homes. As the living situations for these households become untenable, they will require alternate living arrangements and will be in need of rental assistance.

Additionally, there have been impacts to service providers. The Salvation Army in Baton Rouge, one of the Capital Region's largest emergency shelters, flooded during DR-4277, taking on up to 7.5 feet of water. All clients and staff were relocated. As a result, currently 24 emergency shelter beds and 50 transitional housing units are offline. As the weather turns colder, more flood impacted households that are living in

untenable environments, like cars and tents, are expected to seek warmer places to stay, exacerbating the need for safe housing options. With the Salvation Army rendered inoperable and unable to expand for freeze night capacity, the state is concerned substantial populations at risk of homelessness will remain unserved.

Focusing further on Baton Rouge, the City has surveyed some of the major homeless support agencies to determine their client's needs post-flooding. The Volunteers of America (VOA) and the Bishop Ott St. Vincent de Paul both reported a 29 – 30 percent increases in persons seeking housing and homeless services. VOA reported that the number of calls per day seeking housing services have doubled from 100 to 200 and that they have no resources available to which to refer clients. In addition, VOA reported a 60 percent increase in persons classified with special needs requesting housing services. They have a waiting list which continues to grow. Prior to the flood, VOA served 86 clients with mental health and substance abuse issues. They have turned away 28 persons because of a lack of staff and operating funds to assist these individuals. Currently, there are 58 persons on the emergency shelter grant waiting list.

Bishop Ott St. Vincent de Paul, with the help of the Red Cross, increased shelter beds for men by 58 percent after the flood. Monies to support the extra beds will end December 30, 2016. Bishop Ott St. Vincent de Paul serves between 1,300 – 1,400 homeless persons per year. Staff reported that, of the number of new unique persons entering the shelter post-flood, between 20 – 50 percent of the extra beds are filled with first-time homeless clients.

While the City has made great progress in reducing the number of homeless persons over the past 10 years, the flood has brought those numbers back to where they were in 2015. Additional shelter beds and extended shelter stays are required because of the impact of the flood on pre-flood, precariously housed residents, the shortage of housing, the increase in rental costs, and the reduction and termination of FEMA, HUD, and Red Cross emergency services. All agencies reported the need for funding to increase shelter beds, increase the number of case managers and support services needed to help the vulnerable homeless in accessing housing and navigating the complex post-flood housing programs and resources. During the December 2016 East Baton Rouge Metro Council meeting, the Council approved the allocation of approximately \$1 million of its CDBG-DDR funding to provide funding to homeless agencies to support the homeless.

The state is actively working to gather additional information relative to the impacts to and unmet needs of homeless populations across the state. LHA is in the process of reaching out to the CoCs identified above to determine the extent of the need across the state.

Furthermore, the state is working in close coordination with the Disaster Case Management (DCM) program, particularly as it relates to the households in the TSA program. Based on reports from the DCM service providers, there are 1,000 renters and 761 homeowners in the TSA population.

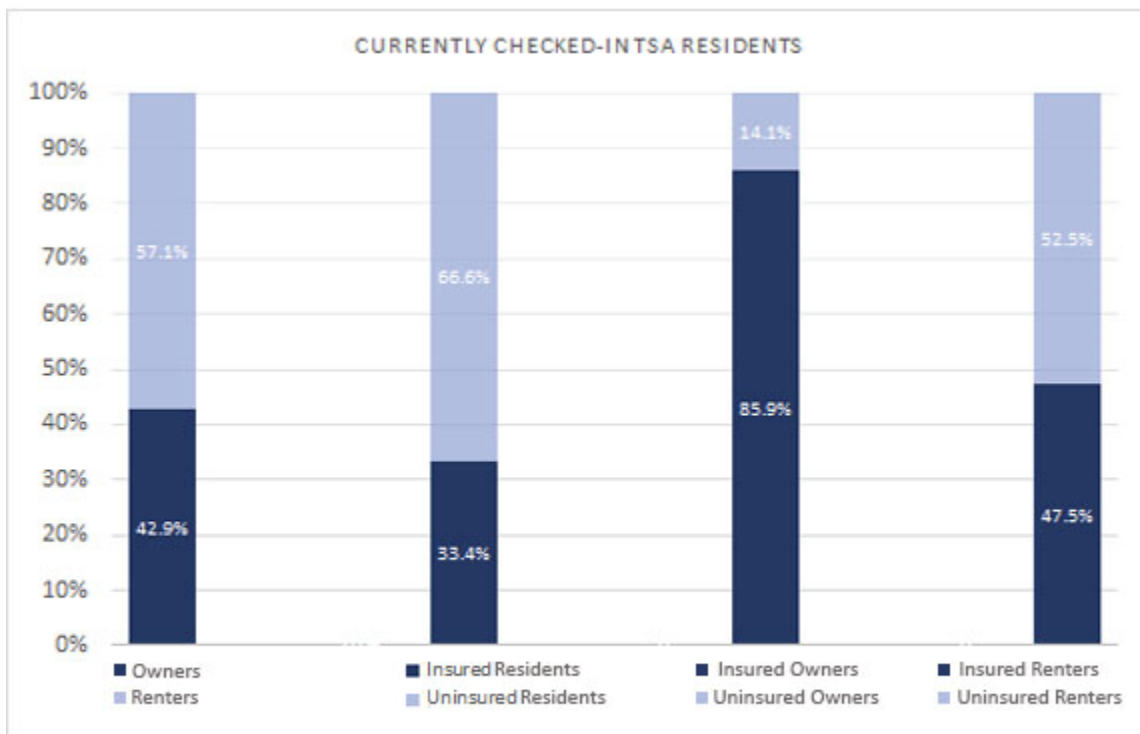
Due to a host of factors, most notably the lack of available affordable rental units, the most vulnerable, and potentially at-risk of homelessness, of the TSA population are those who are renters. They are unlikely to be eligible for a number of housing solutions typically made available to homeowners and many no longer have the FEMA Rental Assistance funds provided to them. In many cases, the rental assistance funds were not utilized for the appropriate purpose due to other needs, meaning those individuals are unlikely to be eligible for additional Rental Assistance funding.

The state recognizes the challenge of ascertaining the vulnerability index relative to predicting homelessness. It is difficult to determine if the renters currently in TSA were independently housed with any stability prior to the disaster or if they were precariously housed prior to the disaster. In addition, it

is not clear as to which of these were living in some sort of pre-disaster subsidized or supported housing situation. These variables and situations, coupled with a reduction in available and affordable rental stock, are ultimately what will be the best predictors of homelessness from within the TSA population.

FEMA staff working directly with households in the TSA program conducted almost 2,000 face-to-face visits with applicants in hotels since October 10, 2016. From those meetings, 375 (19 percent) stated their primary barrier was not being able to afford rentals. An additional 165 (9 percent) said they can't find rentals, which often means they can't find rentals they can afford.

The state reviewed the data collected on the TSA population in an effort to determine which households are most at-risk of homelessness once TSA benefits are no longer available. Due to the reasons stated above, the state contends that uninsured renters are the most likely to be at-risk of homelessness once the TSA program concludes. The chart below provides a breakdown of key aspects of the data collected on the current TSA population.



Source: FEMA, effective 11/28/16

The state is committed to providing temporary housing solutions and, wherever possible, permanent housing to households that are homeless or at-risk of homelessness. Recognizing that, while a temporary housing solution may meet an immediate need, the ultimate goal is to find permanent housing solutions for individuals and families that are currently homeless or at-risk of homelessness. To that end, the state will submit a formal request in the coming weeks for 1,000 permanent supportive housing vouchers. Moving forward, the information gathered through the CoC outreach, coordination with the DCM program, and other efforts will serve as the basis for additional requests and future allocation decisions.

### 3. Unmet Housing Needs

In discussing a full scope of unmet housing needs, it is imperative to understand other resources that have and will be expended, and where those resources have been and will be geographically deployed. To this effect, as of 11/21/16, SBA had approved \$1,132,604,200 in Home Loans to affected populations.

<b>SBA Home Loans Approved (as of 11/21/16)</b>		
<b>Disaster</b>	<b>Parish</b>	<b>Home Loans Approved</b>
<b>4263</b>	Ouachita	\$ 35,721,300
	St. Tammany	\$ 8,361,300
	Tangipahoa	\$ 5,655,000
	Webster	\$ 4,711,900
	Washington	\$ 4,381,100
	Vernon	\$ 3,864,800
	Bossier	\$ 3,714,200
	Calcasieu	\$ 3,429,200
	Natchitoches	\$ 3,342,000
	Morehouse	\$ 3,153,600
	Union	\$ 2,893,300
	Caddo	\$ 2,800,200
	Livingston	\$ 1,309,800
	Winn	\$ 1,307,700
	Grant	\$ 1,089,100
	Richland	\$ 1,073,100
	Caldwell	\$ 967,300
	Beauregard	\$ 779,200
	West Carroll	\$ 699,700
	Claiborne	\$ 650,000
	Rapides	\$ 625,700
	Bienville	\$ 557,300
	DeSoto	\$ 319,500
	Sabine	\$ 317,500
	La Salle	\$ 305,400
	Allen	\$ 172,000
	Lincoln	\$ 146,700
	Avoyelles	\$ 103,200
	Jackson	\$ 91,200
	East Carroll	\$ 68,300
	Catahoula	\$ 43,600
	Red River	\$ 43,400
	Franklin	\$ 32,000
Ascension	\$ 18,000	
Madison	\$ 16,300	
	<b>Total</b>	<b>\$ 92,763,900</b>
<b>4277</b>	East Baton Rouge	\$ 483,342,200
	Livingston	\$ 320,324,400

	Ascension	\$ 122,112,600
	Lafayette	\$ 52,247,900
	Tangipahoa	\$ 23,179,900
	Vermilion	\$ 10,250,100
	St. Martin	\$ 5,613,600
	Acadia	\$ 4,866,500
	St. Landry	\$ 3,774,500
	East Feliciana	\$ 2,752,900
	Iberia	\$ 2,444,900
	St. Helena	\$ 1,894,200
	Iberville	\$ 1,510,400
	Evangeline	\$ 1,348,300
	Jefferson Davis	\$ 1,209,800
	Pointe Coupee	\$ 916,700
	West Feliciana	\$ 671,500
	St. Tammany	\$ 396,000
	Avoyelles	\$ 382,900
	Washington	\$ 327,100
	St. James	\$ 161,300
	West Baton Rouge	\$ 112,600
	<b>Total</b>	<b>\$ 1,039,840,300</b>
	<b>Grand Total</b>	<b>\$ 1,132,604,200</b>

Additionally, FEMA has provided housing assistance to eligible households through the IA program. As of 11/22/16, FEMA had approved \$651,261,396 in housing assistance through the IA program.

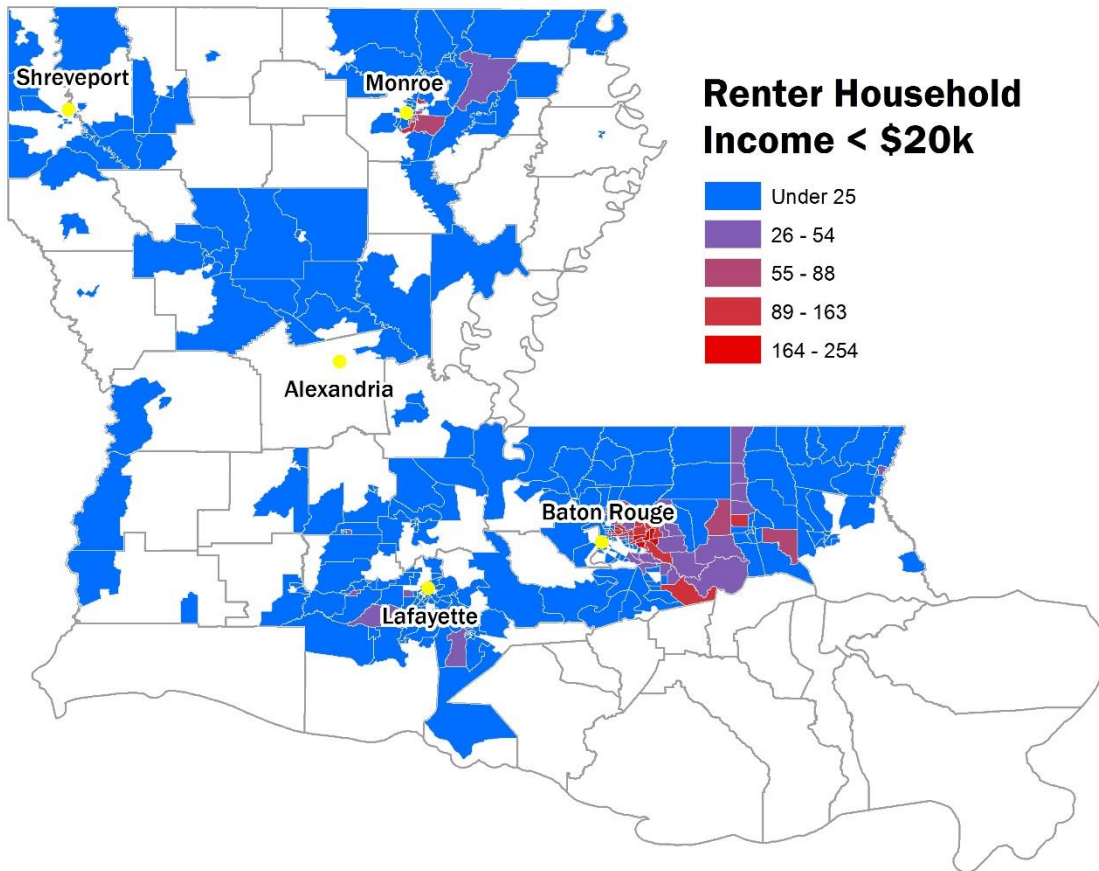
<b>IA Housing Assistance Approved (as of 11/22/16)</b>	
<b>Disaster</b>	<b>Total Approved</b>
DR-4263	\$ 72,992,887
DR-4277	\$ 578,268,509
<b>Total</b>	<b>\$ 651,261,396</b>

As previously presented, to calculate anticipated unmet needs for the owner-occupied household population, this analysis defers to HUD’s methodology described in the Federal Register Notice (FRN) for these two disaster events. Under this methodology, for each household determined to have unmet housing needs, their estimated average unmet housing need less assumed assistance from FEMA, SBA, and Insurance was calculated at \$27,455 for major damage (low); \$45,688 for major damage (high); and \$59,493 for severe damage. Therefore, as this methodology already contemplates unmet needs accounting for other forms of assistance, this analysis does not incorporate resources deployed by FEMA, SBA or NFIP. Data is not currently available respective to estimated needs at the minor-high and minor-low categories.

<b>Owner-Occupied Households Unmet Need Calculation</b>			
<b>Disaster</b>	<b>Damage Category</b>	<b>Households</b>	<b>Estimated Needs</b>
<b>4263</b>	Severe	675	\$ 40,157,775

<b>Owner-Occupied Households Unmet Need Calculation</b>			
<b>Disaster</b>	<b>Damage Category</b>	<b>Households</b>	<b>Estimated Needs</b>
	Major-High	2,276	\$ 103,985,888
	Major-Low	3,979	\$ 109,243,445
	Minor-High	1,503	\$ -
	Minor-Low	8,029	\$ -
	<b>Total</b>	<b>16,462</b>	<b>\$ 253,387,108</b>
<b>4277</b>	Severe	11,249	\$ 669,236,757
	Major-High	24,270	\$ 1,108,847,760
	Major-Low	15,182	\$ 416,821,810
	Minor-High	3,849	\$ -
	Minor-Low	13,830	\$ -
	Total	68,380	\$ 2,194,906,327
	<b>Grand Total</b>	<b>84,852</b>	<b>\$ 2,448,293,435</b>

Additionally, the FRN methodology contemplates unmet needs for rental housing units occupied by households with incomes less than \$20,000. As outlined in the map and table below, there are 13,721 such households impacted by DR-4263 or DR-4277, with high concentrations of these populations located in the Monroe and Baton Rouge metropolitan areas. However, the FRN methodology does not contemplate a specific dollar amount for these unmet rental needs. Therefore, the state will update this analysis as it conducts further assessments and program intake to develop a more nuanced dataset outlining needs for this impacted rental household population.



Renter Households Income <\$20k		
Disaster	Damage Category	Households
<b>4263</b>	Severe	128
	Major-High	619
	Major-Low	737
	Minor-High	566
	Minor-Low	1,074
	<b>Total</b>	<b>3,124</b>
<b>4277</b>	Severe	1,397
	Major-High	3,238
	Major-Low	2,999
	Minor-High	975
	Minor-Low	1,988
	<b>Total</b>	<b>10,597</b>
	<b>Grand Total</b>	<b>13,721</b>

This analysis estimates a housing unmet need of \$2,451,113,449. Given the limitations of this analysis, namely that it does not attribute a dollar amount to unmet rental housing need, and given the unique attributes of these two disasters (low rates of affected populations with flood insurance, high rates of

affected populations located outside the SFHA), it is reasonable to view this unmet need estimation as a floor, rather than a ceiling. Over time, and as more detailed information becomes available, the state will continue to work with various stakeholder groups, affected populations and HUD itself to further refine this estimate.

