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Why are Foreclosure Rates in Prince William County, the City of Manassas, and the City of Manassas Park High When Compared to Other Parts of the Washington, DC Metro Area?

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Urban Institute RESEARCH OF RECORD

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THE Nonprofit Roundtable OF GREATER WASHINGTON

A Student Paper

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We would also like to extend our thanks to the Urban Institute of Washington D.C. (*www.**urban**.org*), and the Nonprofit Roundtable of Greater Washington (www.**nonprofitroundtable**.org). We would especially like to thank Chuck Bean, executive director, and Amy Fishman, program manager, both of the Nonprofit Roundtable, for their continued support and interest in this report.

Policy Research Seminar

This project was undertaken by three students in The College of William and Mary's Thomas Jefferson Program for Public Policy graduate department. It was part of a graduate class called Policy Research Seminar which students take during the Fall semester of their second year. Students work in teams to complete projects for external clients in order to apply the analytical tools they developed during their first year. Completion of a PRS project indicates that a student has successfully applied their academic skills to address a real-world policy problem. This concept paper, whose client was the Urban Institute, is an example of such a project.

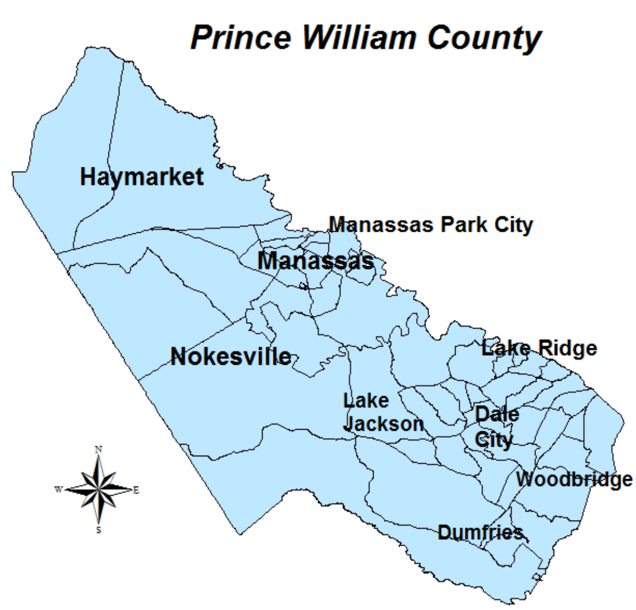
Executive Summary

During the Fall of 2009, the Thomas Jefferson Program in Public Policy was commissioned by the Nonprofit Roundtable and the Urban Institute to examine the impact of foreclosures in Northern Virginia on minority and immigrant populations. The target area for the research project included Prince William County, the City of Manassas, and the City of Manassas Park. Major components of the project included design of a statewide regression model, interviews with key stakeholders, and a targeted review of the literature.

After experiencing data challenges due to inaccessible individual level data, the researchers adapted by reformulating the research question as follows: Why are foreclosure rates in Prince William County, the City of Manassas, and the City of Manassas Park high when compared to other parts of the Washington, DC metro area? A statewide regression model indicated that foreclosure trends in Prince William County, the City of Manassas, and the City of Manassas Park reflected national trends: the probability of foreclosures increased among Black and Hispanic populations. The statewide regression model was used to conduct a quantitative analysis of foreclosures; the results show that there are positive associations between foreclosures and the percentage of Hispanic and Black populations. Notably, this is a very simple model with limited data, therefore future researchers should consider including other relevant variables that were not included in this model. Geographic Information Systems mapping (GIS) indicated that foreclosures and subprime lending were disproportionately located in regions of the target area where Black and Hispanic populations were concentrated. A targeted review of the literature specifically examined the connection between subprime mortgages and foreclosures, subprime mortgages and minority populations, and foreclosures and minority populations. This targeted review reinforced the magnitude of the foreclosure crisis; among other negative effects foreclosures are associated with decreased property values, negative health implications and increased criminal activity. In addition, foreclosures increase the fiscal strain on local governments due to a shrinking tax base.

Multiple stakeholders indicated that the foreclosure crisis is displaying a wave-like pattern. Further, some stakeholders indicated that a new wave of foreclosures has begun. The first wave disproportionately affected minority recipients of subprime loans. As the current wave gathers steam, the foreclosure crisis is pinching middle-class families through the ripple effects of the current economic crisis. In the policy recommendations section, the researchers suggest that government leaders continue to address the first wave and *prepare now* to mitigate the impact of the second wave. The following pages present quantitative analysis, qualitative analysis, and policy recommendations designed to provide a foundation for future research and to inform policymakers as they continue to work to address the foreclosure crisis.

