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## **Homebuying in New Orleans Before and After Katrina: Patterns by Space, Race and Income**

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27. April 2008

Online at <http://mpra.ub.uni-muenchen.de/8611/>  
MPRA Paper No. 8611, posted 06. May 2008 / 06:01

**Homebuying in New Orleans Before and After Katrina:  
Patterns by Space, Race and Income**

Abstract: Natural disasters can conceivably have significant impacts on the “neighborhood sorting” of different racial or economic groups across intrametropolitan space. Using Home Mortgage Disclosure Act data we examine mortgage-financed homebuying activity within the New Orleans MSA before and after Hurricane Katrina. We find that, while the total amount of homebuying in the 7-parish New Orleans MSA was relatively unchanged between 2004 and 2006, homebuying in the city declined significantly, and declined most in places experiencing severe storm damage. We also find that after Hurricane Katrina, the proportion of homebuyers in the region and the city who were African-American or low-income declined. Finally, we find that segregation levels of African-American and lower-income homebuyers declined in the year following Katrina. However, some of this effect is likely due to smaller overall numbers of lower-income and African-American buyers in the region.

## **Introduction**

Among the many types of social and economic effects of Hurricane Katrina, one crucial set of impacts will be on housing and demographic patterns within the New Orleans metropolitan area and within the City of New Orleans itself. While some literature exists on the housing and demographic impacts of natural disasters, much of it has focused on emergency and temporary shelter problems, the destruction of physical stock, and patterns of reconstruction (Comerio, 1997; Lindell and Prater, 2003; Quarantelli, 1995; Quarantelli, 1999). Less work has focused on the spatial sorting impacts of disasters on the how such disasters can reshape – or not – entrenched patterns of racial and economic segregation. In this paper, we look at one segment of housing demographics – buyers of owner-occupied homes – to explore differences in geographic patterns of homebuying before and after Hurricane Katrina. We do this by analyzing federal data on home purchase loans.

Within the literature addressing the effects of natural disasters on housing markets, some researchers have examined the impacts on housing values (Peacock, Zhang and Dash, 2005; Murdock, Singh and Thayer, 1993). Other literature has also addressed racial and ethnic disparities in housing impacts with some focus on rental housing, and the role of the property and casualty insurance market in the owner-occupied market, including inequalities in access to higher-quality insurance (Fothergill, Maestas and Darlington, 1999; Peacock and Girard, 1997). This study departs significantly from the bulk of the existing literature on disaster responses and recovery by focusing on the changes, following Hurricane Katrina, in the spatial patterns – by race and income – of owner-occupied homebuying activity.

The paucity of research on the spatial resorting of racial and economic groups induced by natural disasters is not surprising because policy-makers and others tend to demand information

on the most visible effects of disasters and because disasters large enough to produce easily detectable impacts on such markets have been rare in the U.S.

It is important to note that, in this analysis, we recognize the interactions between the disaster and preexisting housing conditions and problems. Rather than simply assuming that pre-disaster housing markets are well functioning, highly efficient, and generally equitable, we analyze changes since the disaster on a housing system that had already exhibited substantial levels of segregation by race and income and substantial concentrations of poverty.

We find that homebuying in the New Orleans metropolitan area shifted toward increasing shares of higher-income and non-black homebuyers, both in the region as a whole, but especially in the city of New Orleans. Perhaps as might be expected, within the city of New Orleans, areas that suffered much more storm-related damage saw significant declines in overall homebuying activity, with one area in particular that so little damage seeing a very large increase in homebuying (the CBD-Warehouse district).

Within the city, much the decline in African-American and lower-income buying is attributable to a rapid decline in homebuying from 2004 to 2006 in the parts of the city where African-Americans had traditionally dominated the homebuying market, including New Orleans East, Gentilly, and the Lower Ninth/Holy Cross planning districts. We also find that, in part due to the decline in the numbers of lower-income and African-American homebuyers, the level of segregation of the homebuying patterns of these groups declined both when measured by indices of dissimilarity and isolation. Finally, while most parts of the city did not see sizeable changes in non-owner-occupied homebuying, two planning districts, Lakeview and Gentilly, saw substantial increases in the share of purchases due to non-owner-occupants from 2004 to 2006.

## **The Context for Owner-occupied Housing in New Orleans Prior to Katrina**

...the whole process of permanent housing in the aftermath of a major disaster cannot be understood independently of the larger community context. Whatever the governmental policies and programs for rebuilding, they only develop in the context of past history and social factors operative in any given community. They are not dependent only on what happened to the housing stock in the disaster. (Quarantelli, 1995)

The existing structure of housing markets, including segregation by race and income, are likely to be important factors in determining long-term post-disaster housing and demographic patterns. The response of housing markets to the disaster will not be independent of conditions before the hurricane. Hurricane Katrina was unparalleled in the scale of its impact on sheer numbers of residents of a major metropolitan area. Two major parishes in the New Orleans region were particularly hard hit: Orleans parish (the city of New Orleans) and St. Bernard parish. Gabe et al. (2005) estimated that 77 percent of Orleans parish population and nearly all residents of St. Bernard parish were affected by flooding and storm damage.

The housing market of the New Orleans metropolitan area and the city of New Orleans was not without its problems before Katrina struck (Hartman and Squires, 2006). The city, though historically not as segregated racially as some large cities in the Midwest and Northeast, experienced significant problems of concentrated poverty and segregation by race and income. The dissimilarity index (at the tract level) for the 7-parish MSA was 67 out of 100 in 2000, with an isolation index of 71 out of 10.<sup>i</sup> The city of New Orleans was, as of 2000, 67 percent African-American, while the 7-parish MSA as a whole was only 37 percent African-American.

Concentrated poverty, at least as of 2000, was a particular concern in Orleans Parish. The city's poverty rate was approximately 28 percent in 2000, compared to a national rate of 12 percent, with the rate for African Americans (35 percent) being more than three times that for

whites (11 percent). Moreover, among U.S. central cities, New Orleans had the second largest share of poor citizens living in high poverty census tracts (those with poverty rates of 40 percent or more) and saw the number of such tracts increase from 30 in 1980 to 49 in 2000 (Hartman and Squires, 2006).

Logan (2006) was among the first to document that damage due to Hurricane Katrina disproportionately affected minority and lower-income neighborhoods, particularly within the City of New Orleans. Storm-damaged areas were 46 percent African-American, while undamaged areas were only 26 percent African-American. Forty-six percent of homes in storm-damaged areas were renter-occupied, compared to only 31 percent in undamaged areas, and in damaged areas, the poverty rate was a cumulative 21 percent compared to 15 percent in undamaged areas. In suburban parishes, areas with higher numbers of rental units were harder hit by the storm, while in the city the high proportion of renter-occupied units meant that the impact on rental units was large, as was the impact on owner-occupied units.

Gabe et al. (2005) found that African-Americans were disproportionately impacted by Katrina, due to the extent of flooding in the city. They estimated that African-Americans accounted for 44 percent of storm victims, and accounted for 73 percent of the victims in the city. Of course, non-black residents were affected too, with Gabe et al. (2005) estimating that 63 percent of the city's non-black population being affected by the storm. They also estimate that the poor and near-poor were disproportionately affected by the storm, with more than 40 percent of the affected population having incomes below two times the poverty line.

It is difficult to address issues of homebuying patterns before and after Katrina without first describing some of the racial landscape of the New Orleans region before the hurricane. Figure 1 indicates the proportion of a census tract's population that was African-American in

2000. Many census tracts in the central city were predominantly African-American. Such neighborhoods—those where at least 75 percent of the population was African-American in 2000—were concentrated in the city of New Orleans as well as in St. John the Baptist parish and parts of Jefferson parish. Some mixed-race tracts—those with 25 to 75 percent African-American residents in 2000, were scattered across St. Charles, St. John the Baptist, Jefferson, Plaquemines, and to a lesser extent, St. Bernard and St. Tammany parishes.

In the city itself, Figure 2 shows that many tracts east of the central business district were predominantly African American in 2000. Figure 2 also indicates the boundaries of the city's fourteen neighborhood planning districts. (One of the original 13 planning districts is split into two parts, 1a and 1b.) Tracts on the on the far northwest corner of the city, in the Lakeview area, were predominantly nonhispanic white in 2000, as were most tracts in the Uptown/Carrollton area, English Turn and Venetian Isles planning districts. Mixed-race tracts were scattered throughout he central core of the city, including the Gentilly, Midcity, Algiers and Garden District planning areas.