<b>Housing Unmet Need Summary</b>	
<b>Category</b>	<b>Amount</b>
Owner-Occupied	\$ 2,448,293,435
Renter	\$ 233,257,000
Homeless Assistance	\$ 2,820,014
<b>Total</b>	<b>\$ 2,684,370,449</b>

## C. Economic Impact & Needs

### 1. Statewide Economic Damage & Loss Assessment

Immediately following the August event, the Louisiana Department of Economic Development (LED) partnered with Louisiana State University (LSU) to conduct an assessment of economic damages resulting from the DR-4277 flooding event. Key details are:

- At the peak of the August event, 19,900 Louisiana businesses or roughly 20 percent of all Louisiana businesses were disrupted by the flooding event. FEMA has since referred approximately 22,000 businesses to SBA for recovery assistance.
- A disruption of 278,500 workers or 14 percent of the Louisiana workforce occurred at the peak of the flooding event.
- An economic loss estimated at roughly \$300 million in labor productivity and \$836 million in terms of value added during the period immediately surrounding the flood.
- Approximately 6,000 businesses experienced flooding.
- The LSU Ag Center estimates Louisiana agricultural losses of over \$110 million.

Throughout the event, severe weather, flooding and resources redirected to response efforts led to business interruption losses across the region. To characterize those losses, LED and LSU estimated the percent of businesses closed each day based on the extent of flooding drawn from the Governor’s Office of Homeland Security and Emergency Preparedness (GOHSEP) and FEMA flood maps as well as the duration of the flooding based on flood level exceedances from USGS streamgages along rivers and bayous across the impacted area. However, closures extended beyond those businesses directly impacted by flooding due to road closures and the severe weather that disrupted travel for both employees and customers. To assess these broader disruptions, LED and LSU reviewed situation reports from the GOHSEP, school closures and government closures.

These estimated industry closures were then adjusted by industry sector to account for the fact that some sectors were closed entirely while other sectors (e.g. large manufacturing facilities) generally continued to operate at normal, or close to normal capacity. To characterize these business interruption losses, LED and LSU estimated the number of businesses and employees impacted each day as well as the lost worker productivity, measured in terms of wages. While a number of these employees receive pay even if they were not working, the worker’s productivity is lost to the employer – thus creating losses to the region.

Of the most impacted parishes, East Baton Rouge and Livingston had the greatest impacts. Livingston, specifically, was acutely impacted with peak impacts in that parish occurring later in the event, as floodwaters continued to rise and also receded more slowly in some areas. Livingston was also most acutely impacted with a large majority of businesses disrupted to some degree, and more than half of businesses potentially flooded. The severity of flooding creates a greater risk of long-term closure, which can lead to business failure and long-term negative impacts to the region’s economy.

<b>Peak Disruption by Parish (DR-4277)</b>		
<b>Parish</b>	<b>Businesses</b>	<b>Employees</b>
East Baton Rouge	8,000	143,700
Lafayette	3,100	40,000
Livingston	1,800	18,700
Tangipahoa	1,500	17,000
Ascension	1,200	17,100
St. Tammany	900	8,000
Iberia	600	8,200
St. Landry	600	6,300
Acadia	400	3,900
Vermillion	400	3,700
St. Martin	400	3,100
Jefferson Davis	300	2,200
Evangeline	200	1,500
Iberville	100	2,000
Avoyelles	100	1,200
East Feliciana	100	800
Pointe Coupee	100	400
Washington	<100	300
St. Helena	<100	200
West Feliciana	<100	200
<b>Total</b>	<b>19,900</b>	<b>278,500</b>

*Business & Wage Losses*

As flooding impacted different areas at different times, the peak number of businesses and employees impacted by DR-4277 is larger than was seen at any specific point in time. In total, approximately 19,900 businesses in Louisiana experienced temporary closures, or significant operational reductions. These businesses employ approximately 278,500 workers. While many employers may have continued paying employees during closures, some hourly workers may have experienced reduced pay. LED and LSU estimated that 45,000 to 75,000 of these employees work at businesses that experienced flooding and periods without pay, or with reduced pay. At this time, the State does not have access to comparable loss data for DR-4263.

<b>Lost Productivity and Value Added (DR-4277)</b>		
<b>Parish</b>	<b>Lost Labor Productivity</b>	<b>Lost Value-Added</b>
East Baton Rouge	\$ 213,000,000	\$ 540,200,000
Livingston	\$ 27,000,000	\$ 97,800,000
Ascension	\$ 24,900,000	\$ 68,500,000

Tangipahoa	\$ 17,400,000	\$ 62,200,000
Lafayette	\$ 8,600,000	\$ 31,100,000
St. Tammany	\$ 2,900,000	\$ 8,400,000
Iberia	\$ 1,800,000	\$ 8,000,000
Iberville	\$ 1,100,000	\$ 2,900,000
St. Landry	\$ 1,000,000	\$ 3,300,000
Vermillion	\$ 700,000	\$ 2,700,000
Acadia	\$ 600,000	\$ 2,400,000
St. Martin	\$ 500,000	\$ 2,500,000
Avoyelles	\$ 400,000	\$ 1,600,000
Jefferson Davis	\$ 300,000	\$ 1,700,000
East Feliciana	\$ 300,000	\$ 900,000
Evangeline	\$ 200,000	\$ 900,000
Pointe Coupee	\$ 100,000	\$ 500,000
Washington	\$ 100,000	\$ 400,000
St. Helena	\$ 100,000	\$ 200,000
West Feliciana	\$ 100,000	\$ 200,000
<b>Total</b>	<b>\$ 300,900,000</b>	<b>\$ 836,400,000</b>

Total regional impacts attributable to lost labor productivity and lost value-added were compiled for the first three weeks of the event, providing a rough picture of the gross negative impacts of disruptions to the area. Lost labor productivity is estimated to be \$300 million and lost value-added is estimated to be \$836 million. During the three-week period measured, this represented approximately 6 percent of all economic activity in the state.

To estimate damage to businesses, LED and LSU relied on GOHSEP flood maps and FEMA flood maps, as well as flood maps published by parishes in the flooded area. Researchers then overlaid infoUSA point level data on business locations for the impacted parishes to estimate the extent of business flooding in each parish. The total number of businesses estimated to have flooded is 6,100 across the 20 parish area. It is worth noting that 60 percent of businesses in Livingston parish are estimated to have experienced some flooding and 19 percent of those in Ascension as well as 15 percent of those in East Baton Rouge, the parish with by far the largest overall number of businesses in the impacted area.

Data from the Bureau of Economic Analysis was used to estimate the value of business structures and equipment based on the size of employer and industry. LED and LSU estimated damage to business structures totaled \$595.6 million and damage to fixed equipment will add another \$262.8 million to business losses.

Many businesses experiencing flooding lost substantial inventories, which were estimated based on the sales of impacted businesses and data from the Bureau of Economic Analysis that relates average inventories to sales for businesses in manufacturing, wholesale trade and retail trade. LED and LSU estimated a total of \$1.4 billion in inventory damaged by DR-4277 flooding. This figure represents an average of over \$200,000 in inventory for each flooded business. While many impacted businesses were likely smaller businesses that would have significantly lower inventories, a relatively small number of large wholesalers and retailers with substantial inventories can heavily skew the average relative to the typical loss. For example, the Dixie RV Superstore, a recreational vehicle dealership in Hammond estimated as much as \$30 million in damage attributable to a large portion of their vehicular inventory being flooded.

Similarly, stores like the Walmart and Home Depot in Denham Springs flooded and would have lost inventory values much higher than what is typical across the 6,000 businesses that flooded.

*Agricultural Losses*

In response to DR-4263 and DR-4277, Kurt M. Guidry of the LSU AgCenter conducted impact estimates on Louisiana’s agriculture sector. Following DR-4263, 24 parishes reported agribusiness impacts totaling an estimated loss of \$80 million. The March 2016 flood event occurred at the beginning of the year’s planting season, impacting pasture and livestock infrastructure, causing livestock deaths and requiring extensive replanting of crops. Extensive rainfall after the event further exacerbated crop problems, delaying replanting past normal planting windows and reducing crop yields.

The LSU AgCenter and Farm Service Agency surveyed damages specific to DR-4263. The table below provides details on the acreage impacted by crop. Overall, almost 90,000 acres of crops were impacted by the flooding event.

<b>DR-4263 Crops Impacted</b>	
<b>Crop</b>	<b>Acres Impacted</b>
Corn	7,545
Cotton	7,960
Soybeans	18,000
Pasture	52,200
Rice	2,000
Sorghum	2,000
<b>Total</b>	<b>89,705</b>

Following DR-4277, the LSU AgCenter estimated impacts to the agricultural sector to exceed \$110 million. This estimate is conservative, as it only included selected commodities including rice, soybeans, sugarcane, sweet potatoes, fruits and vegetables, corn, sorghum, cotton and lost grazing days for livestock. The economic estimates used acreage, historic yields and pricing data to predict yield loss resulting from DR-4277.

<b>Estimated Agricultural Losses</b>		
<b>Crop</b>	<b>DR-4263</b>	<b>DR-4277</b>
Corn	\$43,454,125	\$10,901,631
Soybeans	\$25,182,504	\$46,754,976
Cotton	\$117,077	\$3,695,816
Sorghum	\$251,771	\$417,931
Rice	\$7,240,111	\$33,624,629
Sweet Potatoes	\$401,200	\$4,465,247
Wheat	\$3,638,397	N/A
Sugarcane	N/A	\$3,203,320
Grazing	N/A	\$1,973,528
Fruits/Vegetables	N/A	\$5,206,991
<b>Total</b>	<b>\$80,285,185</b>	<b>\$110,244,069</b>

OCD-DRU is working with the LSU AgCenter and its partners to gain a clearer understanding of impacts and unmet needs across Louisiana’s agriculture sector. To that end, information is being collected relative to crop loss insurance policies, the Non-insured Crop Disaster Assistance Program (NAP) and any payments

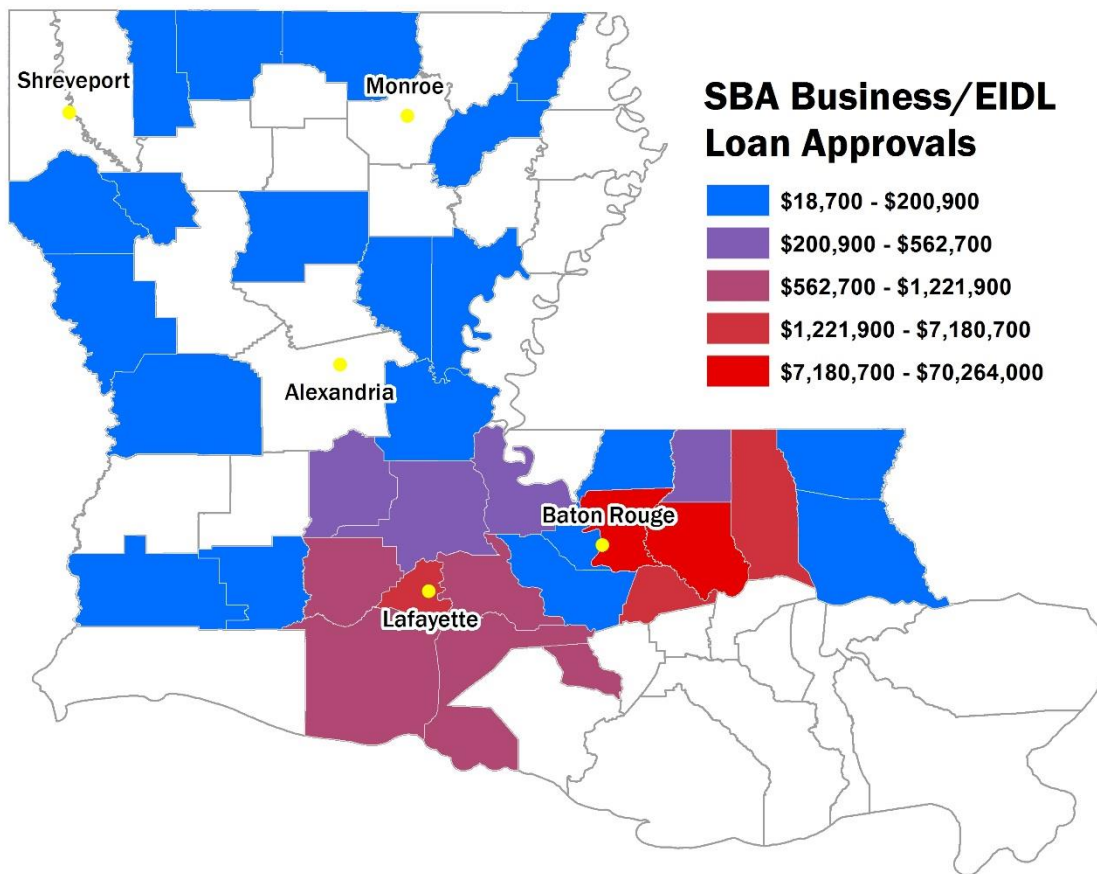
made to livestock, aquaculture, bee keepers and others under permanent disaster assistance programs. A coordination of efforts and sharing of information amongst USDA’ Risk Management Agency, the Farm Service Agency, and LSU AgCenter will enable OCD-DRU to assess the impacts of DR-4263 and DR-4277 and accurately target recovery funds to address the greatest needs.

*Combined Losses*

<b>Economic Loss Summary</b>	
<b>Category</b>	<b>Loss Estimate</b>
Agriculture (DR-4277)	\$ 110,244,069
Agriculture (DR-4263)	\$ 80,285,185
Business Structures	\$ 595,600,000
Business Equipment	\$ 262,800,000
Business Inventories	\$1,425,500,000
Business Interruption Loss	\$ 836,400,000
<b>Total</b>	<b>\$3,310,829,254</b>

**2. Unmet Economic Needs**

As with housing, in discussing a full scope of unmet economic needs, it is imperative to understand other resources that have and will be expended, and where those resources have been and will be geographically deployed. To this effect, as of 11/21/16, SBA had approved \$147,296,500 in Business and Economic Injury Disaster Loans (EIDL) to affected populations from DR-4263 and DR-4277. Highest concentrations of these approvals have been in the Baton Rouge Capital Region and in the metropolitan Lafayette region. In addition, OCD-DRU is working to gather data relative to private insurance claims in order to more accurately identify the remaining unmet needs of the business community.



SBA Business/EIDL Loans (as of 11/21/16)		
Disaster	Parish	Business/EIDL Loans
4263	Ouachita	\$ 8,002,700
	St. Tammany	\$ 1,903,100
	Morehouse	\$ 1,240,600
	Washington	\$ 557,500
	Webster	\$ 552,900
	Caddo	\$ 537,100
	Tangipahoa	\$ 528,700
	Natchitoches	\$ 462,000
	Winn	\$ 424,800
	Bossier	\$ 268,100
	Union	\$ 242,800
	Vernon	\$ 201,300
	Red River	\$ 115,300
	Richland	\$ 101,400
	Rapides	\$ 100,700
Lincoln	\$ 91,000	

	Caldwell	\$ 79,400
	Ascension	\$ 57,900
	West Carroll	\$ 54,000
	Beauregard	\$ 39,000
	Livingston	\$ 25,400
	Bienville	\$ 25,000
	Cameron	\$ 25,000
	Grant	\$ 25,000
	Catahoula	\$ 14,300
	<b>Total</b>	<b>\$ 15,675,000</b>
<b>4277</b>	East Baton Rouge	\$ 70,653,300
	Livingston	\$ 38,767,900
	Ascension	\$ 7,180,700
	Lafayette	\$ 5,393,000
	Tangipahoa	\$ 3,632,900
	St. Martin	\$ 1,221,900
	Vermilion	\$ 884,200
	Iberia	\$ 770,300
	Acadia	\$ 679,500
	Pointe Coupee	\$ 562,700
	St. Landry	\$ 522,700
	St. Helena	\$ 343,000
	Evangeline	\$ 276,300
	East Feliciana	\$ 200,900
	Jefferson Davis	\$ 170,100
	West Baton Rouge	\$ 78,500
	Iberville	\$ 76,000
	Jefferson	\$ 65,300
	Washington	\$ 34,300
	Calcasieu	\$ 25,000
	St. John the Baptist	\$ 25,000
	La Salle	\$ 24,200
	Avoyelles	\$ 18,700
	Orleans	\$ 15,100
	<b>Total</b>	<b>\$ 131,621,500</b>
	<b>Grand Total</b>	<b>\$ 147,296,500</b>

Accounting for resources disbursed through SBA loans, this analysis estimates an unmet economic need of \$3,163,532,754. Note, this analysis contemplates that a portion of these needs may have been mitigated by resources disbursed through NFIP. These resources are discussed in the subsequent section outlining the state's total unmet need calculation.