The Target Area



Take Away Headlines

- Waves are an analogy frequently used to describe the foreclosure crisis. The first wave disproportionately affected minority and immigrant populations, and recipients of subprime loans. The current foreclosure wave is disproportionately affecting middle and upper income families that are experiencing unemployment or underemployment as a result of the economic downturn.

- It is important for homeowners to seek assistance as early as possible when facing mortgage payment challenges. This will increase the likelihood of the homeowner remaining a homeowner.

- Allocation of responsibility for the foreclosure crisis is a controversial issue; however, in the long term, homeowner education should be prioritized.

- Long term strategies that will benefit home purchasers and relevant stakeholders include allocating funds for ongoing research such as homebuyer surveys and stakeholder surveys, and conducting clinical experiments to examine the impact of financial literacy education on foreclosure outcomes. By conducting ongoing research in this fashion, stakeholders will be better equipped to deal with the current crisis and effectively prepare to address future challenges.

Table of Contents

Methodology

The methodology section discusses the components of the targeted literature review, and describes the quantitative and qualitative methods of analysis used by the researchers.

Targeted Literature Review

In the first component of the analysis, the researchers conducted a survey of the literature in order to lay a framework for the data analysis. As noted in the executive summary, the purpose of the targeted literature review was to determine whether the results of the quantitative research were consistent with the existing literature. As indicated above, the research analyzed the connections between subprime mortgages and foreclosures, subprime mortgages and minority populations, and foreclosures and minority populations.

Quantitative Analysis

The second component of the analysis focused on quantitative analysis. The quantitative analysis is comprised of two elements. First, the researchers analyzed available data. As part of the data analysis, the researchers created kernel density plots, designed data charts, and conducted a regression analysis. For these sections the researchers used data from the Urban Institute's analysis of LPS Applied Analytics, formerly McDash Analytics, LLC (hereafter referred to as the *McDash* data) with permission. The researchers also used publicly available data from the 2000 U.S. Census (hereafter *Census* data), Home Mortgage Disclosure Act data (hereafter HMDA data) and the U.S. Department of Housing and Urban Development Neighborhood Stabilization Program (hereafter *HUD* data). In the second element of the quantitative analysis, the researchers used GIS mapping to locate and display the distribution of subprime lending, foreclosures, and minority populations within the target area.

Challenges encountered during the quantitative analysis included mismatched years of data sets and mismatched geographic identifiers. Regarding the years of the mismatched datasets, the McDash data spanned 2007-2009 while the HMDA data spanned 2004-2006, and the Census data was collected in 2000. Regarding mismatched geographic identifiers, the McDash data were aggregated to the zip code level, while the HMDA and Census data were both aggregated to the tract level. These two levels were not comparable, as zip code boundaries in the target area do not match the boundaries of census tracts. Ultimately, the researchers relied heavily on the census tract identifier because census tracts are smaller and more comparable across neighborhoods.

Qualitative Analysis

The third component of the analysis consisted of stakeholder interviews. Examples of stakeholders include housing counselors, legal service providers, and non-profit agencies. The objective of these stakeholder interviews was to gather qualitative information on localized trends in the foreclosure market within the target area and to gain ground-level perspective on the impact of foreclosures on communities and families within the target area. In order to conduct these interviews the researchers designed interview templates. We contacted twenty-one stakeholders and received responses from nine. During the interviews the researchers followed leads with the stakeholders that arose during the interview. Due to challenges in securing responses from key stakeholders in the target area, some of the information presented, though pertinent, came from stakeholders outside of the target area.

Background

National Trends

According to data published by RealtyTrac, during the second quarter of 2009 the number of national foreclosures rose by 11% from the first quarter of 2009. If foreclosure filings continue to rise at this rate, there could be 2.3 million foreclosures in the United States by the end of 2009.[1] Fluctuations in the national housing market have reduced homeownership rates among all racial and ethnic groups. During 2008, 74.9% of Whites were homeowners, compared to 48.9% of Hispanics, and 47.5% of Blacks.[2] The foreclosure crisis has impacted individuals from every racial or ethnic group. The issue addressed by this paper is whether the magnitude of the impact varies across racial groups.