### **Changes in Levels of Financed Homebuying in the New Orleans Metropolitan Area, 2004 to 2006**

We analyze data on owner-occupied home purchases involving mortgages for the New Orleans MSA for the years 2004 (pre-Katrina) and 2006 (post-Katrina). The data we use – the Home Mortgage Disclosure Act (HMDA) data – are collected by federal mortgage lending regulators and, for state regulated lenders, by the U.S. Department of Housing and Urban Development. HMDA data provide a rich set of microdata on home loans, which include information on the purpose of the loan (including home purchase), the ethnicity and race of applicant, the income of applicant, the census tract of property, lien status (first-lien or junior-

lien) and owner-occupancy. Even before expansions of HMDA's coverage of loans in 2003, HMDA data have been estimated to cover more than 80 to 90 percent of home purchase activity, with coverage of home purchase loans likely being even higher (Scheessele, 1998). HMDA data have previously been used to examine changes in the locations and demographic patterns of homebuying activity (Duda and Belsky, 2001; \_\_\_\_\_, \_\_\_\_). HMDA coverage is much higher in metropolitan areas than in rural ones, due to exclusions of lenders that focus on in rural communities. For our purposes here, it is important to point out that there were no material changes in lender coverage under HMDA from 2004 to 2006.

Of course, calendar year 2006 is a period that follows quite closely on the heels of Katrina, and we do not suggest here that these patterns persisted in 2007 or beyond.<sup>ii</sup> In addition to any local or regional changes, such as government recovery efforts or greater levels of recovery, the national problems in the mortgage and housing markets beginning in 2007 mean that directly extrapolating any patterns from 2006 to later periods is probably unwise. At the same time, 2006 is a relatively good year to compare to 2004. Though credit markets loosened from 2004 to 2006, they were both quite robust years in credit markets nationally.

The total number of owner-occupied home purchase loans in the 7-parish MSA for 2006 was not substantially different than in 2004. In fact the number of financed, owner-occupied home purchases in the seven parishes in 2006 (17,618) was actually slightly higher than the number in 2004 (17,118). The largest raw decline in financed owner-occupied purchases was in Orleans Parish, where buying declined by 22 percent from 4,074 to 3,195. The largest proportionate decline however, was in St. Bernard Parish, where buying declined by 78 percent, from 667 to 147. In the five remaining parishes, home purchase activity was actually higher in



2006 compared to 2004, with the largest raw gain in Jefferson Parish (1,151). The largest proportionate increases in buying were in St. Charles, St. John the Baptist, and Jefferson.

The Home Mortgage Disclosure Act data also include non-owner-occupied mortgages, which are loans for vacation homes or for rental/investment properties (or a combination of both). While our concern here is particularly with owner-occupied homebuying activity, it is helpful to examine the proportion of all first-lien purchase loans that were for owner-occupied properties to see if such shares changed markedly after Katrina. We might expect some increases in investor property purchases after the storm especially in light of the tight rental markets the city experienced. The bottom part of Figure 3 breaks out the percentage first-lien home purchase loans that were for owner-occupied properties for the seven parishes for 2004 and 2006. It shows that the percentages of loans made for owner-occupied properties remained quite steady over the 2004 to 2006 period. In the entire MSA, the proportion of first-lien purchase loans that went to owner-occupied properties went from 83.5 percent in 2004 to 85.1 percent in 2006. <sup>iii</sup>

The proportion of loans going to owner-occupied properties was generally the lowest in Orleans parish, at 70 percent in 2004, and was above 83 percent in all other parishes. From 2004 to 2006, the proportion of purchases for owner-occupied properties declined by more than one percentage point in only two parishes (St. Tammany, from 91.6% to 89.5%, and St. Bernard, 84.8 percent to 83.1 percent), and did not decline by more than 2.2 percentage points in any parish. In Orleans parish, the owner-occupancy share remained essentially constant, at least for the city as a whole.

Figure 4 breaks out changes in owner-occupied homebuying within the City of New Orleans by planning district. The volume of homebuying decreased in all but 4 of the 14 planning districts, with decreases of more than 30 percent in 9 of the districts and decreases of

more than fifty percent in five (Lower 9<sup>th</sup>/Holy Cross, New Orleans East, Gentilly, Village de L'est, and Venetian Isles). Homebuying in Lower 9<sup>th</sup>/Holy Cross, which was already quite low in 2004, fell by 95 percent from 81 to 4. Homebuying actually increased in the Central City/Garden District, Uptown/Carrollton districts and especially in the Algiers and CBD/Warehouse districts. The latter two saw increases of 35 percent and 81 percent, respectively.

Figure 4 also shows that, at this smaller geographic level, owner occupancy percentages did change substantially in some parts of the city. In particular, the Gentilly, Lakeview, New Orleans East, and Vieux Carre (French Quarter) districts all saw the percentage of first-lien purchase loans going to owner-occupied properties decline by more than five percentage points. The largest percentage-point declines were in the Lakeview (84.9 percent to 58.5 percent) and Gentilly (84.9 percent to 68.9 percent) districts. At the same time, the percentage of purchase loans going to owner-occupied properties increases by more than five percentage points in Central City-Garden District, Marigny-Bywater, Mid-City, and Venetian Isles. The raw number of owner-occupied home buyers increased in Algiers, CBD-Warehouse, Central City-Garden District, and Uptown and Carrollton.

Because areas with more severe damage might be expected to see decreased homebuying activity, it is helpful to compare rates of homebuying to levels of major or severe damage. One way to measure homebuying rates is to create a “turnover ratio” that divides the number of owner-occupied purchases by an estimated number of owner-occupied units in the area. Thus, the homebuying rate for 2004 is the number of owner-occupied purchases divided by the number of owner-occupied units from the 2000 census. Figure 5 plots the change in homebuying rate from 2004 to 2006 (measured in percentage points) for planning districts against the proportion of owner-occupied units experiencing major damage or destruction during

the storm. The latter data come from estimates prepared by the U.S. Office of the Federal Coordinator for Gulf Coast Rebuilding in the Department of Homeland Security (2006).

Figure 5 shows that, in general, planning districts with high levels of damage saw declines in their homebuying rates, while those with low levels of damage generally saw increases. These changes are not insubstantial since initial homebuying rates for most districts were in the range of 3 to 7 percent. (The initial homebuying rate in CBD/Warehouse was substantially higher, at 13.8 percent of 2000 owner occupied units.) The clear outliers among the districts include the CBD/Warehouse district, where the increase in the homebuying rate was particularly large and the decline in homebuying rate in Vieux Carre, despite the district not suffering significant storm damage.

### **Changes in African-American Homebuying in the New Orleans Metropolitan Area, 2004 to 2006**

As was described earlier, the New Orleans metropolitan area, like many others, was quite racially and economically segregated prior to Hurricane Katrina. We now turn to examining how the homebuying patterns of African-Americans changed after Katrina. Overall, the number of owner-occupied home purchases by African-Americans in the New Orleans MSA fell from 3,424 in 2004 to 2,996 in 2006, and from 21.6 percent of all owner-occupied purchases in 2004 to 18.5 percent in 2006.

At the parish level, Figure 6 in 2004, just over 40 percent of owner-occupied homebuyers in the city of New Orleans were African-American.<sup>iv</sup> In St. John the Baptist parish the ratio was roughly the same. Almost 20 percent of homebuyers in Jefferson parish were African American in 2004, with the other parishes had ratios of all under 15 percent.

By 2006, there were some notable changes in the numbers and shares of African-American buyers. In Orleans parish, the number of African-American financed homebuyers fell from 1,533 to 892, and from 40.6 percent of all such buyers to 30.4 percent. The share in St. Bernard parish fell from 10.2 percent to 3.5 percent and from 9.5 percent to 6.2 percent in St. Tammany parish. Over the same period, however, the shares of African-American buyers increased in St. John the Baptist, St. Charles, and Plaquemines parishes, and held essentially flat in Jefferson parish.

Figure 7 breaks out changes in the percentages of homebuyers who are black by planning district within the city of New Orleans. It shows that some districts experienced substantial drops in the proportion of owner-occupied homebuyers who were African-American, including CBD-Warehouse District, Marigny-Bywater, and Mid-City. However, the stronger reason for the decline in the share of city homebuyers who were African-American was the overall decline in the number of homebuyers in the three districts with high percentages of African-American homebuying (in both 2004 and 2006): the New Orleans East, Gentilly, and Lower Ninth-Holy Cross districts. The other district with substantial raw numbers of African-American homebuyers in 2004 – Algiers—actually saw an increase in buyers in 2006, and a higher percentage of African-American buyers.