<b>Economic Unmet Need Summary</b>	
<b>Category</b>	<b>Amount</b>

Agriculture Losses	\$ 190,529,254
Business Losses	\$ 3,120,300,000
SBA Loans	\$ (147,296,500)
<b>Total</b>	<b>\$ 3,163,532,754</b>

## D. Infrastructure Impact & Needs

### 1. Statewide Infrastructure Damage & Loss Assessment

Infrastructure Systems affected by DR-4263 and DR-4277 included damage and disruptions to levees, roadways and bridges (especially rural roadways), culverts, utilities, wastewater treatment systems, drinking water treatment and collection systems. Across Louisiana, flood basins were overwhelmed by record-breaking or near record-breaking rainfall. In some of the coastal parishes, the runoff of rain was compounded by southern winds that elevated tidal basins and thus inhibited drainage runoff.

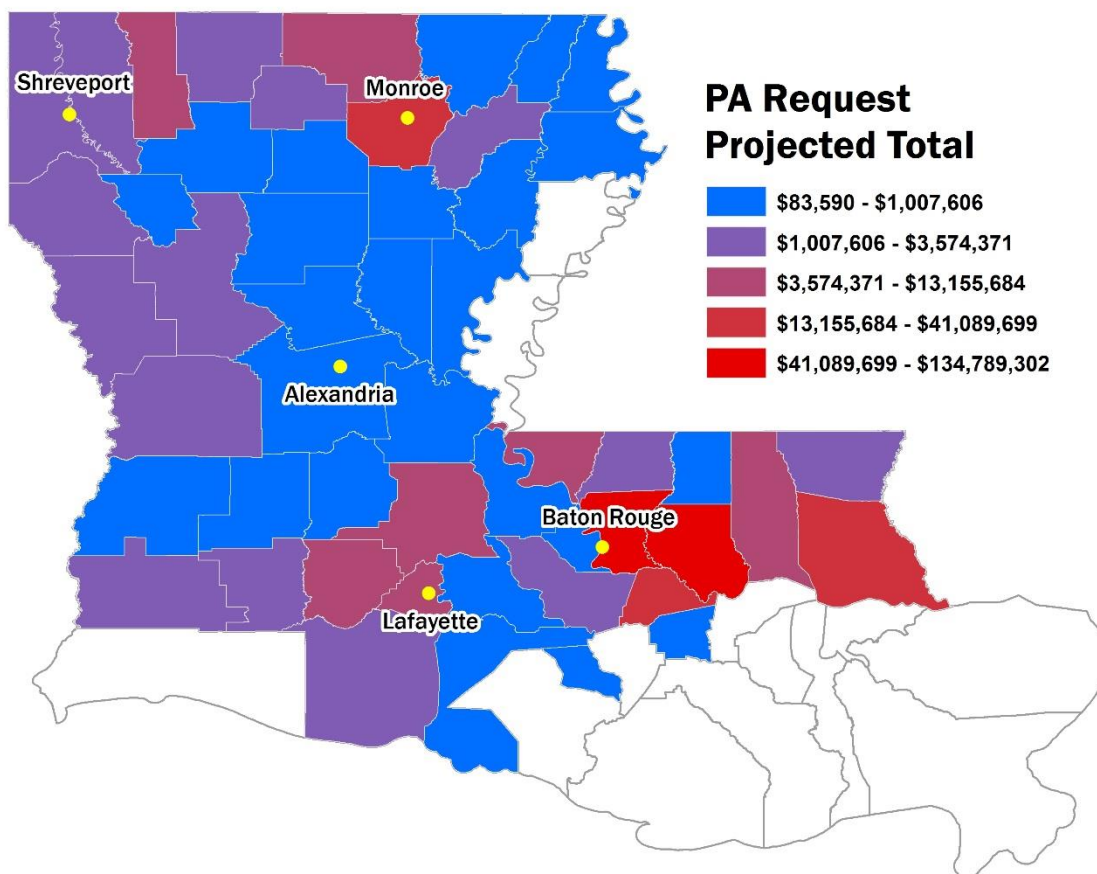
Damages to roadways and bridges inflicted the most significant damages. Impacts to Interstates 10, 49, and 20 rendered vehicle traffic into and out of Louisiana impossible for multiple days during the height of each flooding event. During and in the aftermath of DR-4263, the Red River was rendered unnavigable for several days. Multiple railways across the state were unable to safely pass cargo due to elevated flood waters. In addition, data showed indications of stress and wear on many urban drainage systems.

### 2. Unmet Infrastructure Needs

#### *FEMA Public Assistance*

The FEMA Public Assistance (PA) Program is designed to provide immediate assistance to the impacted jurisdictions for emergency protective measures and permanent repairs to infrastructure and community facilities. For DR-4263, the state's obligation has been established as not less than 25 percent of eligible project costs. For DR-4277, the state's obligation has been established as not less than 10 percent of eligible project costs.

As of 11/21/16, \$36,501,492 has been identified in PA need for DR-4263 and \$247,039,464 has been identified for DR-4277. GOHSEP estimates these totals to rise to \$93,751,791 for DR-4263 and \$750,000,000 for DR-4277. Based on these data, the current unmet need is \$12,167,167 for DR-4263 and \$27,448,829 for DR-4277. Long term, based on GOHSEP's projections, the state estimates this unmet need to grow to \$31,250,597 for DR-4263 and \$83,333,333 for DR-4277, respectively, for a grand total of \$114,583,930.



PA Intake & Projections (as of 11/21/16)				
Disaster	Category	Total PWs	Federal Share	State Share
<b>4263 (25% State Share)</b>	A	78	\$ 3,997,625	\$ 1,332,542
	B	196	\$ 14,503,954	\$ 4,834,651
	C	176	\$ 9,970,594	\$ 3,323,531
	D	6	\$ 268,922	\$ 89,641
	E	90	\$ 3,123,532	\$ 1,041,177
	F	59	\$ 1,407,396	\$ 469,132
	G	36	\$ 2,436,612	\$ 812,204
	Z	1	\$ 792,857	\$ 264,286
	<b>Current 4263 Total</b>		642	\$ 36,501,492
<b>Projected 4263 Total</b>		875	\$ 93,751,791	\$ 31,250,597
<b>4277 (10% State Share)</b>	A	16	\$ 55,688,209	\$ 6,187,579
	B	93	\$ 181,595,176	\$ 20,177,242
	C	13	\$ 864,194	\$ 96,022
	D	3	\$ 524,833	\$ 58,315
	E	18	\$ 2,366,537	\$ 262,949
	F	13	\$ 364,265	\$ 40,474
	G	0	\$ -	\$ -

PA Intake & Projections (as of 11/21/16)				
Disaster	Category	Total PWs	Federal Share	State Share
	Z	1	\$ 5,636,250	\$ 626,250
<b>Current 4277 Total</b>		157	\$ 247,039,464	\$ 27,448,829
<b>Projected 4277 Total</b>		969	\$ 750,000,000	\$ 83,333,333
<b>Current Grand Total</b>		799	\$ 283,540,956	\$ 39,615,993
<b>Current Projected Grand Total</b>		1844	\$ 843,751,791	\$114,583,930

### *Hazard Mitigation Grant Program*

The Hazard Mitigation Grant Program (HMGP) will be a critical part of the long-term recovery process in both rebuilding and protecting housing stock and vital infrastructure. These grant funds are calculated at 15 percent of the total FEMA Individual Assistance and Public Assistance allocations attributable to DR-4263 and DR-4277. As of 11/15/16, the state had received an award letter from FEMA indicating a \$26,117,655 grant in response to DR-4263. Additionally, the state estimates it will receive an additional \$252 million HMGP grant in response to DR-4277.

Unlike PA, the state’s obligation for both DR-4263 and DR-4277 has been established as not less than 25 percent of eligible project costs. Therefore, the state’s unmet need estimate is \$8,705,885 for DR-4263 and \$84 million for DR-4277, with a combined total in excess of \$92.7 million.

HMGP Award & State Share		
Disaster	Federal Share	State Share
DR-4263	\$ 26,117,655	\$ 8,705,885
DR-4277	\$ 252,000,000	\$ 84,000,000
<b>Total</b>	<b>\$ 278,117,655</b>	<b>\$ 92,705,885</b>

Therefore, this analysis contemplates a total unmet infrastructure unmet need gap of \$207,289,815.

Infrastructure Unmet Need Summary	
Category	Amount
PA Cost Share	\$ 114,583,930
HMGP Cost Share	\$ 92,705,885
<b>Total</b>	<b>\$ 207,289,815</b>

### 3. Resilience Gaps

Broadly, the state recognizes DR-4263 and DR-4277 have exposed a wide array of resilience gaps within the communities affected by these two events. Specifically, these gaps include needs for planning and implementation of strategically-focused projects and programs at all scales, from individual investments at the household level to large-scale structural investments designed to impact entire watersheds. These will include basin-wide planning and modeling initiatives in all impacted areas to provide the best information necessary to make wise DR investment decisions delivering optimal benefits. The ultimate purpose of the investments is to reduce floodplain risk exposure throughout the entire impacted region, reducing the necessity of structure elevations while protecting the substantial long-term recovery investments to be made with private and public funds over the next several years as a result of DR-4263 and DR-4277.

Such an approach envisions need for both structural and nonstructural interventions. Structural investments may include large-scale diversions, retention/detention ponds and canals, channel modifications and other large and small-scale structural approaches. Nonstructural strategies may include an elevation program for those households substantially damaged within the floodplain, flood-proofing, voluntary buy-outs of high risk properties, modified building codes, land-use planning and management, targeted infrastructure investments, technical and staffing support, small-scale retention and detention techniques for homes and businesses and public outreach and education efforts. Nonstructural approaches are expected to reduce risk by reducing the need for elevations and by creating a greater buffer between assets and floodplains.

Predicting what types of programs and projects will be funded and at what level is premature prior to modeling for current and future risk within the state's affected watersheds and floodplains. Once these efforts have been undertaken, and the state is able to apply specific measures within risk models to determine optimal return on investment with respect to future damages and resilience, the state will propose a full slate of resilience-oriented investments paired with demonstrable measures of effectiveness.

It is important to note that the state is already applying planning funds to the process of better understanding the impacted basins in anticipation of funding to implement these strategies.

Generally, the state has identified five general types of resilience-building activities for potential CDBG-DR investment:

#### *Structural Investments to Address Regional Watershed Protection*

Currently, there are three major diversion projects under consideration across southern Louisiana. Two diversion projects, which will be located at the southern reaches of the Mississippi River, have recently received \$250M in funding as a result of the Deepwater Horizon settlement with British Petroleum. The Mississippi diversions are intended to divert sediment and create new land. There is also a project plan in place to divert floodwaters from the Comite River in East Baton Rouge Parish to the Mississippi River. According to best data available to the state, the Comite River diversion project, if it had been implemented prior to the August flooding event, potentially could have substantially reduced the disaster's impacts in the Baton Rouge metropolitan area.

In addition to diversions, reservoir creation and channel modification projects have been used to help reduce flood levels in the floodplain. Such projects have been identified within the most-affected areas, and like the Comite River diversion, could have substantially mitigated the disaster's impact had they been implemented prior to the August event.

#### *Resilience Add-Ons to Planned Public Infrastructure Projects*

The state will strive for all public buildings erected with CDBG-DR funds to be certified LEED to ensure lower water and power bills as well as healthy indoor air quality for residents. In addition, the state will encourage the incorporation of a combined heat and power (CHP) system, which will be designed to continue providing a reduced level of electricity and cooling to the building in the event of a grid/power outage, in the construction of houses or complexes. By incorporating smart-grid designs, the state would seek to lower its overall energy risk profile, mindful of the frequency in which it experiences outages attributable to significant disaster events.

### *Stormwater Retention by Household*

At 62.45 inches of rain per year, Louisiana experiences some of the highest annual rainfall in the country, as evidenced by DR-4263 and DR-4277. Stormwater runoff during heavy rain events causes flooding that affects the well-being, property, and livelihood of every inhabitant. Outdated stormwater and pumping systems, designed to alleviate flooding, are often overwhelmed during heavy rains. Not only are these systems costly, outdated, and inadequate for the high levels of rain, but they have become recognized as one of the main causes of subsidence.

One approach to addressing the abovementioned issues is implementing stormwater management projects and programs at the individual household level. Individual household measures can help keep rainwater out of drainage systems, reducing overall system requirements.

Like natural systems, stormwater management projects and programs can contribute to diverting, holding, and moving excess stormwater. If one household were to purchase and regularly use a rain barrel every day, that household would likely not be able to fully address all of their stormwater needs. However, if all households were to implement stormwater management measures to help slow the flow of water to the drainage system, the demands on the management system are dramatically decreased.

According to sources at the Urban Conservancy (UC), a nonprofit in New Orleans that helps individual households address their stormwater management needs, this systematic approach can be done in steps. Step number one, according to the UC, is the elimination of excess paving. Large amounts of impermeable concrete keeps water from flowing back into the natural system and quickly pushes large amounts of water to the drainage system where it can overload the system, causing flooding. Where hard surfaces are necessary, like for parking, installation of permeable pavement can reduce flow to drainage systems. Permeable paving uses interlocking, recycled materials to create a grid in place of the old impermeable surfaces, and instead of filling that grid with concrete, they instead fill it with different types of permeable gravel. This gravel allows for the flow of rainwater back into the natural system. In other words, permeable paving functions practically like concrete, while allowing infiltration of the rain that falls on it. The third step recommended by the UC is to divert roof run-off into features such as rain barrels, retention ponds and rain gardens where the water is held and then released or used at a later date.

In anticipation of a large-scale suite of programs designed to effectuate rehabilitation of single-family homes and businesses impacted by the two flooding events, it would be prudent to embed these resilience-building, flood-mitigating principles into the deployment of such a homeowner rehabilitation effort.

### *Community Stormwater Retention*

The recommendations made at the individual level, community level projects to address stormwater retention and management must be addressed systematically. If one household were to implement all of the abovementioned recommendations their household would only be managing stormwater at a small, lot sized scale. If a community as a whole can begin implementing these projects on an intersection-by-intersection, or the neighborhood-by-neighborhood scale, such activities can have a real, demonstrable impact on the community's flood risk profile.

Another way to promote resilient communities through community level projects can be found in the **NDRC application** for the **City of New Orleans**. In the application, the City of New Orleans made several recommendations for community level resilience measures. Below is a list:

- **Blue-Green Parklands** – Construct a series of large-scale Blue-Green Parklands on underutilized sites for significant water storage, ecological benefit and recreational opportunities.
- **Blue-Green Corridors** – Install blue or green infrastructure where underutilized sites are located.
- **Neighborhood Networks** – Develop a network of green infrastructure interventions in a concentrated scale.
- **Canals** – Transform existing drainage canals into public waterfronts.

Additional recommendations may include:

- Remove excess paving and impermeable surfaces and replace with permeable surfaces at locations that are burdened with large amounts of concrete/asphalt such as: Churches, supermarkets, retail stores, schools, businesses, and community centers.
- Similar to the City of New Orleans’ Blue-Green Parklands and Corridors, take empty lots and/or blighted properties, and turn them into green space, blue space, and public amenities.
- Other areas concrete would be used such as sidewalks, basketball or tennis courts, picnic sights etc., use permeable surfacing.
- Leverage existing programs, such as the Urban Conservancy’s Building Active Stewardship in New Orleans (BASIN) program or Green Light New Orleans’ rain barrel and green light bulb replacement installation programs, to name a few.

### *Planning and Flood-Risk Modeling*

#### *Planning with LA SAFE*

Through this recovery efforts, the state would also seek to leverage its own activities through its National Disaster Resilience award. Already funded by HUD, the LA SAFE Framework focuses on three typologies – Reshaping, Retrofitting, and Resettlement – using a forward-thinking, risk-based approach to guide the state’s future land use and development patterns. Areas projected to experience in excess of 14 feet of flooding in a 100-year storm event 50 years from now are areas in which the state generally recommends community resettlement projects, like the one it has commenced for the Isle de Jean Charles community in Terrebonne Parish. Areas projected to experience between 3 feet and 14 feet of flooding in a 100-year storm event 50 years from now are those in which the state plans to facilitate holistic and strategic adaptations around the social, cultural and economic assets which it cannot abandon. Areas projected to experience less than 3 feet of flooding in a 100-year storm event 50 years from now are those in which the state plans to incentivize future economic and population growth. We know we cannot eliminate Louisiana’s flood-risk profile, but we must preserve – and when possible expand – economic and community development opportunities in moderately vulnerable areas, while incentivizing population and economic growth in those areas minimally at risk.

#### *CPRA & CLARA*

The 2012 Coastal Master Plan, which is being updated for 2017, was based on state-of-the art science and analysis, and its modeling process provides a holistic understanding of our coastal environment today while anticipating changes expected over the next 50 years. The Coastal Louisiana Risk Assessment (CLARA) model is a quantitative simulation model of storm surge flood risk developed by the RAND Corporation. In the Coastal Zone, this is the model upon which LA SAFE relies. However, the state must take a more holistic, watershed-based approach to flood-risk modeling, especially in light of these two rain events in March and August.

### Riverine Flood Modeling – USGS

The CLARA model outlined above does a good job of projecting risk for coastal Louisiana; however, this modeling system does not consider the risk of riverine flooding from rainfall, which is what occurred in Louisiana in March and August. The United States Geological Survey (USGS), through their Flood Inundation Mapping (FIM) Program, provides one option to help the state better understand its riverine flood risk in the future. Others include The Water Institute of the Gulf, and the Corps of Engineers, all of which are under consideration at this time. All investments in protective and resilient infrastructure will be made based on the results of extensive modeling and cost benefit analysis.