Virginia Conditions

Virginia ranks 38th in the United States in highest number of subprime mortgages.[3] Nationally, 11.7% of all mortgages are subprime, while in Virginia the share is 8.8%.[4] The Northern Virginia region's foreclosure rate is 2.7%, but foreclosure rates in several Washington, DC metropolitan area counties exceed this level. In June 2009, Prince George's County, Maryland had the highest foreclosure rate in the Washington, DC metropolitan area at 5.2%, followed by Charles County, Virginia, at 3.9%, and Prince William County, Virginia, at 3.7%.[5] Other counties leading Virginia in the number of foreclosures include Fairfax,

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[1] *Foreclosure Real Estate Listings | RealtyTrac*. Accessible at <http://www.realtytrac.com>.
[2] Kochar, Rakesh, and Gonzalez-Barrera, Ana, with Dockterman, Daniel. *Through Boom and Bust: Minorities, Immigrants and Homeownership.* Pew Hispanic Center. May 2009.
[3] *Foreclosure Real Estate Listings | RealtyTrac*. Accessible at <http://www.realtytrac.com>.
[4] Ibid.
[5] Pettit, Kathryn L., Leah Hendey, Thomas Kingsley, Mary K. Cunningham, Jennifer Comey, Liza Getsinger, and Michel Grosz. *Housing in the Nation's Capital 2009*. Publication. Washington, D.C.: Urban Institute, 2009.

Prince William, Loudoun, Spotsylvania and Chesterfield.[6] Foreclosure filing rates in Prince William County are 54% higher than foreclosure filing rates in Loudoun.[7] Currently, foreclosure filing rates in Fairfax County are 21% higher than in Prince William County.[8]

Washington DC Metro Area

The foreclosure rate in Prince William County exceeded foreclosure rates in other counties in the Washington DC metropolitan area. During the second quarter of 2008, the foreclosure rate in Prince William County was 3.8%. At that time, the county with the second highest foreclosure rate was Loudon, with a foreclosure rate of 1.79%. Between April of 2008 and March of 2009, the foreclosure rate in Prince William County reached 10.48%. Again, Loudon had the next highest foreclosure rate at 6.35%.

Table 1. Foreclosure Trends

PLACE	2008 Q2 (April-June08)	2008 Q3 (July-Sept08)	2008 Q4 (Oct-Dec08)	2009 Q1 (Jan-March09)	1 year (April-March09)
Prince William County, VA	**3.81%**	**3.63**	**2.58**	**2.16**	**10.48**
Loudoun County, VA	1.79%	1.67	1.61	1.21	6.35
Prince George's County, MD	1.24%	1.28	1.67	1.48	5.68
Fairfax	1.50%	1.60	1.31	1.01	5.53

[6] *Foreclosure Real Estate Listings | RealtyTrac*. Accessible at <http://www.realtytrac.com>.
[7] Ibid.
[8] Ibid.

County, VA					
Arlington County, VA	0.88%	1.06	0.66	0.68	3.33

Source: Table 1, Facing Foreclosures: A Shared Approach to A Shared Problem

As shown in the table below, the total number of foreclosures in the target area and surrounding counties during 2007 through 2008 was highest in Fairfax County at 6,705. Prince William County followed close behind with 6,632 foreclosures.

Table 2. Foreclosure Trends II

County	Number of Foreclosures in 2007- June 2008
Fairfax County	6,705
Prince William County	6,632
Virginia Beach City	2,900
Loudoun County	2,636
Chesterfield County	2,387

Source: HUD Neighborhood Stabilization Project Foreclosure data (http://www.huduser.org/portal/datasets/nsp_foreclosure_data.html)

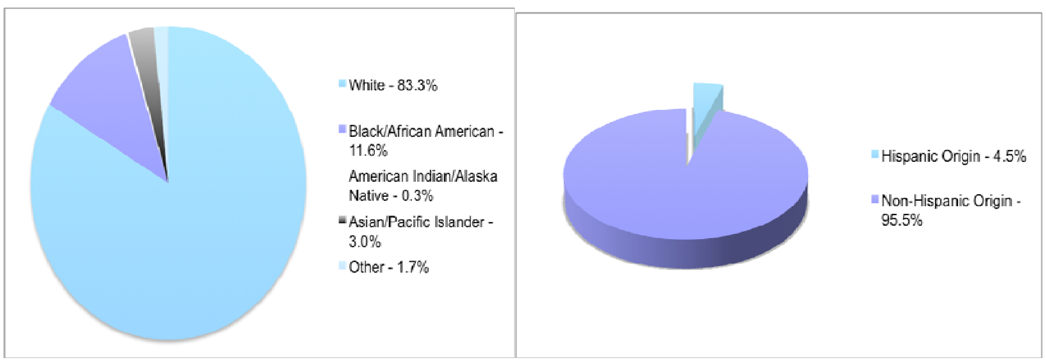
Demographic Changes in the Target Area

Prince William County

Prince William County (PWC), Manassas, and Manassas Park City are located to the west of the District of Columbia and south of Fairfax County.