### **Changes in the Income of Homebuyers in the New Orleans Metropolitan Area, 2004 to 2006**

In addition to examining the race of homebuyers, the HMDA data also allow us to look at changes in the incomes of buyers of owner-occupied homes in the New Orleans area from before to after Katrina. Overall, the New Orleans MSA saw a sharp decline in the proportion of buyers

who had low- or moderate-incomes, dropping from 28.8 percent to 19.9 percent, for a drop in share of more than 30 percent.<sup>v</sup>

The three charts in Figure 8 indicate changes in the shares of owner-occupied home buyers who were low- and moderate-income (less than 80 percent of metropolitan median family income), middle-income (80 to less than 120 percent of metropolitan median family income) and upper-income (120 percent or more of metropolitan median family income), respectively. The top chart shows that, in every parish other than Plaquemines, the share of buyers who had low- or moderate-incomes declined, sometimes quite sharply.<sup>vi</sup>

Examining the middle and bottom charts in Figure 8 shows that the decline in the low- and moderate-income shares in the MSA were due primarily to gains in the percentages of buyers falling into the upper-income bracket, especially in Orleans parish. That is, in most parishes, the percentage point gain in the percentage of upper-income buyers exceeded any gain in the percentage of middle-income buyers. For example, in Jefferson parish, the upper-income share increased by 6 percentage points, compared to a 3 percentage-point increase in middle-income buyers. In St. John the Baptist, an 11.4 percentage point increase in upper-income share was almost triple the increase in middle-income share. And in St. Charles, a 7.8 percentage point increase in upper-income share far outpaced the meager 1 percentage point increase in middle-income share.

In Orleans parish, the share of homebuyers with low- and moderate-incomes declined by more than 46 percent, from 27.3 percent to 14.7 percent. The declines in the other parishes with falling percentages were also substantial. In fact, in Orleans parish, the share of buyers with middle incomes actually declined slightly (in addition to the low- and moderate-income share), so that the substantial increase in upper income buyers came at the expense of both low- and

moderate-income and middle-income share. Figure 9 shows that, within the city of New Orleans, many districts saw a decline in the share of buyers with low- and moderate-incomes. Only Lakeview, Venetian Isles, and Village de L'est Area saw increases in their share of buyers with low- and moderate incomes. Figure 10 illustrates the changes in the percentage of buyers with upper-incomes at the census tract level for the MSA and city, respectively. It shows that the city, especially the west side of the city, saw a significant shift toward upper-income homebuying from 2004 to 2006.

### **Measures of Racial and Economic Segregation in Homebuying before and after Katrina.**

In order to understand whether the patterns of segregation in owner-occupied homebuying changed after Katrina, we computed measures of spatial segregation of homebuying by both race and income. We began by calculating the dissimilarity index of black versus nonblack homebuyers across the 388 census tracts in the seven-parish MSA, and then developed a measure of the evenness of the distribution of low-income homebuyers by calculating a dissimilarity index for low-income versus other homebuyers. To provide some test of robustness of these indicators we also looked at the issue of exposure of black buyers to nonblack buyers at the census tract level by calculating an isolation index for black buyers. All of these indicators were calculated for 2000 total population (not homebuyers only) data from the 2000 census for comparison purposes as well as for 2004 and 2006 homebuying data separately.

The dissimilarity index used is the standard one of the form:

$$D = \sum_{i=1}^N \frac{t_i |p_i - P|}{2TP(1-P)}$$

Where  $t_i$  is the total number of financed homebuyers in tract  $i$ ,  $p_i$  is the proportion of black buyers in tract  $i$ ,  $P$  is the proportion of all MSA buyers who are black,  $T$  is the total number of MSA buyers, and  $N$  is the number of tracts in the MSA.  $D$  ranges from 0 to 1, with 1 indicating perfect unevenness in the spatial distribution of black buyers.

The measure of exposure used is the isolation index, given by:

$$I = \sum_{i=1}^N \left[ \left( \frac{m_i}{M} \right) * \left( \frac{m_i}{t_i} \right) \right]$$

Where, in this case,  $m_i$  is the number of financed black owner-occupied homebuyers in tract  $i$ ,  $M$  is the total number of black homebuyers in the MSA, and  $t_i$ , again, is the total number of financed homebuyers in tract  $i$ .  $I$  also ranges from 0 to 1, with 1 indicating perfect isolation. In its use here, an  $I$  of 1 would reflect a zero probability of black residents buying homes in a tract where at least one nonblack buyer exists.

We measure the dissimilarity index for homebuying by income and race, but, for the sake of conciseness, we only measure the isolation index by race. We calculated these measures for 2004 and 2006 to identify whether there appears to be a difference in the “spatial sorting” of homebuyers by race or income immediately after Katrina. We also provided the 2000 racial indices for residents as a whole for comparison purposes.

Table 1 indicates the dissimilarity and isolation indices for three types of households/persons. First, the black-white dissimilarity and isolation indices were calculated using census tracts as the geographic unit for the 388 tracts in the New Orleans MSA based on

2000 census data for all residents. We also indicate the proportion of the index that is accounted for by the 181 tracts in the City of New Orleans.

Table 1 indicates that in 2004, African-Americans were, as measured by the dissimilarity index, geographically distributed across the MSA to essentially the same extent (0.69 versus 0.67) as African-American residents were in 2000. However, the isolation index is somewhat lower for 2004 African-American homebuyers as compared to all residents in 2000, suggesting more exposure of black homebuyers to nonblack buyers vis-à-vis the 2000 pattern of overall isolation levels of blacks in 2000 in the MSA.

Table 1 also shows that measured both by dissimilarity and isolation indices, the segregation of black homebuyers declined somewhat from 2004 to 2006, with the dissimilarity ratio declining to 0.62, from 0.69, and the isolation index declining from 0.55 to 0.49. It is important to point out here, however, that the overall number of black buyers and the share of all buyers who were black declined significantly from 2004 to 2006, and this likely accounts for a substantial portion of these changes.

## **Conclusions**

Through the analysis of Home Mortgage Disclosure Act data we have identified demographic shifts among homebuyers in New Orleans from 2004 to 2006. The data reveal that there have been significant shifts in homebuying activity within the metropolitan area as well as declines in African-American and lower-income homebuyers relative to other buyers. Declines in African-American and lower-income homebuying in Orleans Parish is accounted for in large part by big declines in homebuying in heavily storm-impacted neighborhoods that had been the locus of a large amount of African-American and lower-income homebuying before Katrina. There



were also shifts within more active planning districts toward higher-income and nonblack buyers.

The decline in African-American and lower-income homebuyers after Katrina helped drive measures of racial and economic segregation of such buyers somewhat lower from 2004 to 2006. At first blush, such declines may be encouraging. However, many may be concerned that the overall share of modest-income and African-American buyers in the metropolitan area and, especially Orleans Parish, is merely a reflection of a lesser tendency of African-American and modest-income homebuyers to return to the city or to purchase homes in the region or city compared to middle- or upper-income households. As the number of African-American and lower-income buyers declines, indices measure evenness and exposure tend to decline.

This study is only able to examine homebuying in the year immediately following Hurricane Katrina (calendar year 2006). Moreover, the study says little about overall demographics of the city because it does not include information on renters or sellers of homes. However, the substantial changes in the racial and economic patterns of buyers following the storm suggests that the characteristics of those who purchased homes in different parts of the city and MSA did change substantially. It will be important to examine similar data for 2007 and beyond as they become available to see if such patterns continue.

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**Table 1. Changes in Racial and Economic Segregation in Homebuying Patterns, 2004 to 2006**

	2000 Census		2004 Homebuyers		2006 Homebuyers	
	MSA	City Share	MSA	City Share	MSA	City Share
<b>Racial Segregation Indices</b>						
<b>Black-nonblack dissimilarity</b>	0.67	0.31/0.67 (46%)	0.69	0.24/0.69 (35%)	0.62	0.16/0.62 (26%)
<b>Black-nonblack isolation</b>	0.71	0.55/0.71 (77%)	0.55	0.33/0.55 (60%)	0.49	0.19/0.49 (39%)
<b>Income Segregation Index</b>						
<b>Low-income-non-low-income dissimilarity</b>	N/A	N/A	0.45	0.13/0.45 (29%)	0.39	0.09/0.39 (23%)

Source: Authors calculations from 2000 census data and 2004, 2006 H.M.D.A data; all calculations use census tracts as geographic units