### Summary of Unmet Resilience Need Gaps

Based on the categories of resilience need gaps articulated above, the State anticipates a total unmet need of \$600,000,000. This total has been derived based on the following:

- **Structural Investments (\$75,000,000):** This estimate is based on an assumption such structural investments would be paired with other sources of funding, including but not exclusive to those articulated in the State’s 2017 Coastal Master Plan.
- **Resilience Add-Ons to Planned Infrastructure (\$132,915,926):** As outlined in the section documenting unmet infrastructure needs, the State anticipates a total investment of \$1,329,159,261 through FEMA’s PA and HMGP programs in conjunction with DR-4263 and DR-4277 recovery efforts. Based on similar initiatives in past disaster recovery environments, the State believes these resilience-building add-ons would increase total project costs by 10%.
- **Household Stormwater Retention (\$122,414,672):** As outlined in the section documenting unmet housing needs, the State anticipates a total unmet need of \$2,448,293,435 for affected owner-occupied units. The State believes retention adaptations would increase these project costs by 5%.
- **Community Stormwater Retention (\$239,669,402):** This estimate is based on the State’s historical precedence in implementing neighborhood-level water management projects, specifically those following hurricanes Katrina, Rita, Gustav and Ike.
- **Planning & Flood-Risk Modeling (\$30,000,000):** This estimate is comparable with scale of the State’s Comprehensive Resiliency Pilot Program, implemented following hurricanes Gustav and Ike. Given the comparable nature of the large geographic areas impacted by both Gustav and Ike and DR-4263 and DR-4277, the State believes these needs are roughly comparable to one another in terms of programmatic scale.

These gaps have been summarized as follows:

Resilience Unmet Need Gaps	
Category	Amount
Structural Investments	\$ 75,000,000
Resilience Add-Ons to Planned Infrastructure	\$ 132,915,926
Household Stormwater Retention	\$ 122,414,672
Community Stormwater Retention	\$ 239,669,402
Planning & Flood-Risk Modeling	\$ 30,000,000
<b>Total</b>	<b>\$ 600,000,000</b>

## E. Public Service Unmet Needs

Through the implementation of the National Disaster Framework (NDRF), the state, along with FEMA and GOHSEP, have held Community Planning and Capacity Building meetings state wide in accordance with Recovery Support Function 1 (RSF 1). The RSF 1 meetings occurred with Ascension Parish, the Town of Sorrento, the City of Gonzales, the City of Denham Springs, Livingston Parish, and St. Tammany Parish. As a result of these meetings, the leadership and key staff of all impacted communities have identified needs in all service areas handled by a government entity, such as the flooding of fire, police stations and other government buildings, which provide key public services to citizens as well as large-scale infrastructure projects that will need to be implemented in order to recover.

Funding is a severe handicap, especially compounded by the fact that sales tax and other revenue streams to local government have declined, or are expected to decline, once the initial buying of cars, building materials, etc., subsides. Therefore, the approved budgets for the upcoming fiscal year are having to be revisited and modified, which includes the deferral of planned projects and a potential decrease in staffing for fire and police and other services to meet the immediate recovery needs of the parishes. For example, in Livingston Parish alone, the parish lost a minimum of 10 fire trucks, 33 police vehicles, 61 school buses and 20 other parish-related vehicles which will need to be replaced, impacting the funding for other projects.

## F. Summary of Unmet Needs & Additional Considerations

In summary, and outlined in the sections above, through this analysis, the state has noted the following sources of recovery expenditure through the FEMA IA program and through various SBA loan programs.

<b>IA Housing Assistance Approved (as of 11/22/16)</b>	
<b>Disaster</b>	<b>Total Approved</b>
DR-4263	\$ 72,992,887
DR-4277	\$ 578,268,509
<b>Total</b>	<b>\$ 651,261,396</b>

<b>Summary of SBA Loans Approved (as of 11/21/16)</b>				
<b>Disaster</b>	<b>All Loans</b>	<b>Home Loans</b>	<b>Business Loans</b>	<b>EIDL</b>
DR-4263	\$ 5,729,100	\$ 4,696,700	\$ 932,400	\$ 100,000
DR-4277	\$1,167,826,800	\$1,036,699,100	\$ 122,967,100	\$8,160,600
<b>Grand Total</b>	<b>\$1,173,555,900</b>	<b>\$1,041,395,800</b>	<b>\$ 123,899,500</b>	<b>\$8,260,600</b>

This analysis does not include proceeds disbursed or approved through NFIP policy claims, since the state does not have sufficient information to assign claim payments attributable to housing or economic losses. Therefore, rather than attempting to incorporate these claim payouts in either category, this analysis incorporates NFIP by calculating a total likely unmet need amount. As of 11/22/16, there were 33,177 policy claims made through NFIP for DR-4263 and DR-4277 and \$626,583,804 approved or disbursed through the program.

It should additionally be noted this total represents an initial sample of what will ultimately be claimed and disbursed through NFIP. As of 12/3/16, FEMA had granted Gov. John Bel Edwards request to extend the filing deadline by which those affected by DR-4277 must submit a proof of loss claim. With the

extension, applicants will have 180 days from the date of the loss to provide the completed paperwork to the insurer.

<b>NFIP Claims and Totals (as of 11/22/16)</b>			
<b>Disaster</b>	<b>Parish</b>	<b>Claims</b>	<b>Total Amount</b>
<b>4263</b>	Ouachita	1,681	\$ 84,894,456
	St. Tammany	748	\$ 45,920,582
	Tangipahoa	569	\$ 25,060,398
	Bossier	387	\$ 14,261,313
	Washington	156	\$ 7,399,609
	Caddo	155	\$ 7,368,970
	Union	139	\$ 6,373,469
	Natchitoches	119	\$ 5,293,486
	Morehouse	77	\$ 4,592,970
	Webster	65	\$ 4,277,947
	Livingston	195	\$ 4,196,158
	Richland	90	\$ 3,801,760
	Vernon	64	\$ 3,457,134
	Calcasieu	31	\$ 1,836,773
	Catahoula	63	\$ 1,579,181
	Rapides	32	\$ 1,466,140
	Grant	45	\$ 1,374,548
	Claiborne	42	\$ 1,316,871
	East Baton Rouge	60	\$ 1,296,768
	West Carroll	25	\$ 1,167,357
	Ascension	50	\$ 1,074,296
	Winn	16	\$ 1,026,922
	Lasalle	20	\$ 802,644
	Beauregard	11	\$ 741,433
	Caldwell	37	\$ 644,167
	Allen	9	\$ 398,385
	East Carroll	9	\$ 333,499
	De Soto	9	\$ 304,238
	Avoyelles	9	\$ 216,955
	Bienville	6	\$ 182,094
	Concordia	5	\$ 149,645
	Sabine	7	\$ 140,623
	Lincoln	5	\$ 134,947
	Red River	2	\$ 72,965
	St. Helena	3	\$ 67,050
	Madison	4	\$ 48,442
	Lafayette	1	\$ 34,344

<b>NFIP Claims and Totals (as of 11/22/16)</b>			
<b>Disaster</b>	<b>Parish</b>	<b>Claims</b>	<b>Total Amount</b>
	Orleans	6	\$ 30,279
	Jefferson	3	\$ 12,820
	St. Landry	1	\$ 9,686
	Franklin	5	\$ 4,515
	Plaquemines	1	\$ 4,395
	Lafourche	1	\$ 2,906
	Pointe Coupee	1	\$ 1,786
	Iberville	1	\$ 928
	St. John the Baptist	2	\$ -
	Terrebonne	1	\$ -
	<b>Total</b>	<b>4,968</b>	<b>\$233,375,854</b>
<b>4277</b>	East Baton Rouge	10,651	\$138,419,750
	Livingston	7,007	\$ 94,887,500
	Ascension	3,441	\$ 50,241,800
	Lafayette	2,230	\$ 39,479,850
	Tangipahoa	971	\$ 15,647,750
	Vermilion	1,230	\$ 14,792,250
	Acadia	806	\$ 9,770,400
	Iberia	361	\$ 6,171,800
	Jefferson Davis	254	\$ 5,531,900
	St. Martin	251	\$ 3,558,500
	St. Landry	241	\$ 3,481,050
	St. Tammany	140	\$ 2,303,250
	Pointe Coupee	146	\$ 1,896,700
	Evangeline	127	\$ 1,871,450
	Iberville	65	\$ 991,500
	Jefferson	32	\$ 476,800
	St. James	33	\$ 475,500
	St. Helena	23	\$ 396,500
	Avoyelles	28	\$ 390,200
	Calcasieu	25	\$ 384,100
	West Baton Rouge	24	\$ 292,000
	East Feliciana	20	\$ 281,500
	West Feliciana	13	\$ 250,500
	Washington	16	\$ 213,200
	St. Charles	11	\$ 210,700
	Orleans	17	\$ 198,500
	Cameron	9	\$ 111,000
	Bossier	5	\$ 76,000
	St. John the Baptist	3	\$ 67,000

<b>NFIP Claims and Totals (as of 11/22/16)</b>			
<b>Disaster</b>	<b>Parish</b>	<b>Claims</b>	<b>Total Amount</b>
	St. Mary	4	\$ 58,000
	Ouachita	5	\$ 56,000
	Terrebonne	5	\$ 50,000
	Lafourche	4	\$ 34,000
	Allen	2	\$ 31,000
	St. Bernard	1	\$ 22,000
	Assumption	1	\$ 20,000
	Concordia	1	\$ 20,000
	Morehouse	1	\$ 16,000
	Caldwell	1	\$ 10,000
	Rapides	1	\$ 10,000
	Catahoula	1	\$ 6,000
	Lincoln	1	\$ 6,000
	East Carroll	1	\$ -
	<b>Total</b>	<b>28,209</b>	<b>\$393,207,950</b>
	<b>Grand Total</b>	<b>33,177</b>	<b>\$626,583,804</b>

Therefore, in accounting for NFIP claims and payouts, this analysis estimates a total unmet need gap of \$5,590,809,214.

<b>Summary of Unmet Needs</b>	
<b>Type</b>	<b>Amount</b>
Housing	\$ 2,258,570,449
Economic	\$ 3,151,532,754
Infrastructure	\$ 207,289,815
Resilience	\$ 600,000,000
NFIP Payouts	\$ (626,583,804)
<b>Total</b>	<b>\$ 5,590,809,214</b>

### G. Anticipated Unmet Needs Gap

During the October 10 Congressional Session, state government officials, including Gov. John Bel Edwards, traveled to Washington D.C. and worked collaboratively with Louisiana’s Congressional Delegation to secure long-term disaster recovery resources in response to DR-4263 and DR-4277. Working with limited disaster loss unmet need information, Louisiana’s delegation proposed a relief package of nearly \$3.8 billion. This package focused primarily on housing needs, as the state has prioritized housing as its most urgent and pressing recovery concern following the two flooding events. Through this Action Plan, the state now presents revised unmet need estimates based on current best available data. Over time, the state reserves the right to continue to update these estimates as additional assessments are made and more complete data becomes available.

Accounting for this initial \$437,800,000 appropriation for long-term recovery purposes, the state has calculated a remaining unmet need gap of \$4,774,732,200.

Summary of Total Unmet Needs			
Category	Losses/Gaps	Known Investments	Remaining Unmet Need
Owner-Occupied Housing	\$2,448,293,435		\$2,448,293,435
Homeowner Rehabilitation and Reconstruction (CDBG-DR)		(\$405,800,000)	(\$405,800,000)
Renter Housing	\$233,257,000		\$233,257,000
Rental Housing Rehabilitation (CDBG-DR)		(\$20,000,000)	(\$20,000,000)
Homeless Assistance	\$2,820,014		\$2,820,014
Agriculture Losses (DR-4277)	\$110,244,069		\$110,244,069
Agriculture Losses (DR-4263)	\$80,285,185		\$80,285,185
Business Structures	\$595,600,000		\$595,600,000
Business Equipment	\$262,800,000		\$262,800,000
Business Inventories	\$1,425,500,000		\$1,425,500,000
Business Interruption Loss	\$836,400,000		\$836,400,000
SBA Business/EIDL Loans		(\$147,296,500)	(\$147,296,500)
Business and Agriculture Recovery (CDBG-DR)		(\$12,000,000)	(\$12,000,000)
PA State Share	\$114,583,930		\$114,583,930
HMGP State Share	\$92,705,885		\$92,705,885
Resilience Gaps	\$600,000,000		\$600,000,000
NFIP Claim Totals		(\$626,583,804)	(\$626,583,804)
<b>Totals</b>	<b>\$6,802,489,518</b>	<b>(\$1,211,680,304)</b>	<b>\$5,590,809,214</b>

\*CDBG-DR investments are inclusive of administration and program delivery costs.

### 3. Method of Distribution and Connection to Unmet Needs

#### A. Method of Distribution Process

All programs will be implemented by the State of Louisiana at this time. Depending on a continued assessment of unmet needs and additional funding, the state may allocate funds to parishes or other subrecipients through future substantial Action Plan Amendments. The programs established in this Action Plan are not entitlement programs and are subject to available funding.

#### B. Connection to Unmet Needs

Based on the unmet needs assessment and input from impacted communities throughout Louisiana, the state has prioritized programs that will assist in meeting the short- and long-term recovery needs of its residents and communities. While the impact of the 2016 Severe Storms and Flooding was much greater than the resources available under this initial HUD allocation, these programs will begin to address the unmet needs in homeowners' primary residences and rental housing and economic recovery and revitalization. Infrastructure activities will be addressed in future action plans.

The Continuing Appropriations Act, 2017, requires that all CDBG-DR funded activities address an impact of the disaster for which funding was appropriated. The CDBG-DR provisions require that each activity: (1) be CDBG eligible (or receive a waiver); (2) meet a national objective as defined by 24 CFR 570.483; and (3) address a direct or indirect impact from the disaster in parishes declared by the President to have been impacted by the disaster. A disaster impact can be addressed through a number of eligible CDBG activities listed in Section 105(a) of the Housing and Community Development Act of 1974, as amended. The

recovery activities described herein will make full use of the three national objectives under 24 CFR 570.483 which include benefitting low and moderate income persons, preventing or eliminating slums or blight, and meeting urgent needs to implement a robust and comprehensive recovery for the residents of Louisiana.

As required by the Federal Register, 81 FR 83254, November 28, 2016, the state will spend 80 percent of the overall grant on activities undertaken in the HUD-identified “most impacted and distressed” area. The HUD-identified “most impacted and distressed” area for the 2016 Severe Storms and Flooding consists of Ascension, East Baton Rouge, Lafayette, Livingston, Ouachita and Tangipahoa Parishes. However, the state may determine to make the remaining funds available for eligible program activities in all disaster-impacted parishes.

Up to five percent of the overall grant will be used for administration of the grant. Also, as required by the Federal Register Notice, the state will spend no less than 70 percent of funds allocated on activities that benefit low to moderate income (LMI) households.

The 2016 Severe Storms and Flooding caused significant levels of damage to owner-occupied and rental housing within impacted parishes. Based on the state’s review of the most recent data obtained from FEMA and SBA, the unmet need for housing repair and replacement is more than \$2.4 billion. The need for safe, decent, and affordable housing is the state’s top priority, which is why the state has allocated a proportion not equivalent to the unmet needs described above. Over 92 percent of the programmatic funding from the initial allocation of CDBG-DR funds to housing programs. Proposed housing activities are intended to assist homeowners in reconstructing, rehabilitating, and elevating homes as well as provide affordable rental housing for persons displaced by the storm.

In addition to implementing homeowner and rental programs, the state intends to implement programs that benefit small businesses. If additional funds are available, the state will look to implement additional economic revitalization, infrastructure and planning programs.

The state will dedicate the initial allocation of \$437,800,000 to address unmet housing and economic recovery needs. Of this, \$404,510,000 will be dedicated to the meet the unmet housing needs, including rehabilitation of owner-occupied households (\$385,510,000) and the repair and increase of the stock of affordable rental housing for impacted renters (\$19,000,000). Economic recovery will be supported by \$11,400,000 dedicated to assist small businesses impacted by the flood events.

Due to the limited funds received in the initial allocation, the state has prioritized vulnerable populations throughout each of the programs proposed in this Action Plan. For the owner-occupied housing programs, low-to-moderate income households, households with a head of household that is 62 or older, or individuals with disabilities are prioritized. In the tenant-based programs, the state will prioritize these vulnerable populations as well as persons displaced by the disaster event in need of affordable housing. As mentioned in the unmet needs section above, as the state conducts housing program intake it will coordinate outreach efforts in accordance with locales with high-levels of documented damages and social vulnerability. For the In-fil Rental Development Program and the Multi Family Rental Gap Program, Community Housing Development Organizations (CHDO), PHAs, and similar entities will be prioritized to receive funding to ensure affordable units are back on the market.