Figure 1. New Orleans MSA, Percentage of Residents Who Were Black, 2000

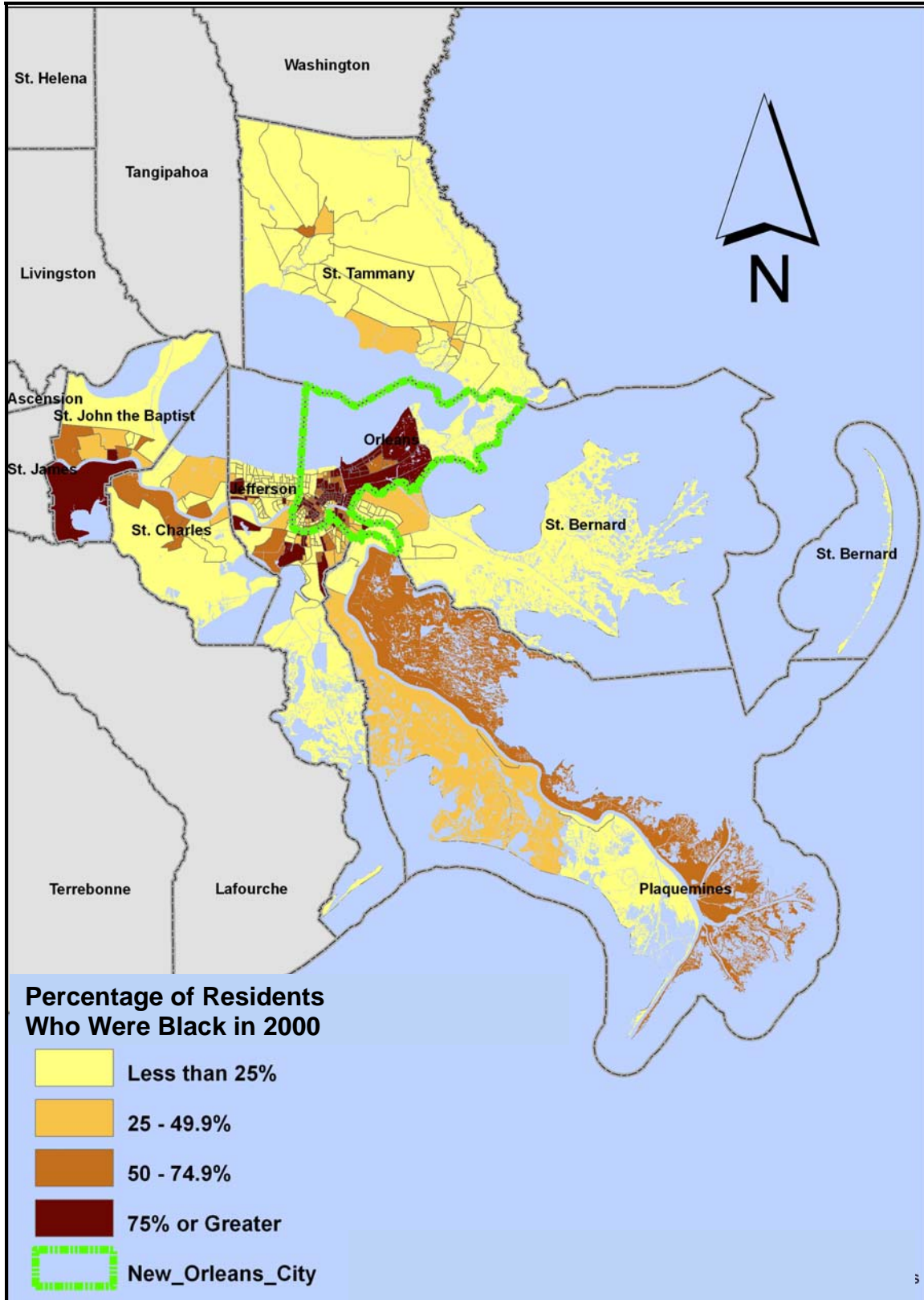
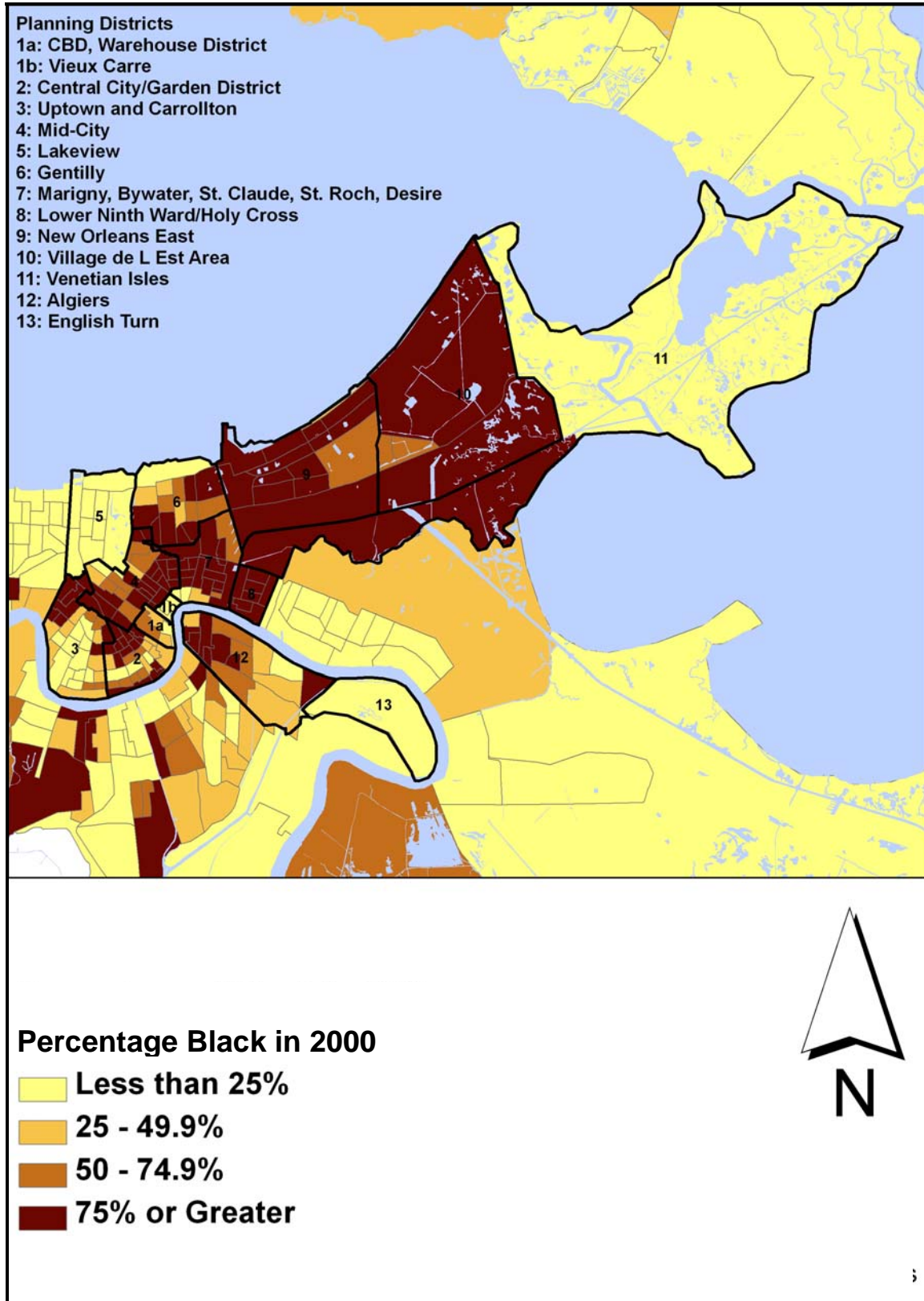
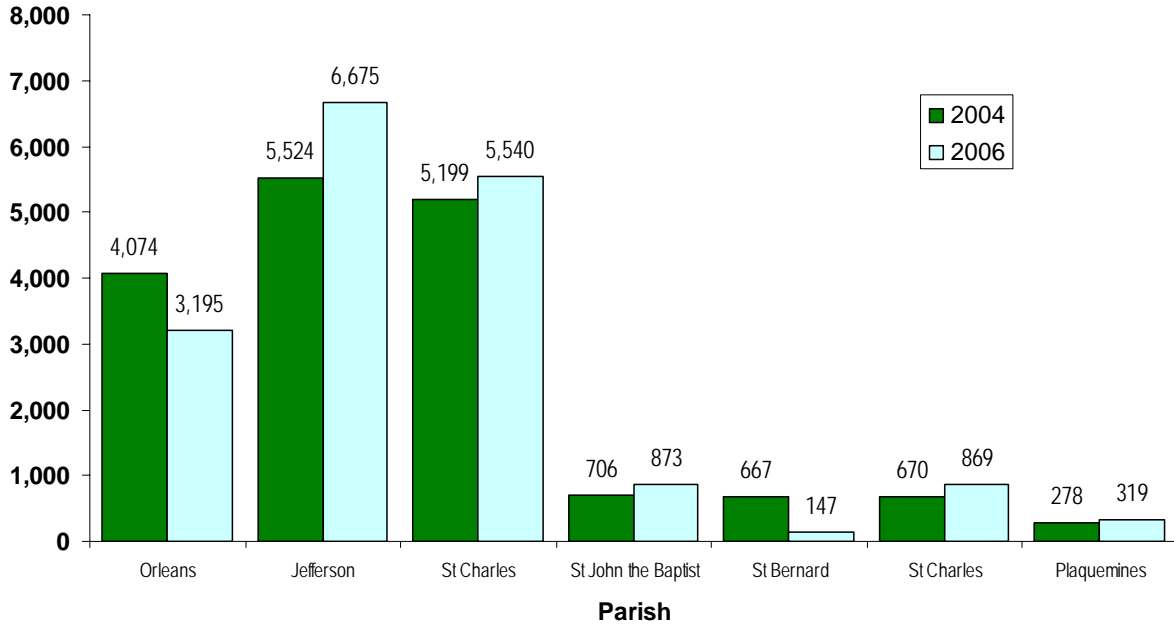