The state’s economic recovery and revitalization programs will focus on small businesses which are consistently more vulnerable to the impacts of disasters. Small businesses are critical to the revitalization of the households, neighborhoods and communities in which they are located. Historically, a sizable

portion of small businesses are less able to secure assistance from other sources and struggle to reopen or maintain operations following a disaster event.

### C. Allocation of Funds

State of Louisiana CDBG-DR Allocation	
Initial Allocation	\$ 437,800,000
Restore Louisiana Housing Programs	\$ 404,510,000
Homeowner Program	\$ 385,510,000
Rental Housing Programs	\$ 19,000,000
Restore Louisiana Economic Recovery and Revitalization Programs	\$ 11,400,000
Administration and Planning	\$ 21,890,000

## 4. Proposed Use of Funds

### A. State Implemented Programs

All programs outlined below will be implemented by the State of Louisiana. All eligible activities listed below are as provided by statute, as may have been amended by the Federal Register Notice or hereafter affected by waivers from HUD.

#### 1. Housing

The state’s housing programs will focus on assisting homeowners to reconstruct, rehabilitate, reimburse, and elevate their homes as well as providing affordable rental housing for persons displaced by the storm.

#### **Allocation for Housing Activities: \$404,510,000 (Initial allocation)**

**Eligible Activities:** Rehabilitation, reconstruction, replacement, buyouts, and new construction; includes any rental housing for LMI households; public housing; emergency shelters and housing for the homeless; private market units receiving project-based assistance or Section 8; and any other HUD-assisted housing; moving expenses; rental assistance; interim mortgage assistance; housing counseling services; housing incentives; acquisition; and buyouts. Funds may also be used for the creation of new units or rehabilitation of units not damaged by the flood events if the activity can be clearly linked to Most Impacted/Distressed (MID) target area. Code enforcement is an eligible activity that will be considered by the state for the slate of housing programs.

The following activities under the Housing and Community Development Act of 1974 (HCDA) are eligible: 105(a)1-11, 14-15; 18; 20; 23-25 as well as (42 U.S.C. 5305(a)(4)), Rent reduction incentive to landlords following HOME Program rent limits (42 U.S.C. 5305(a)(6)); and FR 5989-N-01 VI.B.28.

**Ineligible Activities:** Forced mortgage payoffs; SBA home/business loan payoffs; funding for second homes; assistance for those who previously received Federal flood disaster assistance and did not maintain flood insurance; and compensation payments.

**Elevation Requirements:** New construction, substantially damaged, or substantial improvement of structures in the 1 percent annual (or 100 year) floodplain must be elevated (2’ above Base Flood Elevation).

**Building Standards:** New construction or replacement of substantially damaged buildings must meet green building standards and are strongly encouraged to meet a resilient home construction standard.

**Flood Insurance:** Applicants living in a SFHA that receive federal assistance under these programs must obtain and maintain flood insurance for rehabilitated or reconstructed properties.

*Restore Louisiana Homeowner Rehabilitation, Reconstruction and Reimbursement Program*

**Activity Type:** Repair/reconstruction of residential owner-occupied structures.

**National Objective:** Low and Moderate Income or Urgent Need.

**Geographic Eligibility:** Disaster-declared parishes impacted by the 2016 Severe Storms and Flooding

**Eligible Activity:** Rehabilitation, Reconstruction, Reimbursement, Elevation, Buyouts and Acquisitions (42 U.S.C. 5305(a)(4)); HCDA Section 105 (a)(1), 105(a)(3-4), 105(a)(7-8)).

**Allocation for Activities: \$385,510,000 (Initial allocation)**

**Administering Entity: State of Louisiana**

**Proposed Use of Funds:** Given the time elapsed from the March and August flooding events, homeowners are in varied states of progress in their rebuilding process depending on the extent of damage and resources available. In response, the state will implement the Restore Louisiana Rehabilitation, Reconstruction and Reimbursement Programs to cover eligible costs for the repair or replacement of damage to real property; replacement of disaster-impacted residential appliances; and environmental health hazard mitigation costs related to the repair of disaster-impacted property.

Homeowners will have four potential program solutions (tracks) to choose from based on their progress in the rebuilding process and their capacity to complete the rebuilding process. The state's programs will give homeowners the option to select their own contractor who will follow the state's requirements for rebuilding or work with a state-managed contractor. Additionally, homeowners that have completed repairs and rehabilitation within one year of the flood event may be able to receive reimbursement for eligible costs.

Elevations will be included for homeowners that meet requirements determined by the program, including substantially damaged properties in the floodplain. Elevation will be evaluated on a case by case basis. Elevations will not be conducted on properties outside of the floodplain, with the possible exception where elevation is required by local ordinance.

State staff will provide guidance to homeowners on the guidelines and requirements of each track. Based on their individual conditions at the time of application, homeowners will choose the program track which best fits their need.

**Program Solutions:**

**Track 1: Program Managed:** The state manages and completes the construction process for the rehabilitation or reconstruction of damaged homes on behalf homeowners. The state will contract with a pool of contractors and assign them to repair, or reconstruct damaged properties. Homeowners will not select their own contractors and will not contract with the construction contractor. Homeowners will be required to enter into grant agreements with the state.

**Track 2: Homeowner Contracted Program:** Homeowners choose to manage their own rehabilitation or reconstruction process with the state will providing construction advisory services for all homeowners in this track. Homeowners will select their own homebuilding contractor(s) and contract directly with homebuilding contractors to rebuild as well as enter a grant agreement with the state for the CDBG-DR funding. The state will monitor all projects in the Homeowner Contracted Program.

**Track 3: Reimbursement:** Homeowners who have completed partial or full repairs on their home before applying to the program may be eligible for reimbursement of eligible expenses incurred prior to application to the program and within one year of the storm event.

**Track 4: Voluntary Buyouts or Acquisitions:** Based on further analysis of unmet needs the state may execute voluntary buyouts or acquisitions in limited situations.

**Eligible Applicants:** Homeowners will be eligible for the program if they meet the following criteria:

- Owner occupant at time of disaster event
- Damaged address was the applicant's primary residence at the time of disaster event
- Located in one of 51 disaster declared parishes
- Suffered damage as a result of the 2016 Severe Storms and Flooding events
- Eligible structure as determined by program, including but not exclusive to, one or two family homes, mobile and manufactured homes

Due to limits in the funding available in the initial allocation, the state will prioritize in this first phase of the program impacted homeowners meeting the criteria outlined below. If funds are not fully expended during the first phase of the program for the prioritized population below, the state may expand the criteria to include additional homeowner populations. If and when additional funding is made available, the state also reserves the right to modify program criteria to assist additional homeowners with remaining unmet needs. The criteria for Phase One of the program include all of the requirements below:

- The impacted home experienced Major/Severe Damages by either a FEMA-designation or have damage which meets the major/severe damage standard that FEMA has defined
- The applicant household meets federal Low- to Moderate-Income (LMI) requirements;
- The applicant or co-applicant is elderly (age 62 on the date of the disaster event) OR is a person with disabilities or has a person with disabilities in the household;
- The home is located outside the Special Flood Hazard Area (floodplain); and
- The household did not have NFIP (flood insurance) at the time of the flood.

**Criteria for Selection:** Criteria for selection will be further determined within the program policies and procedures based on availability of funds and number of applications.

**Maximum Award:** The maximum award will be determined by the scope of work based on average grade building materials as calculated by the program using national building standard estimating software, less than any duplication of benefits (e.g. NFIP, FEMA or SBA). Duplication of Benefits is defined further in the program policies and procedures. The state will include details of the program standards in its policies and procedures.

**Program Managed and Homeowner Contracted Programs - Sample Award Calculations:**

<b>Example 1</b>	
<b>Scope of Work</b>	<b>\$120,000</b>
<i>Duplication of Benefits</i>	
NFIP Claim	\$30,000
FEMA Assistance	\$12,000
SBA Loan	\$25,000
<i>Total duplication of benefits</i>	<b>\$67,000</b>
<b>Maximum Award</b>	
	<b>\$53,000</b>

<b>Example 2</b>	
<b>Scope of Work</b>	<b>\$100,000</b>
<i>Duplication of Benefits</i>	
NFIP Claim	\$20,000
FEMA Assistance	\$12,000
SBA Loan	\$0
Grant from a local non-profit to purchase sheetrock	\$5,000
<i>Total duplication of benefits</i>	<b>\$37,000</b>
<b>Maximum Award</b>	
	<b>\$68,000</b>

**Program Timeline:** The State of Louisiana anticipates the launch the Homeowner Program in the second quarter of 2016 after the approval of the action plan by HUD. The program will end when all funds are expended, or six years after the execution of the grant agreement with HUD.

### *Restore Louisiana Rental Housing Programs*

The State of Louisiana will allocate an initial \$19,000,000 to a portfolio of rental programs to address the immediate and long-term housing needs of low-to-moderate income families in the flood impacted areas. Due to the shortage of affordable housing stock, and to meet the unmet needs of renters in the community, it is imperative to provide solutions to address immediate housing needs and provide alternative housing solutions for rental properties in need of long-term recovery.

The ability to deliver a variety of rental housing solutions is important. Each program will address rental availability, affordability and quality standards.

As stated in the 2014 Housing Needs Assessment conducted by LSU, Louisiana residents are rent burdened. The floods of 2016 made the situation for Louisiana residents much worse. The vacancy rates dropped to about 1 percent and monthly rents increased. Currently, 720 low-income families are receiving FEMA Temporary Shelter Assistance (TSA), which is set to end in January 2017.

New construction, substantially damaged, or substantial improvement of structures in the 1 percent annual (or 100 year) floodplain must be elevated (2' above Base Flood Elevation).

Due to the limited amount of funding available, the state will underwrite applicants for feasibility, cost efficiencies and ability to meet the goals of the programs. Applicants will be prioritized based on meeting program eligibility requirements. **Proposed Use of Funds:** Programs may include: repair, rehabilitation of flood-damaged units; new construction to increase available rental units; and offset of insurance burden.

Initially, the state will address the affordable rental housing needs through the activities defined below:

- **Repairing Rental Units:** The state has created options within the rental program that will enable some rental units to be restored within a few months. Property owners will be able to receive funds as a loan to repair units and in exchange the state will require affordable rents for qualified families.
- **Creating New Rental Units:** Creating new rental units is another viable approach to provide needed relief for renters located in the damaged parishes. This program will utilize lots already owned and controlled by local nonprofits and units of local government. In partnership with local housing agencies such as redevelopment authorities and community housing development organizations as well as financial institutions, the state can assist the development of new and rehabilitated rental units within nine months to a year.

**Activity Types:** Repair, rehabilitation, replacement, and/or new construction of residential rental structures.

**National Objective:** Low and Moderate Income

**Eligible Activities:** Rehabilitation, new construction, elevation, rental loss prevention, loan financing, code enforcement (42 U.S.C. 5305(a)(4) ; HCDA Sec. 105 (a)(4)); 105(a)(8); 105(a)(15)).

**Allocation for Activities: \$19,000,000 (Initial allocation)**

**Administering Entity: State of Louisiana**

**Geographic Eligibility:** Disaster-declared parishes impacted by the 2016 Severe Storms and Flooding

**Eligible Applicants:** Landlords with vacant units and/or units occupied by low-to moderate income families that were displaced by the flood, community development nonprofits, Public Housing Authorities (PHAs), Development Authorities, and Community Housing Development Organizations (CHDOs) and/or private entities.

**Program Timelines:** The State of Louisiana anticipates launching the Restore Louisiana Rental Housing Programs in the second quarter of 2016 after the approval of the action plan by HUD. The program will end the earlier of when all funds are expended or six years after the execution of the grant agreement with HUD.

#### **In-fill Rental Development**

This program seeks to rehabilitate or create new affordable housing units through the creation of a partially forgivable loan program.

**Proposed Use of Funds:** The state-run program will offer eligible applicants CDBG-DR funding to restore or create affordable units, with the goal to create new affordable housing units in structures that contain seven or fewer housing units. Once construction is complete, the state would pay down the construction loan, securing a first mortgage lien on the property. The loan issued to the property owner would be issued as a partially forgivable loan, as defined in the program policies and procedures.

**Maximum Award:** The maximum award will be the lesser of the cost of construction or limits set by the program in the program policies and procedures. Each project will be reviewed for financial feasibility and cost reasonableness. Awards will not exceed the following amounts for the following structure types:

Single Family Unit: \$150,000

Double Unit: \$250,000

Triple Unit: \$315,000

Four Unit: \$375,000

Five to Seven Units: \$500,000

### **Multifamily Rental Gap Program**

As noted in the unmet needs assessment, many properties outside the floodplain were not required to hold insurance and thus have no means to offset the cost of repair. For those property owners that had insurance, the cost of repair may not be fully met. Given these circumstances both groups of property owners may face significant gaps to repair units. In addition, insurance rates may increase given the extensive nature of the disaster; therefore, it is anticipated that owners of large developments will have a financial burden in operation and cash flow, which will impact their ability to recover and offer affordable housing to qualified renters.

**Proposed Use of Funds:** Funding will be provided in the form of a recourse loan to the property owners. Owners will be required to sign a guaranty. Priority will be given to vacant properties. For property owners located in a floodplain that had the required flood insurance, the basis of award is the difference between the estimated cost of repair and the portion not covered by insurance, subject to program policies and procedures. For property owners not located in a floodplain and thus not required to carry flood insurance, the state will fund the gap between the cost of repair and all funding received for the same purpose, subject to program policies and procedures.

The program will address multi-unit developments in two categories:

- Properties with 20 units or more; and
- Properties in a Special Flood Hazard Area (floodplain) with the required flood insurance; or
- Properties not located in a Special Flood Hazard Area (floodplain).

**Maximum Award:** The maximum award will be set after determination of damage during program implementation. Each project will be reviewed for financial feasibility and cost reasonableness. No payment will exceed \$1,000,000.

## 2. Economic Revitalization

### *Restore Louisiana Economic Revitalization Programs*

For economic revitalization programs, the state has allocated \$11,400,000 for a suite of three programs described below. Additional funds will be added in the event of a future CDBG-DR allocation, in line with the results of the unmet needs assessment carried out by the state.

As outlined above, the state has proposed critical housing programs to address the significant housing unmet recovery need. The state understands that residential communities cannot fully recover and thrive without the businesses returning to the community, as they provide services and employment to local residents. In addition to addressing the business owners' and their employees' immediate and long-term recovery needs, in order to meet the urgent recovery needs of the impacted residential communities, it is imperative the state invest in those businesses that are able to support recovering neighborhoods by providing them with essential services. The state has prioritized businesses that experienced physical or financial losses as a result of the 2016 Severe Storms and Flooding, as they are in need of immediate financial assistance in order to reopen or remain viable and provide these services to the impacted communities. Assistance will not be limited to those businesses that meet an LMI national objective, as assistance is prioritized based on the types of services a business provides to recovering communities; these businesses may provide employment to a spectrum of wage earners and may provide services to non-LMI residential areas.

Therefore, the state has proposed the below programs to support the housing and overall unmet recovery needs of the impacted communities. Additionally, the three economic revitalization programs described below are designed with the goal of long-term recovery for the local businesses and the entire community.

**National Objective(s):** LMI Job Creation and/or Retention, LMI Area Wide Benefit, LMI Limited Clientele, Urgent Need

**Eligible Activities:** Section 105(a)8, 105(a) 14-15 and 105(a) 17

**Administering Entity:** State of Louisiana and subrecipients

**Eligible Applicants:** Small for-profit businesses and private non-profit organizations located in the parishes impacted by the 2016 federally-declared severe storms and flooding events.

**Eligible Use of Funds:** Operating expenses (rent/mortgage, insurance, utilities, non-owner employee wages); replacement of lost or damaged movable equipment; and replacement of lost or damaged inventory.

**Program Timelines:** The State of Louisiana anticipates the launch the Restore Louisiana Economic Revitalization Programs in the second quarter of 2016 after the approval of the action plan by HUD. The program will end when all funds are expended, or six years after the execution of the grant agreement with HUD.

### *Small Business Loan and Grant Program*

The state will enter into subrecipient agreements with local community development organizations (non-profit organizations, community development financial institutions, local credit unions, etc.) to implement and administer a lending program for disaster-impacted small businesses for non-construction related expenses. In the event the state is unable to identify local community development organizations that can

serve the entire impacted area, the state may issue awards directly to small businesses that meet the program criteria.

**Prioritized Businesses for Current Allocation:** First allocation will be used to prioritize assistance to businesses that:

- Were operating prior to the respective flood events (March or August).
- Employ 1 to 50 full time equivalent employees
- Generate a minimum of \$25,000 annual gross revenue
- Were directly impacted by the floods, as a documented physical or financial loss
- Are located in the six most impacted parishes – East Baton Rouge, Livingston, Ascension, Tangipahoa,
- Ouachita and Lafayette (at least 80 percent of allocation will be dedicated to these parishes and to the remaining funds will be allocated to other impacted parishes)
- Provide essential goods or services necessary for the immediate and long term housing and community recovery, which will be detailed in the program policies and procedures. Such goods and services may include grocery stores, pharmacies, healthcare providers, gas stations, residential construction-related companies, child care providers and locally-owned restaurants or residential service providers.

**Exceptions Policy:** There will be an exceptions policy used by the subrecipients and the state to award businesses that may not meet all eligibility requirements, but a case can be made that the need for the award is critical to the community's long term recovery.

**Assistance type:** Grant (20 percent) and loan (80 percent) or partially forgivable loan (20 percent forgiven, 80 percent repayable)

**Maximum Award:** The administering entities will underwrite each business for need, feasibility and cost reasonableness, and will provide a total maximum award of up to \$150,000.

**Loan interest rate and loan term:** zero to low interest rate loan, amortized and repaid over a term outlined in the policies and procedures.

#### *Small Business Technical Assistance Program*

Either separate technical assistance providers or the entities implementing the loan and grant program will provide business technical assistance services as part of the loan underwriting and loan servicing processes. Technical assistance activities will be detailed in the program policies and procedures, but may include: development of business plans; financial management guidance; long-term recovery and sustainability plans; and specialized training.

#### *Small Business Bridge Loan Program*

The Louisiana Flood Bridge Loan Program provides banks a guarantee against losses for short-term bridge loans to assist businesses with immediate capital while they seek flood insurance, SBA assistance or other longer-term recovery assistance. The program will be designed to provide immediate, rapid financial assistance using existing banks as the conduit for businesses to gain access to the resources, and immediately useful in the short term of the first 12-18 months after the disaster.

**Prioritized Businesses for Current Allocation:** The First allocation will be used to prioritize assistance to businesses that:

- Were operating prior to the respective flood events (March or August).
- Employ 1 to 50 full time equivalent employees
- Generate a minimum of \$25,000 annual gross revenue
- Were directly impacted by the floods, as a documented physical or financial loss
- Are located in the six most impacted parishes – East Baton Rouge, Livingston, Ascension, Tangipahoa, Ouachita and Lafayette (at least 80 percent of allocation will be dedicated to these parishes and to the remaining funds will be allocated to other impacted parishes)
- Provide essential goods or services necessary for the immediate and long term housing and community recovery, which will be detailed in the program policies and procedures. Such goods and services may include grocery stores, pharmacies, healthcare providers, gas stations, residential construction-related companies, child care providers and locally-owned restaurants or residential service providers.

**Maximum Award:** The program would provide up to a maximum award of \$150,000.

**Loan Term and Rate:** Low Interest loans, with the term of the loan outlined in the policies and procedures.

### 3. Infrastructure

The impact of the flooding events of 2016 exposed vulnerabilities in the state's infrastructure system. The state of Louisiana identified a need of over \$207 million in infrastructure needs, including over \$114 million in match for FEMA PA Projects throughout the state. With the limited funding provided in this allocation and the overwhelming housing needs, the state will focus on housing recovery programs, and will address infrastructure programs in a subsequent amendment.

### 4. Vulnerable Populations

OCD-DRU, in coordination with the LHA, has designed a suite of programs that account for the specific needs of the state's most vulnerable populations, understanding that the funding allocated is not sufficient to serve all households in need of assistance. As is identified in the program descriptions above, the state is prioritizing the provision of funding to those most in need of assistance with its owner-occupied and rental housing programs.

Specifically, the homeowner program will prioritize low-to-moderate income individuals and families, elderly persons, and persons with disabilities. The design of the proposed portfolio of rental programs creates affordable units as quickly as possible to provide immediate housing options to individuals and families that are currently homeless or at-risk of homelessness.

In addition to the programs proposed in this Action Plan, the state continues to work with its federal partners to continue to support vulnerable populations who remain displaced from the March and August floods through TSA and Disaster Case Management (DCM). Currently, FEMA has nearly 1800 displaced households who are receiving TSA. This program, while temporary, is providing a much needed recovery function for vulnerable populations. The state in coordination with FEMA seek to ensure that all households have a permanent housing plan prior to the exit from TSA. The programs proposed in this Action Plan will play a key role the transition.

Through DCM, the state works with five on-the-ground partners such as Catholic Charities of the Dioceses of Baton Rouge who provide direct case management for over 1700 households. This crucial case

management service for vulnerable populations ensures that they have access to critical resources to further their recovery needs. The state understands the gravity of the needs of the most vulnerable populations, and continues to work with state, local, and federal partners to provide recovery solutions and a safety net to this population.

Furthermore, the state has requested \$92,000,000 in Social Services Block Grant funds to meet the needs of vulnerable populations through Health Delivery System to rebuild the health care needs of its populations through child care centers, child abuse prevention, mental health services for children, developmental disability services and mental health services for adults, child welfare services, child care services, and a call center/hotline designated to connecting residents with appropriate housing resources.

## B. Leveraging Funds

### 1. Housing

To maximize the impact of the CDBG-DR funding provided to the state, and as part of a continuous effort to prevent duplication of benefits, there will be an ongoing commitment to identify and leverage other federal and non-federal funding sources. Further, the state will utilize existing relationships and strive to create new partnerships with other federal and state agencies, corporations, foundations, nonprofits and other stakeholders as a means of utilizing all viable sources of funding.

CDBG-DR funds will be used to address critical unmet needs that remain following the infusion of funding from other federal sources, including FEMA, NFIP and the SBA. Existing state resources and other funds from the disaster appropriation will also be examined in an effort to ensure that all available funding is utilized where it is most needed.

Specifically, the state is working directly with FEMA and GOSHEP to implement the Shelter at Home Program which provides emergency damage remediation for families so they can return home while rebuilding. To date the program has assisted over 9,400 households. While the Shelter at Home program allows for emergency repairs that are different from the long-term repairs funded through the CDBG-DR programs, further assistance through CDBG-DR funding will continue to leverage this initial federal investment from FEMA. Additionally, the state has committed existing Tenant Based Rental Assistance (TBRA) dollars to meet the immediate needs of renters in the impacted parishes. Existing state resources and other funds from the disaster appropriation will also be examined in an effort to ensure that all available funding is utilized where it is most needed.

Furthermore, the state has designed all of the housing programs in this action plan to cover the gap funding needed by leveraging insurance, private funds, and other assistance to complete the repairs from the 2016 Floods. Understanding the limited funding for recovery, the state will encourage all applicants to seek out all other funding sources to meet their full recovery needs.

### 2. Economic Development

The state will combine funding to address economic development unmet needs from other federal funding sources such as SBA loans, NFIP, non-disaster CDBG funding, the U.S. Department of Agriculture (USDA), and the U.S. Department of Commerce. Non-federal resources such as local and state economic development public funds, as well as private financing and equity investments, will provide additional leverage to disaster recovery funds.

### 3. Infrastructure

The state will combine funding to address infrastructure unmet needs from other federal funding sources such as non-disaster CDBG funding, USDA, and FEMA PA. Additional non-federal resources such as local and state public funds will provide additional leverage to these disaster recovery funds.

#### 4. Mitigation

The state is committed to a multi-pronged approach to addressing mitigation needs community wide. The state will leverage FEMA HMGP funds to look to large scale mitigation projects which provide mitigation measures at the parcel level, yet impact a community as a whole. Leveraging mitigation dollars will allow for the state to invest in resilient infrastructure to rebuild impacted areas to standards which will reduce impacts from future flooding events. For example, the State may consider combining CDBG-DR funds to leverage HMGP funds used for strategic buyouts in a floodplain. Further details on mitigation projects will be outlined in future action plans.

#### 5. Other Sources of Funds

As part of the state's ongoing recovery efforts, OCD-DRU leverages CDBG-DR funds with the following sources of funds which may include but is not limited to:

- Low-Income Housing Tax Credit Programs;
- HOME Program;
- Medicaid Funded Provision of Medical Services;
- FEMA PA;
- New Market Tax Credit Programs;
- Historic Tax Credit Programs;
- Live Performance Tax Credits Programs;
- HUD 242 Loan Program;
- Private Resources (Developers/Non-Profit Organizations); and
- State Capital Outlay Program.

#### C. Contractor Standards and Appeals Process

Recovery programs implemented by the State of Louisiana will incorporate uniform best practices of construction standards for all construction contractors performing work in all relevant jurisdictions. Construction contractors will be required to carry required licenses, insurance coverage(s) for all work performed, and state-contracted contractors will be required to provide a warranty period for all work performed. Contractor standards will be enumerated for each program (e.g. homeowners and rental property owners) in respective policies and procedures documents, and will pertain to the scale and type of work being performed. The state will implement an appeals process for homeowners, rental property owners and small business owners related to program eligibility and program application process. In addition, the state will implement an appeals process for the Restore Louisiana state managed homeowner program to allow for appeals of rehabilitation contractor work that is not in keeping with established contractor standards and workmanship detailed in relevant policies and procedures manuals governing the respective program. In the state managed homeowner program, the homeowners will make an appeal to the state or its designated vendor to contest the work completed by the state-contracted homebuilding contractor. Details of the point of contact and procedure for submitting the appeal will be detailed in the program policies and procedures. In the homeowner managed program, the homeowner will resolve conflicts with the homebuilding contractor directly, as the state is not a party to the contract between the homeowner and the homebuilding contractor.

The State of Louisiana intends to promote high quality, durable and energy efficient construction methods in affected parishes. All newly constructed buildings must meet all locally adopted building codes, standards and ordinances. In the absence of locally adopted and enforced building codes that are more restrictive than the state building code the requirements of the State Building Code will apply. Future property damage will be minimized by incorporating resilience standards through requiring that any

rebuilding be done according to the best available science for that area with respect to base flood elevations.

## D. Planning and Coordination

The State of Louisiana has historically experienced flooding, coastal erosion, subsidence and wetland erosion with a significant portion of the southern half of the state below sea level, and the constant threat of tropical storms and hurricanes. Since the flooding and damage associated with hurricanes Katrina and Rita in 2005, followed by hurricanes Gustav and Ike in 2008 and Hurricane Isaac in 2012, the state has been proactive in undertaking measures that address resiliency and sustainability, as well as educating the public so that risk for communities and individuals is minimized. Louisiana articulated its vision for a recovery that is “Safer, Stronger and Smarter” translated into the following actions:

- Oversight for ensuring impacted parishes developed Long Term Recovery Plans as required under FEMA’s ESF-14 in 2006;
- State adoption of the National Building Code Standards in 2006;
- Proactively ensuring parish adoption of the Advisory Base Flood Elevations (ABFEs) with concurrent adjustments in permits issued for new construction and height or elevation requirements issued after the respective adoptions;
- Funding of “Louisiana Speaks” – a major regional initiative for all of south Louisiana reflecting visions and strategies for resiliency and sustainable growth practices (May 2007). More than 27,000 citizens, a historical first in the United States, participated in developing the plan. The 94-page document in hardcopy and disc and two subsequent publications: “Louisiana Speaks: Planning Toolkit” and “Louisiana Speaks: Pattern Book” were widely distributed to planners, government entities, local nonprofits and associations and citizens; and
- The Coastal Protection Restoration Authority (CPRA) funded by the Louisiana Legislature to develop a 2017 Coastal Master Plan (CMP) with specific projects within each parish designed for protection of the coast and communities. CPRA collaborates extensively with a wide range of other federal, state and local agencies, has developed an interdisciplinary planning process that engages diverse groups of coastal stakeholders, focus groups, and national and international experts in order to capture the wide range of perspectives and expertise necessary in developing a holistic coastal planning effort for the 2017 CMP. Under the CPRA effort, numerous supporting teams have been formed, which include:
  - Framework Development Team (FDT) which serves as the primary cross-disciplinary collaborative group, consists of representatives from federal, state and local governments; NGOs; business and industry; academia; and coastal communities.
  - Science and Engineering Board (SEB) which includes scientists and engineers with national or international experience who cover the range of disciplines, including socio-economics, coastal modeling, water and natural resources, urban planning, wetlands, fisheries, coastal geoscience, economic policy, and risk reduction
  - Resiliency Technical Advisory Committee (TAC) is a small cross-disciplinary advisory group that offers working-level guidance and recommendations on the programmatic and policy measures needed to implement a comprehensive flood risk and resilience program. The TAC comprises experts in the areas of climate adaptation planning, community planning,

socio-economics, social vulnerability, hazard mitigation, disaster planning, and environmental policy.

Because OCD-DRU has administered CDBG-DR disaster recovery funds since 2006, mechanisms are in place to serve as guidelines for not only CDBG compliance, but also comprehensive planning and prioritization of projects for the short-term and long-term recovery of communities. These mechanisms include:

- The state’s template for the development of a disaster recovery proposal to use CDBG-DR funds at the parish level is being adapted to incorporate assurances that projects will reflect “unmet needs” as established in the state’s Action Plan, as well as take into consideration and reflect:
  - The Flood Recovery Strategy emanating from the NDRF;
  - Local ABFEs and Flood Insurance Rate Maps (FIRMs);
  - The parish Hazard Mitigation Plan required by GOSHEP;
  - The parish’s Long Term Recovery Plan (ESF-14);
  - An assessment of local land use plans, zoning and floodplain management ordinances permit requirements;
  - The Master Plan of the CPRA (if applicable); and
  - Regional coordination with the respective regional planning commission.

This action will enable the leveraging of CDBG-DR funds with other funding sources and already identified priorities for sustainability and resiliency;

- The state has guidelines on elevation and costs for specific types of housing and encourages coordination of CDBG-DR funding with FEMA’s HMGP; and
- The Pilot Comprehensive Resiliency Program, implemented in 2010 under funding from hurricanes Gustav and Ike, is a proactive program to develop and facilitate local planning that incorporates sustainability and resiliency into land use plans, zoning and floodplain management. The program funds were made available to local governments and non-profit entities in parishes impacted by hurricanes Gustav and Ike through a competitive application process. Twenty-nine communities were awarded grants through the competitive program. These projects include water management, floodplain ordinances, comprehensive plans, zoning codes and a plan for wetland carbon. In addition, 17 building code inspectors are funded for a two-year period in 10 communities to assist with enforcement and adaptation of permit policies and fees to allow for those communities to ultimately sustain the effort to manage growth, compliance and blight.

The education component of the Resiliency Program, through a joint venture with the LSU Coastal Sustainable Studio, has established a permanent online library, reflecting the plans developed through the Resiliency Program, criteria for determining sustainability and resiliency at the local level and educational tools. The OCD-DRU and LSU initiative includes a series of statewide webinars and workshops that provide national perspectives through recognized experts and local tools and strategies for implementation. Topics to date have included: “Gaining Economic Advantage through Environmental and Hazard Mitigation”, “Social Resilience: Bridging Planning and Communication through Technology” and “Retrofitting for Resiliency”. The Forum, “NFIP: Preparing for Changes to Flood Insurance” that was held June 17, 2013 was designed to help parishes and municipalities develop community-scale strategies that

reduce flood risk and increase their scores on the Community Rating System. All webinars and workshops are available on the Louisiana Resiliency Assistance Program website at <http://resiliency.lsu.edu/>. Outreach for these sessions are statewide to elected officials, disaster recovery subrecipients, floodplain managers, planners, etc. Distribution is both by LSU, OCD-DRU and through partners such as the Louisiana Municipal Association, the Louisiana Chapter of the American Planning Association, the Floodplain Management Association and others. Therefore, in preparation of this Action Plan, the state has ensured that this document does not conflict with any existing regional recovery plans. The state will continue to coordinate with regional and local governments to ensure that all recovery efforts are aligned.

## 5. Citizen Participation

### A. Citizen Participation Plan

The State of Louisiana developed a specific Citizen Participation Plan for disaster recovery from the 2016 Severe Storms and Flooding in compliance with CDBG- regulations and all applicable waivers. The plan includes citizen participation requirements both for the state and also the parishes or other entities that will implement activities under this grant. The State's full Citizen Participation Plan is Appendix B of this document.

Citizens and other stakeholders will be given an opportunity for reasonable and timely access to information and a period for submitting comments relating to this Disaster Recovery Action Plan and any ensuing substantial amendments. Publication of the Action Plan, public comment, and substantial amendment criteria is located on the OCD-DRU website.

The state is committed to providing access to the Action Plan and programs detailed within to all its citizens. These efforts include special consideration for those with limited English proficiency (LEP) and persons with disabilities. The Action Plan and substantial amendments will be translated into Spanish and Vietnamese to reach the LEP population in the impacted areas. Citizens with disabilities or those who need technical assistance can contact the OCD-DRU office for assistance, either via:

- Telephone, voice 225-219-9600 or LA Relay Service 711;
- Email at [ocd@la.gov](mailto:ocd@la.gov); or
- Mail to the Office of Community Development, Disaster Recovery Unit, Post Office Box 94095, Baton Rouge, LA, 70804-9095.

The OCD-DRU website (<http://www.doa.la.gov/Pages/ocd-dru/Index.aspx>) will contain direct links to the Action Plan, amendments, reports and recovery programs and will be updated to provide additional information.

#### 1. Citizen Input

The state has been in ongoing communications with its residents, local government leaders, state legislators and other stakeholders in communities impacted from both the March and August flooding events. This continuous outreach has helped identify the needs and priorities of the impacted communities and informs the programs set forth in this Action Plan.

OCD-DRU personnel have provided ongoing support within the parishes since the flooding events. State officials have held frequent calls and meetings with these and other impacted communities to discuss, among other things, the storms' effects on the local housing stock, infrastructure and business communities.