Figure 2. City of New Orleans, Percentage of Residents Who Were Black, 2000

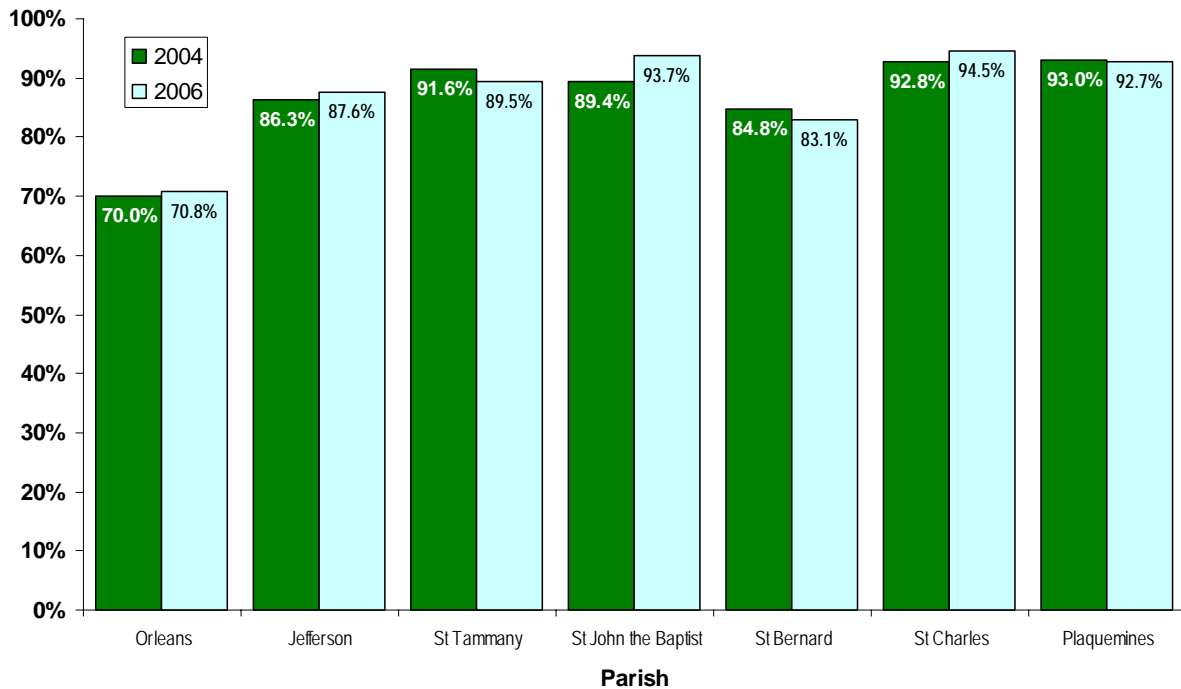


**Figure 3. Number of First-Lien Owner-Occupied Homebuyers and Percent of Home Purchase Loans Going to Owner-Occupants By Parish, 2004 and 2006**

**Number of First-Lien, Owner-Occupied Home Purchase Loans**



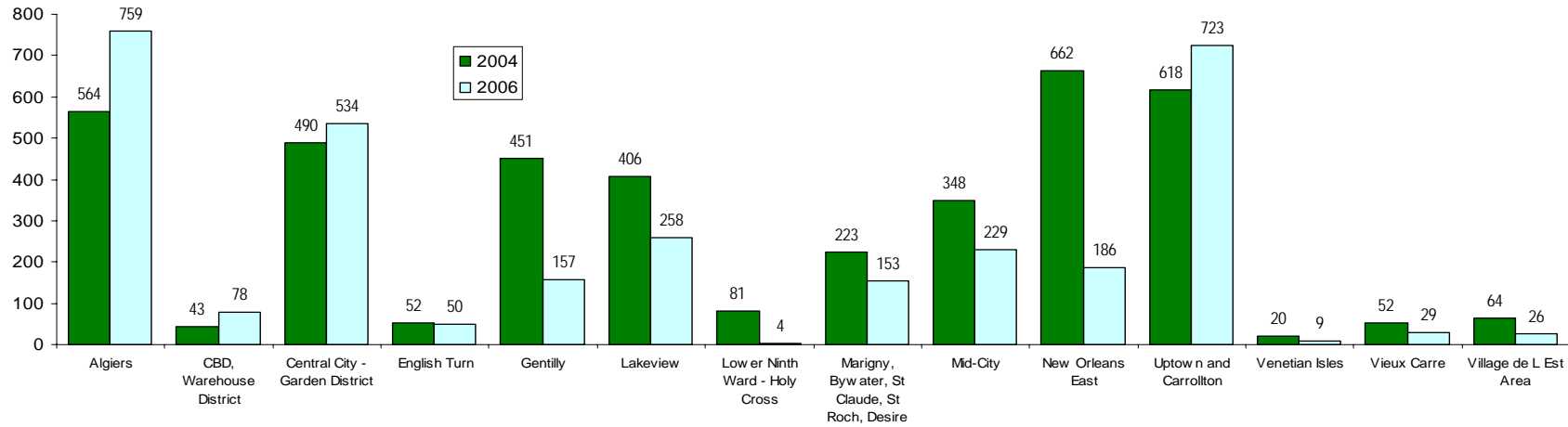
**Percent of All First-Lien Home Purchase Loans Going to Owner-Occupants**



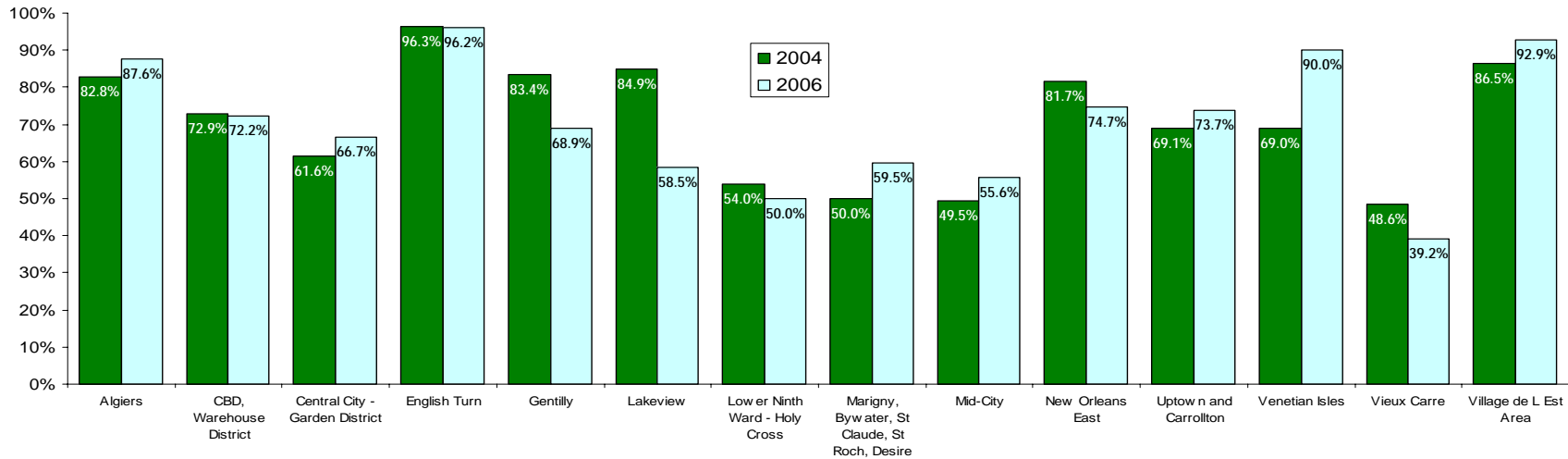


**Figure 3. Number of First-Lien Owner-Occupied Homebuyers and Percent of Home Purchase Loans Going to Owner-Occupants By Planning District, 2004 and 2006**