## 2. Louisiana Disaster Housing Task Force

FEMA's NDRF is a guide that enables effective recovery support to disaster-impacted states, tribes, territorial and local jurisdictions. It provides a flexible structure that enables disaster recovery managers to operate in a unified and collaborative manner. It also focuses on how best to restore, redevelop and revitalize the health, social, economic, natural and environmental fabric of the community and build a more resilient Nation. As part of Louisiana's framework, the Disaster Housing Task force was created and implemented following Hurricane Isaac. Immediately following the March floods, the Louisiana Disaster Housing Task Force (Task Force) was activated and remained in effect throughout the August flooding event. The Task Force includes: state personnel from OCD-DRU, GOHSEP, the LHC and the state Department of Children and Family Services (DCFS); representatives from HUD and FEMA; and members from the local Voluntary Organizations Active in Disaster (VOAD).

The Task Force has played an essential role in maintaining contact with the leaders of the impacted parishes, assessing needs on the local level and providing data as needed. The state's outreach efforts will continue throughout the duration of the program planning and recovery process, in accordance with the Citizen Participation Plan.

## 3. Restore Louisiana Task Force

In response to the flooding events in March and August, Governor John Bel Edwards enacted the Restore Louisiana Task Force (RLTF), charged with overseeing the state's recovery efforts from flooding events in 2016. The RLTF is comprised of key stakeholders from the public and private sectors who represent the entire state, including impacted parishes. Their roles as elected officials or advisory roles in the community position them to provide strategic direction to create policy and advise the governor and OCD-DRU staff in the aftermath of the 2016 Severe Storms and Flooding.

Furthermore, the RLTF establishes and recommends to state and local agencies both short and long-term priorities in developing plans for recovery and redevelopment. These priorities and plans shall focus on the following areas: housing rehabilitation and redevelopment; economic and workforce development; education, infrastructure and transportation; healthcare; fiscal stability; family services; and agriculture.

Additionally, the RLTF coordinates with GOSHEP, OCD-DRU, and the affected parishes and municipalities to assist in developing data about the ongoing residential, business and public infrastructure needs for recovery, identifying additional sources of federal funding, and sets priorities and offers direction to OCD-DRU and GOHSEP related to the use of funds made available through the Robert T. Stafford Disaster Relief and Emergency Assistance Act and any additional available federal funds.

The state's template for the development of a disaster recovery proposal to utilize CDBG-DR funds has been adapted to incorporate the NDRF process. As a function of the Restore Louisiana Task Force, Task Force members engage in smaller working group sessions to deliberate and recommend program strategies related to particular recovery areas. These working groups have been structured to mirror the Recovery Support Functions (RSF) outlined in the NDRF: Community Planning and Capacity Building; Economic Recovery; Health and Social Services; Housing; Infrastructure Systems; and Natural and Cultural Resources. Each working group has been assigned an OCD-DRU staff member responsible for ensuring that local, state and federal members of the RSFs are invited and encouraged to participate in each of the RLTF working group sessions. By combining these functions, the state has been able to draw upon and incorporate the expertise, strategies and perspectives from local, state and federal stakeholders in the initial and ongoing programs design process.

The RLTF also establishes a federal and state legislative agenda for the recovery and redevelopment effort and for coordinating between levels and branches of government to implement that agenda. The RLTF is comprised of 21 voting members representing the impacted parishes and communities of Louisiana.

#### 4. Consultation with Units of Local Government, Tribes and Stakeholders

With 56 parishes impacted by the 2016 Severe Storms and Flooding, the state has continued ongoing dialogue and consultation with all Units of Local Governments (UGLGs), stakeholders and tribes during and after the direct impacts of the disasters. OCD-DRU's outreach team provides daily support to many of the impacted parishes and has conducted technical assistance and assessment meetings with impacted parishes. Additionally, OCD-DRU staff has consulted with representatives from local chambers of commerce, financial institutions, non-profit organizations and community development financial institutions to seek input on the experiences of residents and businesses following the storms. Input from these stakeholders have informed the initial program design and ongoing consultation will incorporate best practices into the development of program policies and procedures.

For specific consultation on Action Plan development, the state worked with both the Louisiana Municipal Association (LMA) and the Louisiana Police Jury Association to conduct webinars to provide a platform for UGLGs, non-entitlement, entitlement communities to provide input and consultation. Additionally, through the RSF 1 – Community and Capacity Building (RSF 1) of the Task Force, OCD-DRU staff in coordination with FEMA and GOHSEP have conducted numerous meetings with UGLGs to advise and assess ongoing recovery needs.

Furthermore, the RSF 1 teams will begin Community Long Term Planning starting January 1, 2017. –As part of the overall NDRF structure, the effort will be key to identifying needs and priorities for the recovery phase. To maximize impacts, it will be a joint effort involving all RSF's in the planning and implementation. The community planning process under the state's Stronger Economies Together, which has been successful in 32 communities in Louisiana, is being modified to reflect each RSF as an element, with an additional element on resiliency being added. A subgroup, consisting of a member from each RSF for input and feedback is being formed. The process is anticipated to be completed over a 3-5-month timeframe for each impacted community and will enable the state and local communities to identify and leverage appropriate resources for a more efficient recovery effort.

In conjunction with the NDRF, the state hosted the ***Louisiana Symposium on Recovery and Resilience*** on December 8, 2016, which provided impacted parishes and-municipalities with an opportunity to learn about and share best practices. The one-day event included 184 participants representing 18 flood-impacted parishes. The Symposium provided the following to attendees:

- The opportunity to hear from and dialogue with peers and subject matter experts with experience in addressing recovery issues and resilience in Louisiana and other parts of the nation.
- Information about regional and state watershed management within Louisiana with an opportunity for a targeted discussion on implementation going forward.
- Specifics on how the State of Louisiana's approach to responding to the needs created by the floods.

The symposium included seven breakout sessions, including panels and feedback on risk reduction, resilient implementation, and long term community planning and recovery. The event will be followed up by other statewide training opportunities and targeted workshops in individual communities as needed.

Through the Governor's Office of Indian Affairs, the state conducted outreach to the ten state recognized tribes after both the March and August flooding events. Two of the ten tribes are located within the impacted parishes, and the state is committed to working with these tribes to ensure that the recovery needs are being addressed.

Additionally, the Governor's Office of Indian Affairs has completed outreach to the four federally recognized tribes and continues to assess impacts and needs of the tribes to ensure recovery needs are being addressed at the state and federal level.

Because of the widespread impact of the flooding events, the state is committed to ongoing consultation through regional public meetings, the RLTF, meetings with UGLGs and tribes in impacted parishes and with the public to ensure the continuation of robust consultation efforts with these key groups throughout the recovery process.

## B. Citizen Complaints

The state and its subrecipients have established procedures for responding to citizens' complaints regarding activities carried out utilizing these CDBG-DR funds. The Citizen Participation Plan provides full details. Citizens will be provided with an appropriate address, telephone number and times during which they may submit such complaints. The state and subrecipients will provide a written response to each complaint within 15 days of receiving a complaint, as practicable.

## C. Receipt of Comments

This Action Plan was posted for public comment on December 14, 2016. The plan was posted online in English and Spanish. Public notices were published in eight newspapers, including The Advocate, the state's journal of record, and a press release was also distributed. In addition, public comments will be accepted at the planned public hearings to be held in the impacted areas.

## D. Amendments to the Disaster Recovery Action Plan

### 1. Substantial Amendments

Per 81 FR 83254 substantial amendments are defined by a change in program benefit or eligibility criteria; the addition or deletion of an activity; or the allocation or reallocation of a monetary threshold specified by the grantee. For purposes of this allocation of funding, the state will define the threshold for a substantial amendment as the greater of a re-allocation of more than \$5 million dollars or a reallocation which constitutes a change of 15 percent or greater of a program budget.

Only those amendments which meet the definition of a substantial amendment are subject to the citizen participation process.

### 2. Submittal of Amendments

A substantial amendment to the Action Plan will follow the same procedures for publication as the original Action Plan in accordance with the Citizen Participation Plan. All amendments, both substantial and non-substantial, will be posted on the OCD-DRU website in sequential order after HUD has given final approval. Action Plan Amendments will also be incorporated into the Original Action Plan.

## 6. Other Criteria

### A. Protection of People and Property; Construction Methods

The State of Louisiana intends to promote high quality, durable and energy efficient construction methods in areas impacted by the 2016 Severe Storms and Flooding. All newly constructed buildings must meet all locally adopted building codes, standards and ordinances. In the absence of locally adopted and enforced building codes, the requirements of the State Building Code will apply. Future property damage will be minimized by requiring that any rebuilding be done according to the best available science for that area with respect to base flood elevations.

#### 1. Green Building Standards

All new construction of residential buildings or replacement and/or reconstruction of substantially damaged buildings must incorporate Green Building Standards and rehabilitation of non-substantially damaged residential buildings must follow guidelines in the [HUD CPD Green Building Retrofit Checklist](#). Any construction subject to the Green Building Standards must meet an industry-recognized standard and achieve certification under at least one of the following programs:

- ENERGYSTAR;
- Enterprise Green Communities;
- LEED;
- ICC-700 National Building Standard;
- EPA Indoor AirPlus; or
- Any other equivalent comprehensive green building program deemed acceptable to HUD and approved by OCD-DRU.

For construction projects completed, under construction, or under contract prior to the date that assistance is approved for the project, adherence to the applicable standards to the extent feasible is encouraged, but not required.

All state-administered programs may use a third party inspection service to ensure that Green Building Standards are met using standardized checklists developed from the above listed programs.

#### 2. Resilient Home Construction Standard

In the interest of reducing the risks associated with natural hazards, OCD-DRU will seek to incorporate an industry-recognized standard for building resilient or disaster resistant structures (such as those set by the Insurance Institute for Business and Home Safety's FORTIFIED Home program) in any new construction or substantial rehabilitation projects.

#### 3. Broadband Infrastructure

Any new construction or substantial rehabilitation of a building with more than four rental units must include installation of broadband infrastructure, with the following exceptions:

- The location of the new construction or substantial rehabilitation makes installation of broadband infrastructure infeasible;
- The cost of installing broadband infrastructure would result in a fundamental alteration in the nature of a program or activity or in an undue financial burden; or

- The structure of the housing to be substantially rehabilitated makes installation of broadband infrastructure infeasible.

The state will require the review for the feasibility of implementing the requisite broadband infrastructure in the plans and specs approval process and will perform onsite inspections during construction and post construction to ensure compliance, where applicable.

#### 4. Elevation Standards

The elevation standards outlined below will apply to new construction, repair of substantial damage, or substantial improvement of structures located in an area delineated as a flood hazard area.

- All structures designed principally for residential use and located in the 1 percent annual (or 100-year) floodplain that receive assistance for new construction, repair of substantial damage, or substantial improvement must be elevated with the lowest floor, including the basement, at least two feet above the 1 percent annual floodplain elevation.
- Residential structures with no dwelling units and no residents below two feet above the 1 percent annual floodplain must be elevated or flood-proofed, in accordance with FEMA flood-proofing standards, to at least two feet above the 1 percent annual floodplain.
- All Critical Actions (defined as any activity for which even a slight chance of flooding would be too great because such flooding might result in loss of life, injury to persons, or damage to property) within the 0.2 percent annual floodplain (or 500-year) must be elevated or flood-proofed (in accordance with FEMA standards) to the higher of the 0.2 percent annual floodplain flood elevation or three feet above the 1 percent annual floodplain. If the 0.2 percent annual floodplain or elevation is unavailable for Critical Actions, and the structure is in the 1 percent annual floodplain, then the structure must be elevated or flood-proofed at least three feet above the 1 percent annual floodplain level.

Applicable state and local codes and standards for floodplain management that exceed these requirements, including elevation, setbacks, and cumulative substantial damage requirements, will be followed.

#### B. Public Housing, HUD-Assisted Housing and Housing for the Homeless

The state's proposed suite of rental programs is designed specifically to address the housing needs of low-to-moderate income individuals and families. HUD-assisted housing, private market units receiving project based assistance and units that were occupied by tenants participating in the Housing Choice Voucher Program are eligible for assistance through the proposed programs. Recognizing that the flooding did impact at least one homeless shelter (The Salvation Army in Baton Rouge), OCD-DRU, in coordination with the Louisiana Housing Corporation, is working to determine how best to address the short-term needs of the individuals that utilized the shelter prior to the August floods and develop a long-term solution for rehabilitating the damaged shelter.

Specifically, the state is working with East Baton Rouge Parish to determine how the CDBG-DDR funding it recently received can be used, in part, to address the damages to homeless shelters and expand the provision of services to homeless populations within the parish. The parish has committed to investing nearly \$1 million for the rehabilitation, expansion, and provision of homeless shelter facilities at two or more shelters in the parish. This investment is expected to increase shelter capacity from post-storm levels by over 100 beds.

## C. Minimize or Address Displacement

The State of Louisiana will minimize displacement of persons or entities as a result of the implementation of CDBG-DR projects by ensuring that all programs are administered in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act (URA) of 1970, as amended (49 CFR Part 24) and Section 104(d) of the Housing and Community Development Act of 1974 and the implementing regulations at 24 CFR Part 570.496(a). To immediately minimize displacement from the 2016 floods, the state has expanded existing programs, such as Rapid Re-Housing and TBRA to meet the housing needs. Furthermore, through TSA and Shelter at Home, the state, in conjunction with FEMA, is working diligently to address immediate displacement of households and ensure that they are in decent, safe, and sanitary housing conditions. All of the housing recovery programs outlined in this Action Plan will be implemented with the goal of minimizing displacement of families from their home, whether rental or owned.

## D. Program Income

The state understands that when implementing certain activities with CDBG-DR funds, there is potential for generating program income. Prior to implementing these activities, the state will develop and adopt program income policies and procedures for the 2016 Severe Storms and Flooding. All program income generated by CDBG-DR funds under the flooding events of 2016 disaster will be returned to OCD-DRU and will follow these policies and procedures. Program Income will continue allocation to projects which further recovery in parishes impacted by the 2016 Severe Storms and Flooding. These funds will continue to be considered CDBG-DR funds and will be subject to all CDBG regulations and applicable disaster recovery waivers. Any program income generated will be governed by the program income guidance provided in the regulations at 24 CFR 570.489(e), 24 CFR 200.80, and all applicable waivers.

## E. Monitoring Standards and Procedures

### 1. State-Administered Programs

The OCD-DRU program manager will be responsible for overseeing all aspects of state-administered programs. In instances where OCD-DRU utilizes a third-party vendor to supplement the state's internal capacity, the OCD-DRU program manager will provide direct oversight of the vendor's activities.

The program manager will monitor the vendor's performance throughout the life of the contract and obtain independent assurances regarding how the contractor administers key processes and functions in coordination with OCD-DRU. In addition, contract language will identify what assurances the contractor is required to provide and who is responsible for the cost of providing the assurances.

Depending on the function being performed by the vendor, OCD-DRU will use appropriate methods for ensuring the vendor is compliant with all applicable regulations, including:

- An annual independent examination that results in a service organization control (SOC) report.
- A quality control plan that is monitored during the life of the contract to ensure that the requirements of the contract are met.
- Periodic monitoring reviews of the function(s) being performed by the vendor.

### 2. Subrecipient-Administered Programs

OCD-DRU will use its Monitoring Process and Procedures currently used to monitor Katrina/Rita and Gustav/Ike, and Isaac CDBG-DR programs and projects. This is a systems-based process that uses three levels of risk analysis to determine what projects or programs should be reviewed on-site to determine if jurisdictions and subrecipients are administering their programs and projects in a manner to assure

compliance with all applicable CDBG-DR rules and regulations. Monitoring schedules are published and tracked on a quarterly basis. For jurisdictions and subrecipients with only one or two projects, the systems approach is modified to accommodate the monitoring of each project. For 2016 Severe Storms and Flooding CDBG-DR funds, this same methodology will be employed for on-site monitoring. Given the number and types of activities funded, the monitoring may be tweaked for risk analysis.

For each subrecipient, the OCD-DRU provides monitoring guidance in Chapter 12 of the Grantee Administrative Manual, <http://www.doa.la.gov/Pages/ocd-dru/DRAdminManual.aspx>. This section of the manual provides an overview of the OCD-DRU monitoring process and strategy, and provides guidance and checklists for subrecipients to develop their own monitoring process. When subrecipients are monitored by the OCD-DRU, part of the monitoring focuses on their process and implementation.

For both state-administered and subrecipient-administered programs, OCD-DRU will use established guidance to ensure compliance with all applicable regulatory requirements. OCD-DRU personnel bring extensive experience in all areas of regulatory compliance, including duplication of benefits, procurement, and labor standards, fair housing, and citizen participation, and will use that experience in providing direct program oversight and in their oversight of subrecipients.

## F. Procedures to Detect and Prevent Fraud, Abuse and Mismanagement

In order to minimize fraud, waste, and abuse in CDBG-DR programs, the state will require all vendors and subrecipients to demonstrate that they have procedures and/or systems in place to identify and report potential fraud, waste and abuse. If suspected fraud is identified, all parties will be required to immediately report the information to the OCD-DRU executive director. The state will in turn refer the matter to the HUD Office of Inspector General (HUD OIG) and other law enforcement agencies where appropriate.