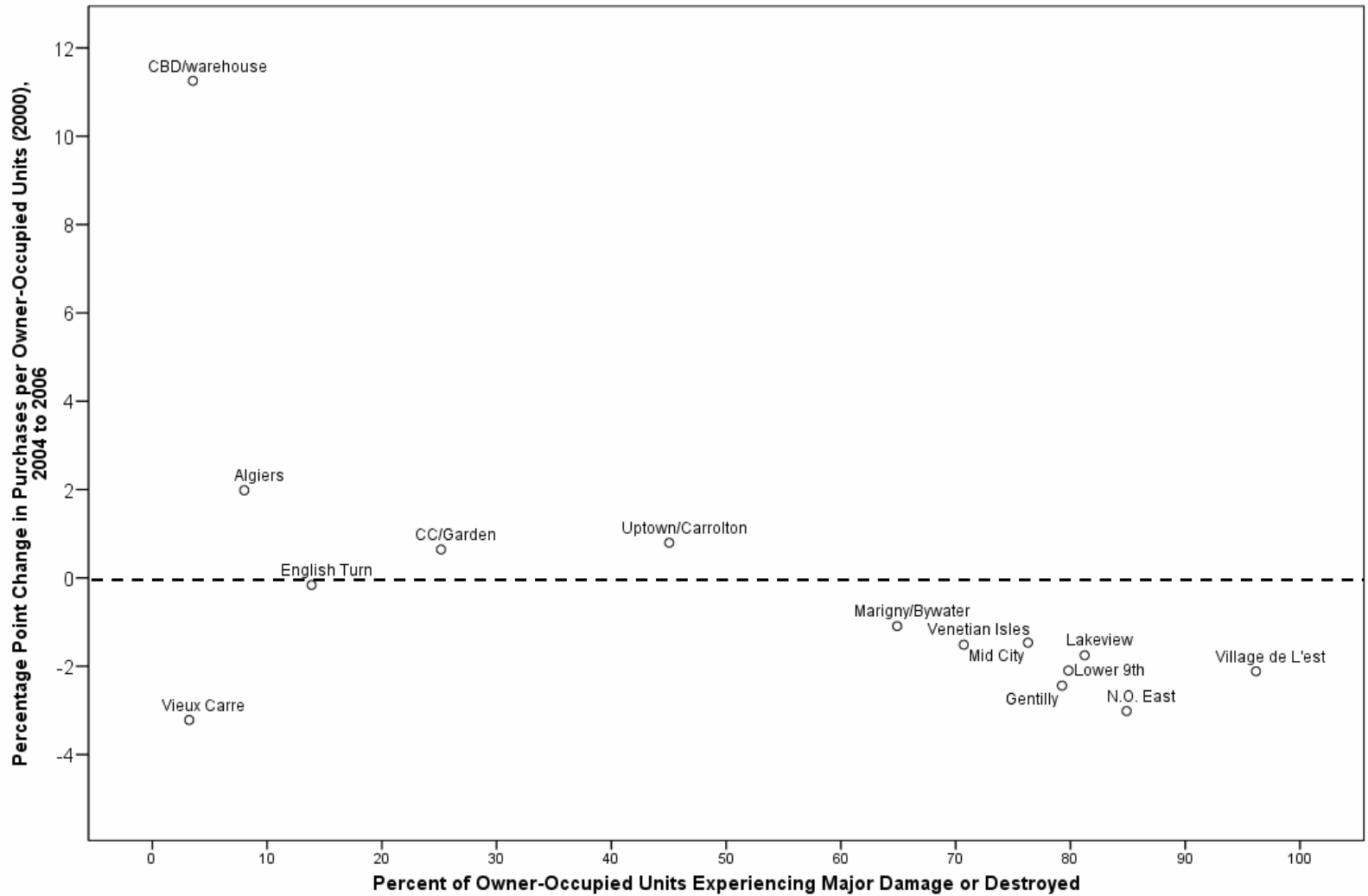
**Number of First-Lien, Owner-Occupied Home Purchase Loans**



**Percent of All First-Lien Home Purchase Loans Going to Owner-Occupants**

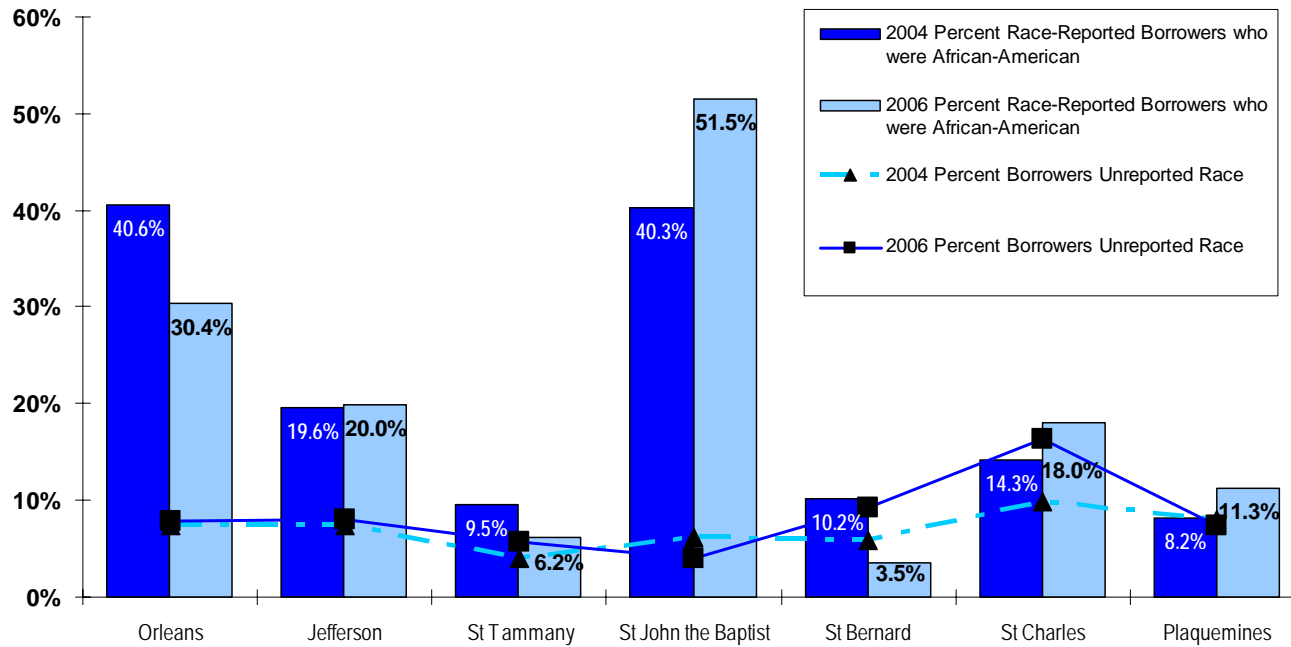


**Figure 5. Change in Home-Purchase Rates from 2004 to 2006 by Percent Damage to Owner-Occupied Units, City of New Orleans Planning Districts**

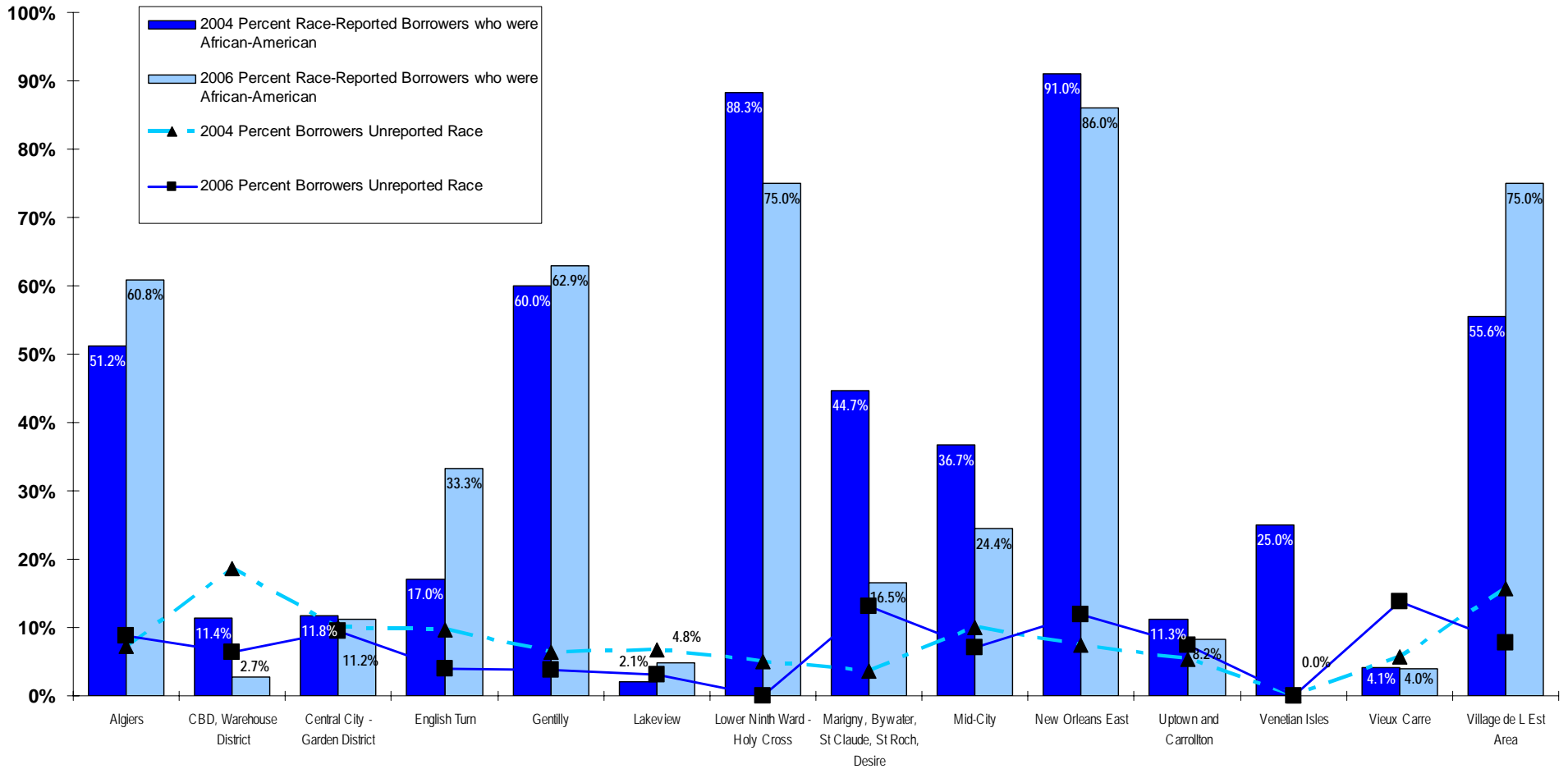


Source: Authors calculations of H.M.D.A. data and damage estimates from U.S. Department of Housing and Urban Development

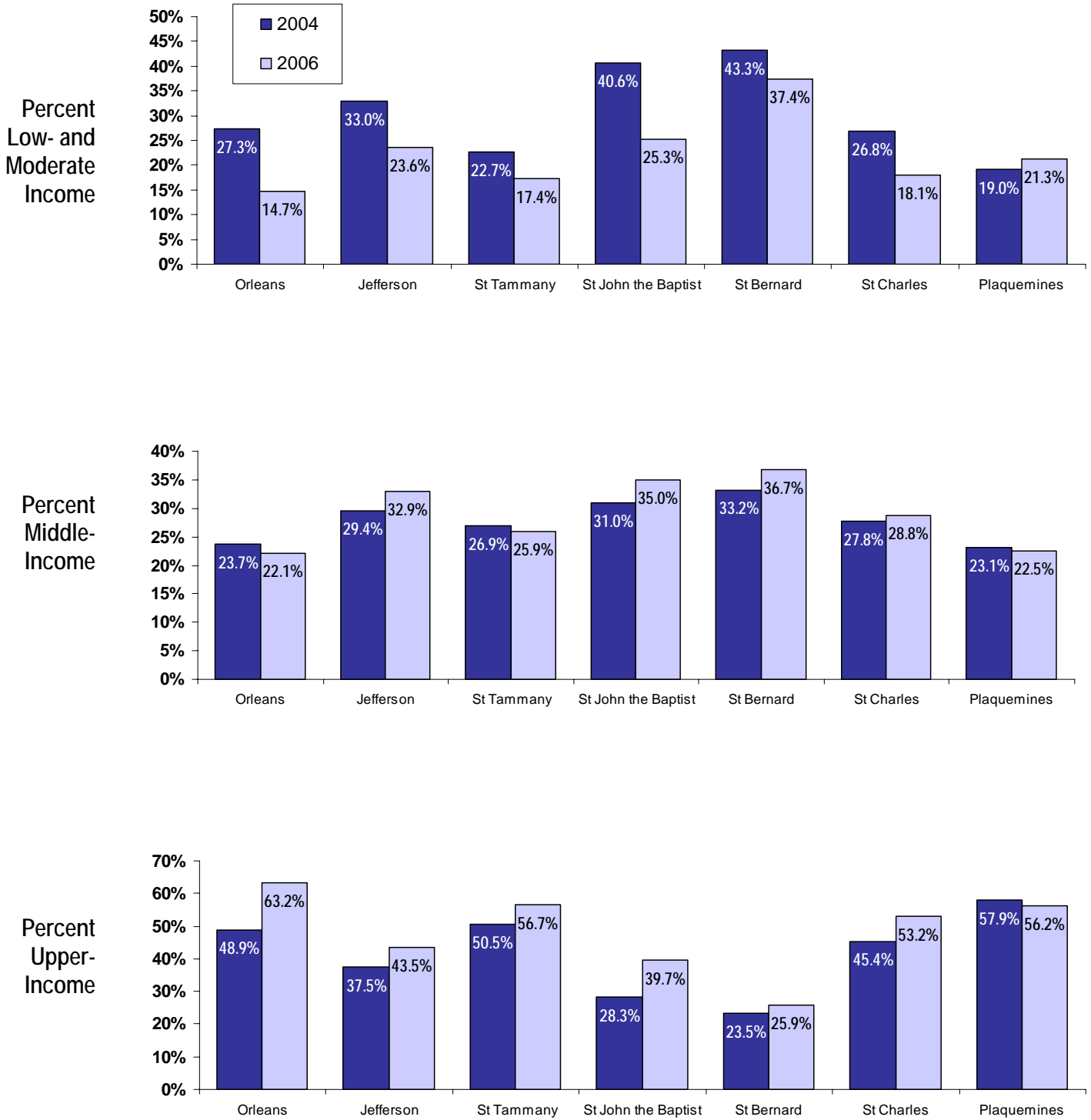
**Figure 6. Percent of First-Lien Owner-Occupied Home Purchase Loans Going to African-American Homebuyers, by Parish, 2004 and 2006**



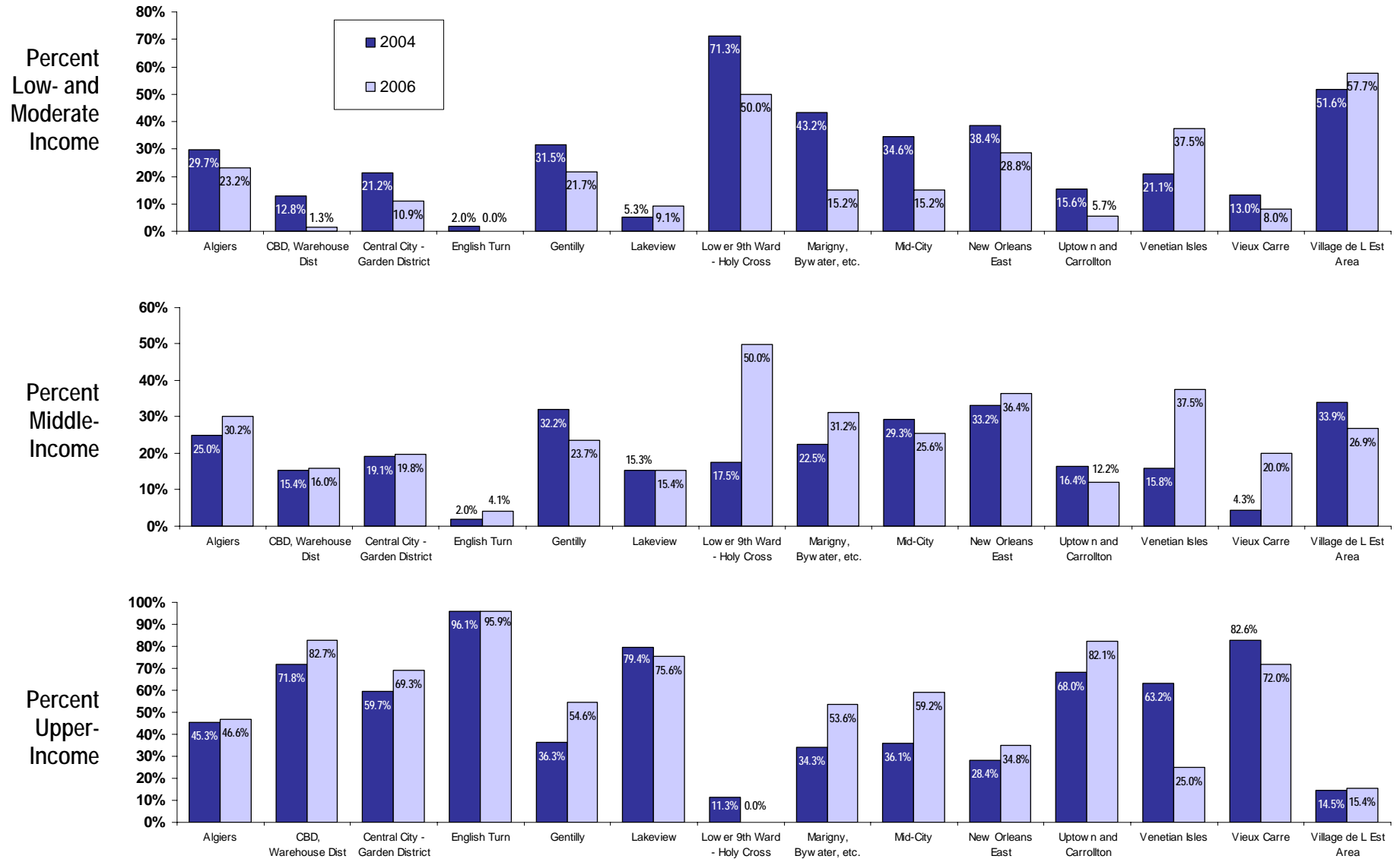
**Figure 7. Percent of First-Lien Owner-Occupied Home Purchase Loans Going to African-American Homebuyers, by City of New Orleans Planning District, 2004 and 2006**