In concert with the HUD OIG and other law enforcement agencies, the state will take appropriate measures to address such allegations as the circumstances dictate. In accordance with Louisiana Revised Statute 24:523, in the event that the state has actual knowledge of a misappropriation of funds or assets, the matter will additionally be referred to the applicable office of district attorney and the Louisiana Legislative Auditor, if not already notified. In addition, the state will conduct regular monitoring of its vendors and subrecipients and will report any potential fraud, waste and abuse to these same agencies.

Conflict of Interest statements are included in all agreements, which state that no person who exercises or has exercised any functions or responsibilities with CDBG-DR activities shall obtain a financial interest of benefit from any CDBG-DR project or program. The state will only consider an exception to these provisions after the party has: 1) disclosed the full nature of the conflict and submitted documentation that the disclosure has been made public and 2) provided a legal opinion stating that there is no violation of state or local law if the exception is granted.

The process of detecting any fraud, waste and abuse of CDBG-DR funds involves not only OCD-DRU, but also the state Division of Administration's Internal Auditor and the following state offices: the Office of Legislative Auditors (LLA), the Office of Inspector General and the Office of Finance and Support Services (OFSS).

### 1. Office of the Legislative Auditors (LLA)

The Legislative Auditor serves as the supervisory body of public spending, overseeing more than 3,500 audits of state and local governments and their related quasi-public enterprises. Conducting independent financial and performance audits of the state's agencies, colleges, and universities, auditors identify issues in an effort to protect public resources and tighten government control systems. When necessary, they look into allegations of fraud, waste or abuse. The Legislative Auditor will perform an annual audit of the Division of Administration (DOA), which includes OCD-DRU, in accordance with 2 CFR 200 Part F.

### 2. Office of the Inspector General

In addition, the state has an established Office of Inspector General. The office's mission is to prevent and detect fraud, corruption, waste, inefficiencies, mismanagement, misconduct, and abuse within the executive branch of state government using a highly qualified, committed, and trained staff. The Inspector General answers to the governor.

### 3. Office of Finance and Support Services (OFSS)

OFSS, a division within the Division of Administration, has established clear designation of responsibilities in order to ensure separation of duties. This separation of duties, along with other established operational policies and procedures, provides assurance that fraud cannot be accomplished without collusion among employees in separate areas. OFSS is responsible for payments, federal draw requests and state and federal financial reporting. One employee actually inputs the properly authorized payment request into the financial system, and the request must be approved by an OFSS Supervisor in the system before a payment request is approved.

## G. Capacity

OCD-DRU was created to administer CDBG-DR funds after hurricanes Katrina and Rita. The Louisiana Recovery Authority acted as the policy making arm for the state until the agency sunset in 2010; at that time, the LRA's work was folded into OCD-DRU. OCD-DRU is presently responsible for administering over \$15 billion in CDBG-DR funds, related to recoveries from hurricanes Katrina, Rita, Gustav, Ike, and Isaac. OCD-DRU has the established policies, procedures, systems and personnel to continue leading long-term recovery efforts related to the 2016 flood events.

The state has conducted a thorough capacity assessment and has the current organizational structure in place to support critical management, oversight, implementation, compliance, and monitoring functions. OCD-DRU has been operating in CDBG-DR for over 10 years and is currently managing multiple federal disaster grants. In 2015 alone, OCD-DRU's Finance Division processed over 3,000 draw request totaling over \$232 million in payments to subgrantees, subrecipients, and vendors. The average length of time for employees, including senior management, at OCD-DRU is greater than five years.

OCD-DRU will also continue to provide technical assistance and training to those subrecipients responsible for administering and implementing CDBG-DR programs and projects. OCD-DRU will continue using its numerous outreach and communication efforts to provide direct technical assistance and training to subrecipients to ensure timely, compliant, and effective use of funds. These outreach efforts include: designated OCD-DRU outreach personnel meetings with local officials; hosting regional coordination meetings; sending mass communication messages via an online grant system; utilizing performance monitoring trackers to keep projects held to deadlines and deliverable dates; and conducting compliance and monitoring visits. All of these efforts are designed to increase the capacity of subrecipients to ensure the appropriate, compliant use of funds.

Additionally, OCD-DRU will continue using its “Disaster CDBG Grantee Administrative Manual” as a guide in implementing recovery programs. OCD-DRU will also continue to utilize its established online grant system for the efficient processing of applications and payment requests.

OCD-DRU acknowledges that it remains legally and financially accountable for the use of all CDBG-DR funds appropriated to the State of Louisiana. Our agency is committed to appropriate management and oversight of these funds.

## H. Certification of Controls, Processes and Procedures

As directed by Federal Register Vol. 81, No. 224, the State of Louisiana, Division of Administration certified and submitted to HUD on January 6, 2017 that OCD-DRU has in place the following:

- Proficient financial controls and procurement processes;
- Adequate procedures to prevent any duplication of benefits;
- Processes to ensure timely expenditure of funds;
- Ability to maintain comprehensive website(s) regarding all disaster recovery activities assisted with CDBG-DR funds; and
- Adequate measures to detect and prevent waste, fraud and abuse of funds.

## I. Risk Analysis

As directed by Federal Register VO. 81 No. 224, the State of Louisiana, Division of Administration submitted its Risk Analysis to HUD on January 6, 2017 which certifies that the state has sufficient management capacity by demonstrating the analysis of the following criteria:

- Plan to provide timely information on application status for all programs and all applicants.
- Pre-award Implementation Plan with the following elements:
  - Capacity Assessment which ensures the capacity to implement recovery programs and a plan to address any gaps;
  - Staffing Assessment to identify personnel responsible for key program implementation elements;
  - Internal and Interagency coordination;
  - Technical assistance for any personnel who the grantee does not employ at the time of the Action Plan submission;
  - Accountability: confirming OCD-DRU reports directly to the Governor of Louisiana.

## J. Other

OCD-DRU will define “demonstrable hardship” and “not suitable for rehabilitation” as they relate to recovery programs in the policies and procedures associated with the programs that will use the CDBG-DR funds allocated in this Action Plan.

Appendix A- Grantee Certifications

Appendix B- Citizen Participation Plan

**State of Louisiana**  
**State of Louisiana Office of Community Development- Disaster Recovery Unit Citizen**  
**Participation Plan CDBG-Disaster Recovery**

The primary goal of the Louisiana Citizen Participation Plan is to provide all Louisiana citizens with an opportunity to participate in the planning, implementation and assessment of the state's CDBG-DR programs for recovery. This plan sets forth policies and procedures for citizen participation, which are designed to maximize the opportunity for citizen involvement in the recovery process. The state will provide all citizens with the opportunity to comment, with an emphasis on reaching low- to moderate-income individuals and residents of the impacted communities where the CDBG-DR funds are targeted. Additionally, efforts will be made to provide access to the plan to citizens with Limited English Proficiency (LEP) and those requiring special options due to disabilities.

States receiving CDBG-DR funds under Public Law 114-113 were given several waivers relative to the Citizen Participation regulations, such as the requirement for public hearings at the state and local level, consulting with all units of local governments, etc. The State of Louisiana will employ innovative methods to communicate with our citizens and to solicit their views on the proposed uses of disaster recovery funds. These comments and the state's responses will be made a part of the initial Action Plan.

The Louisiana Citizen Participation Plan for CDBG-Disaster Recovery will be placed on OCD-DRU's website at <http://www.doa.la.gov/Pages/ocd-dru/Index.aspx>. The state will ensure that local governments or subrecipients who receive funds will also have a Citizen Participation Plan that meets the CDBG-DR regulations and takes into consideration the waivers and alternatives made available under CDBG-DR funding.

In order to facilitate citizen participation requirements and to maximize citizen interaction in the development of the Disaster Recovery Action Plan and subsequent Action Plans and amendments, the state will take the following actions to encourage participation and allow equal access to information by all citizens. The state also encourages the participation of statewide and regional institutions and other organizations (including businesses, developers and non-profit and faith-based organizations) that are involved with or affected by the proposed programs or activities.

## **I. Proposed Disaster Recovery Plan and Following Substantial Amendments**

### **A. Public Notices and Comment Period**

Prior to the submittal of the Disaster Recovery Action Plan and subsequent amendments to HUD, a summary of the plan will be published in a minimum of four MSA newspapers, along with newspapers in targeted parishes where funding will be provided. Included in the four MSA newspapers will be The Advocate, the state's legal journal. The plan will also be placed on OCD-DRU's website for review and comments. On the day that the public comment period begins, a press release will be issued to media outlets statewide and to members of the Louisiana Legislature. A limited number of proposed plans will be made available at no charge to persons

requesting copies. Copies of the proposed plan will also be available for review in OCD-DRU's Baton Rouge and New Orleans offices. The public comment period will last a minimum of fourteen (14) calendar days. This process will be repeated whenever the state has a substantial amendment to the Action Plan.

#### **B. Methods for Public Comment**

Citizens and organizations can comment on the state's Action Plan and any following substantial amendments via:

- The OCD-DRU website, <http://www.doa.la.gov/Pages/ocd-dru/Index.aspx>
- Email at [ocd@la.gov](mailto:ocd@la.gov);
- Telephone, 225-219,9600 or LA Relay Service - 711;
- Facsimile, 225-219-9605; or
- Mail at the Office of Community Development-Disaster Recovery Unit, P.O. Box 94095, Baton Rouge, LA 70804-9095.

The plan will be translated into Vietnamese and Spanish to reach the LEP citizens in the impacted areas. Citizens with disabilities or those who need other technical assistance can contact the OCD-DRU office for assistance via the methods listed above.

#### **C. Responses to Public Comments**

After the public comment period ends, the state will prepare responses to the comments. A summary of the comments and responses will be added to the Action Plan for submittal to HUD.

#### **D. Substantial Amendments to the Action Plan**

Per 81 FR 83254 substantial amendments are defined by a change in program benefit or eligibility criteria; the addition or deletion of an activity; or the allocation or reallocation of a monetary threshold specified by the grantee. For purposes of this allocation of funding, the state will define the threshold for a substantial amendment as the greater of either a re-allocation of more than \$5 million dollars or a reallocation which constitutes a change of 15 percent or greater of a program budget.

Citizens and units of general local government will be provided with reasonable notice and an opportunity to comment on proposed substantial amendments to the Action Plan. The process for public comment will be the same as for the initial Action Plan. Citizens will have no less than fourteen (14) calendar days to comment on the amendment, and responses will be included in the final version submitted to HUD for approval.

Non-substantial amendments to the Action Plan will be posted on the OCD-DRU website after notification is sent to HUD and the amendment becomes effective. Every amendment to the Action Plan, both substantial and non-substantial, will be numbered sequentially and posted on the website.

#### **E. Performance Reports**

The state must prepare and submit to HUD quarterly reports on the uses of CDBG-DR funds and of the activities funded with those dollars. The Quarterly Performance Reports (QPR) will be submitted through HUD's Disaster Recovery Grant Reporting (DRGR) system no later than 30 days following the end of each calendar quarter. Each QPR will include information about the uses of

funds in the activities and programs identified in the Action Plan and entered into the DRGR system.

This includes, but is not limited to:

- Project name, activity, location and national objective met;
- Funds budgeted, obligated, drawn down and expended;
- The funding source and total amount of non-CDBG-DR funds spent on an activity;
- The beginning and actual completion dates of completed activities;
- Achieved performance outcomes, such as the number of housing units completed or the number of LMI citizens benefitted; and
- The race and ethnicity of persons assisted under direct-benefit activities.

The state must also record the amount of funding expended for each contractor identified in the Action Plan. Efforts made by the state to affirmatively further fair housing will also be included in the QPRs.

Within three days of submission to HUD, each QPR must be posted on the OCD-DRU website. During the term of the grant, the state will provide citizens, affected local governments and other interested parties with reasonable and timely access to information and records relating to the approved program, to the use of grant funds and the contracts procured with CDBG-DR funding. This information will be posted online and provided upon request.

The state's first QPR is due after the first full calendar quarter following the first allocation of grant funds. The QPRs will be posted on a quarterly basis until all funds have been expended and all expenditures have been reported.

## **II. Technical Assistance**

The state will provide technical assistance to facilitate citizen participation where requested, particularly to groups representative of LMI persons. The level and type of technical assistance will be determined by the applicant/recipient based upon the specific need of the community's citizens.

## **III. Citizen Complaint Procedures**

The state will respond to complaints from citizens related to the Action Plan, subsequent amendments or quarterly performance reports. Written complaints should be directed to OCD-DRU either via email at [ocd@la.gov](mailto:ocd@la.gov) or mail at:

Office of Community Development-Disaster Recovery Unit  
P.O. Box 94095 Baton Rouge, LA 70804-9095  
ATTN: Executive Director

The state will provide a timely, substantive written response to the complainant within fifteen (15) working days of the receipt of the complaint, where practicable. Additionally, the state will require that its subrecipients follow a Citizen Complaint procedure reflective of the goals of the Citizen Participation Plan. A copy and/or summary of the citizen complaints received by subrecipients will be forwarded to OCD-DRU. The complainant must be made aware by the subrecipient that, if he or she is not satisfied with the response from the subrecipient, a written complaint may be filed with OCD-DRU.

#### **IV. Citizen Participation Requirements for Subrecipients and Local Governments Participating in CDBG-DR Programs**

To ensure applicant and subrecipient compliance with Section 508 of the Housing and Community Development Act of 1974, utilizing the citizen participation waivers HUD provided, all local units of government that receive CDBG-DR funds must have a written and adopted Citizen Participation Plan that:

A. Encourages citizen participation, with particular emphasis on participation by persons of low and moderate income who are residents of the areas or neighborhoods in which CDBG-DR funds are proposed to be used;

B. Provides citizens with reasonable and timely access to local meetings, information and records relating to the subrecipient's proposed and actual use of funds under this program;

C. Provides for technical assistance to groups representative of persons of low and moderate income that request such assistance, with the level and type of assistance to be determined by the subrecipient;

D. Provides for reasonable opportunities to obtain citizen views and to respond to proposals and questions at all stages of the community development program, including at least the development of needs, the review of proposed activities and review of program performance. In order to comply with the citizen participation requirement, information must be posted on the subrecipient or unit of local government's official website. If a unit of local government does not have an official website, the information must be posted in public places in the jurisdiction, with directions as to where the information may be inspected. In addition to web posting or advertising, the public can also be made aware of grant information by public service announcements and bulletins posted at public places. All comments must be responded to and maintained;

E. Provides for a timely written answer to written complaints and grievances, within fifteen (15) working days where practicable; and

F. Identifies how the needs of non-English speaking residents will be met where a significant number of non-English speaking residents can be reasonably expected to participate.

The provision and implementation of a Citizen Participation Plan may not be construed to restrict the responsibility or authority of the subrecipient for the development and execution of its community development program.

All subrecipients must adopt a Citizen Participation Plan and provide documentation of compliance throughout the term of the grant agreement. The plan must include the following components.

##### **G. Components of the Subrecipient's Citizen Participation Plan**

###### **1. Program Design Phase**

The subrecipient will determine plans and procedures to post and allow for public comment. Public comments shall be summarized and submitted with the information provided to OCD-DRU, where practicable.

## 2. Implementation Phase

During the term of the grant, the subrecipient will provide citizens, affected local governments and other interested parties with reasonable and timely access to information and records relating to the approved program, the use of grant funds and the contracts procured with CDBG-DR funding. Efforts should be made to post this information on the subrecipient's official website and also to be provided upon request.

## 3. Substantial Amendment to Approved Program

The subrecipient shall make any substantial amendment to the programs available on its website, where practicable, in addition to the state's posting of the amendment on the OCD-DRU website.

## 4. Close-Out

The subrecipient shall make all performance reports available to the public on its website and upon request.

## 5. Technical Assistance

The subrecipient must provide technical assistance to facilitate citizen participation where requested, particularly to groups representative of persons of LMI. The level and type of technical assistance shall be determined by the applicant/recipient based upon the specific need of the community's citizens.

## 6. Complaint Procedures

As stated above, each subrecipient must have written citizen and administrative complaint procedures. The procedure(s) must be posted on the subrecipient's website, or information must be provided to citizens as to where and when they can obtain a written copy.

The Citizen Participation Plan must also state that persons wishing to object to approval of a CDBG-DR application by the state may make such objection known to OCD-DRU in writing. The state will consider objections made only on the following grounds:

- a. The applicant's description of needs and objectives is plainly inconsistent with available facts and data;
- b. The activities to be undertaken are plainly inappropriate to meeting the needs and objectives identified by the applicant; and
- c. The application does not comply with the requirements set forth in the Action Plan and amendments to the plan or other applicable laws. Such objections should include both identification of the requirements not met and, in the case of objections relative to program design, the complainant must supply the data upon which she or he relied.

## 7. Performance Hearings

Prior to close-out of the community development program, the subrecipient must have a public hearing to obtain citizen views and to respond to questions relative to the recipient's performance. This hearing shall be held after adequate notice, at times and locations convenient to actual beneficiaries and with accommodations for the disabled and non-English speaking persons provided. Documentation must be kept at the local level to support compliance with the aforementioned requirements.