**Figure 8. Percent of First-Lien, Owner-Occupied Home Purchase Loans to Borrowers of Different Income Levels, by Parish, 2004 and 2006**

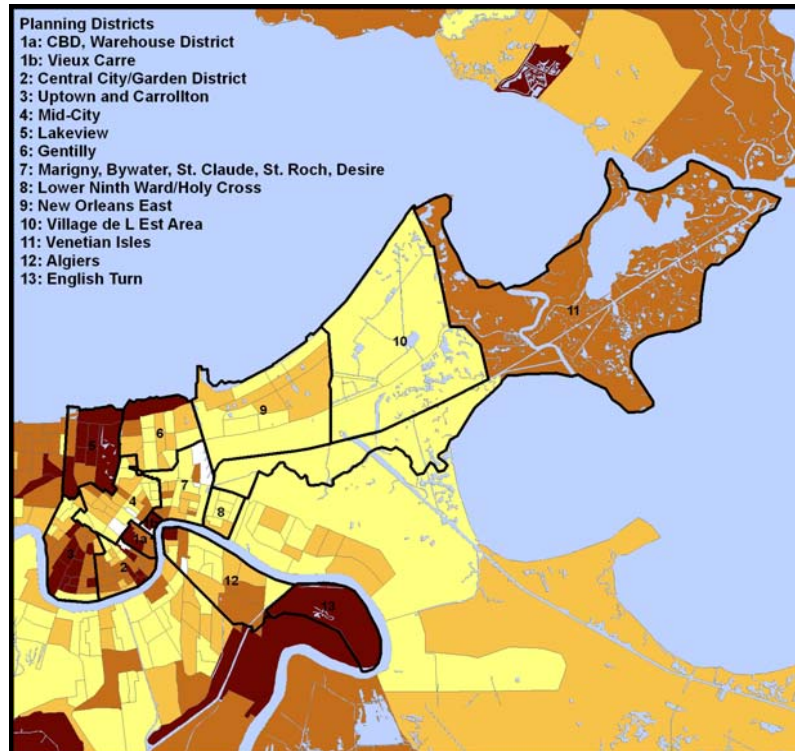


**Figure 9. Percent of First-Lien, Owner-Occupied Home Purchase Loans to Borrowers of Different Income Levels, by City of New Orleans Planning District, 2004 and 2006**

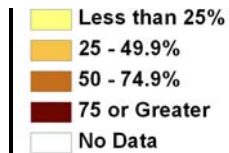


**Figure 10. Percent of First-Lien, Owner-Occupied Home Purchase Loans to Upper-Income Buyers. City of New Orleans, 2004 and 2006**

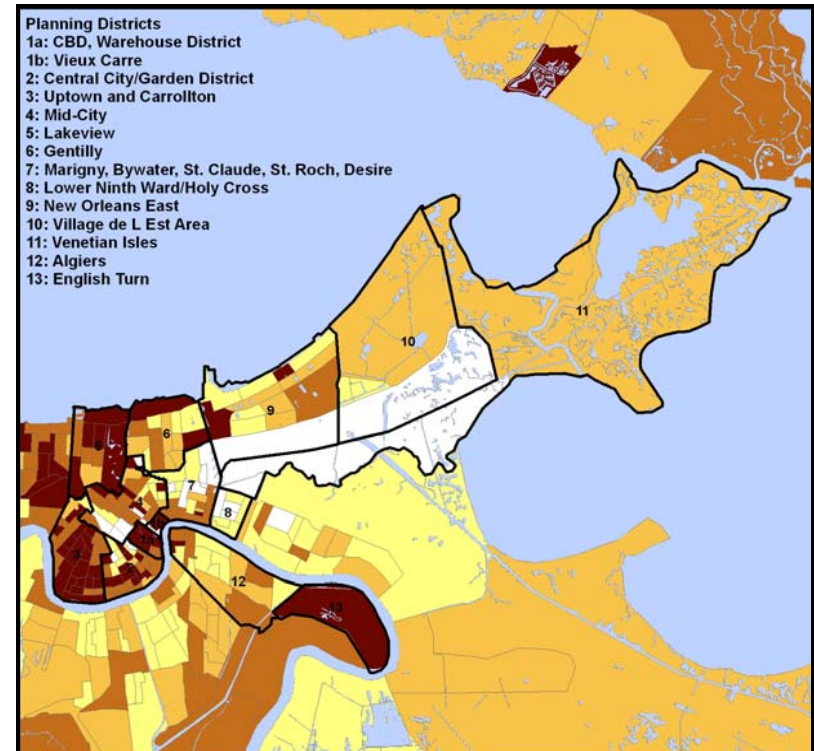
**2004**



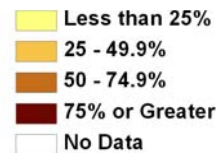
Percent of First-Lien, Owner-Occupied Home Purchase Loans to Upper-Income Buyers. 2004



**2006**



Percent of First-Lien, Owner-Occupied Home Purchase Loans to Upper-Income Buyers. 2004



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<sup>i</sup> These are moderately high figures, but do not place the region among the most segregated metropolitan areas, at least in terms of black-white segregation. Detroit, Milwaukee, Chicago, and New York, for example, all had black-white dissimilarity indices of over 75 as of the 2000 census.

<sup>ii</sup> Liu and Plyer (2008) have calculated more recent small area population estimates for Orleans Parish using U.S. Postal data.

<sup>iii</sup> Because owner-occupied loans are considered less risky and typically carry somewhat lower interest rates, there is some incentive to claim a loan is for owner-occupancy when it is not. Thus, the HMDA data could overstate the level of owner-occupancy.

<sup>iv</sup> Figures 13 and 15 also indicate the percentages of first-lien, owner-occupied home purchase loans where race was not reported. Where these percentages are large relative to the percentage of reported African-American buyers, special care should be taken in the interpretation of the numbers or shares of African-American buyers.

<sup>v</sup> It happens that the national proportion of homebuyers with low- and moderate-incomes declined from 2004 to 2006 as well, but only from 31.2 percent to 26.3 percent, a decline of less than 16 percent compared to the 30 percent in the New Orleans MSA. The national decrease was likely due to a substantial increase over this period in lending activity in higher-cost metropolitan areas (e.g., CA, FL) where homebuyers are relatively affluent compared to the metropolitan median income. From 2004 to 2006, the New Orleans metro's percentage of low- and moderate income buyers dropped from 92 percent of the national percentage to 76 percent of the national percentage.



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<sup>vi</sup> Of course, there is some issue with using HUD median family incomes as baselines for this analysis. These are estimates and are unlikely to be highly accurate in the New Orleans metropolitan area in 2006. However, because the median family income is higher in 2006 than 2004 (52,300 vs. 49,900), the absolute thresholds (in nonadjusted dollars) increased from 2004 to 2006. Thus the large, overall decline in borrowers under 80 percent of MSA median income was *not* due to some substantial lowering of the 80 percent threshold.