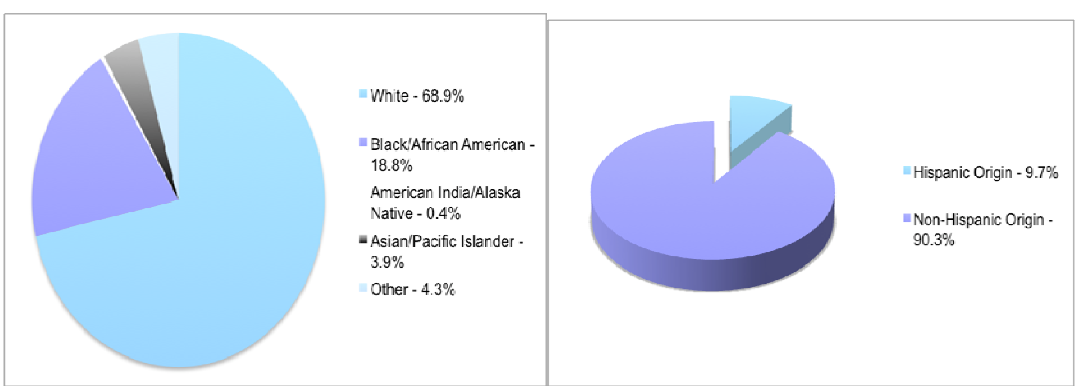
Demographic changes in Prince William County since 1980 have been substantial and are catalogued on the county's official website. Prince William County is the third largest jurisdiction in the state of Virginia. Prince William's population grew by 30.2% from 1990 to 2000. As of September 15, 2009, Prince William's population was estimated at 394,370.[9] Racial and ethnic diversity has also increased within PWC. The Hispanic population has nearly tripled, and the Black population more than doubled from 1990 to 2000.[10] The series of charts below presents the change in the demographic distribution of the population in Prince William County from 1990 to 2008.

Chart 1 & 2. Breakdown of demographics in Prince William County 1990



Source: 2009 Key Demographics, City of Manassas, Virginia

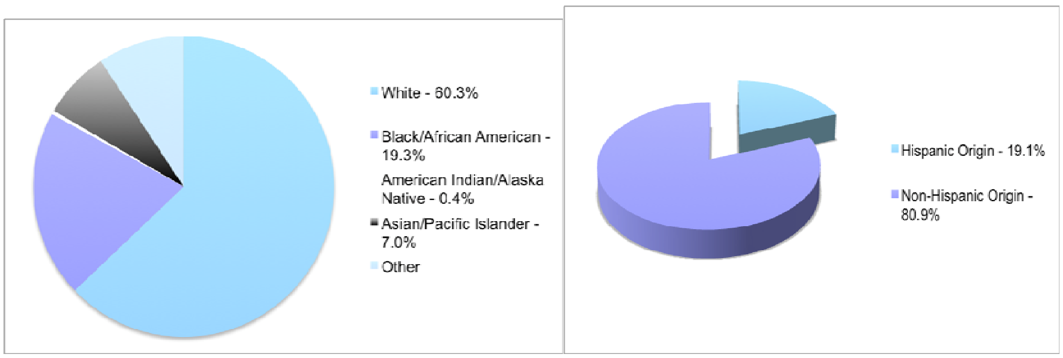
Charts 3 & 4. Breakdown of demographics in Prince William County 2000



[9] Prince William Quarterly Report: http://www.pwcgov.org/docLibrary/PDF/10977.pdf.
[10] Ibid.

Source: 2009 Key Demographics, City of Manassas, Virginia

Charts 5 & 6. Breakdown of demographics in Prince William County 2008



Source: 2009 Key Demographics, City of Manassas, Virginia

As indicated in charts 1 through 6 above, the proportion of the population that self-identifies as being of Hispanic origin has increased from 4.5% in 1990 to 19.1% in 2008.

PWC has also experienced an increase in the proportion of its population that is foreign-born. In 2008, 20% of PWC's population was foreign born compared with 6.2% in 1992.[11] Latin America is the geographic region of origin for the largest proportion of the foreign born population.

PWC is a relatively wealthy county. The median PWC household income in 2008 was $88,724, the fourth highest in Virginia. The county is located in a wealthy region of the nation; in an assessment of the top twenty wealthiest

[11] Ibid.

counties in the US for median household income, nine are located in the Washington D.C. metro area and surrounding counties.[12]

Manassas City

Manassas City is nestled between PWC and Fairfax County, Virginia. Despite relative consistency in population size, the racial and ethnic composition of Manassas City has drastically changed.

In 2009, the total population of Manassas City was an estimated 35,883,[13] only slightly larger than the total in 2000 (35,135).[14] The racial distribution of the three largest ethnic groups at the time of the 2000 Census was 66.9% White, 12.7% Black, and 15.1% Hispanic.[15] In comparison, 2009 estimates project that 32.7% of the population is White, 12.8% Black, and 29.9% Hispanic.[16]

As displayed in the pie charts below, the demographic distribution of the population in the City of Manassas changed drastically between 2000 and 2009.

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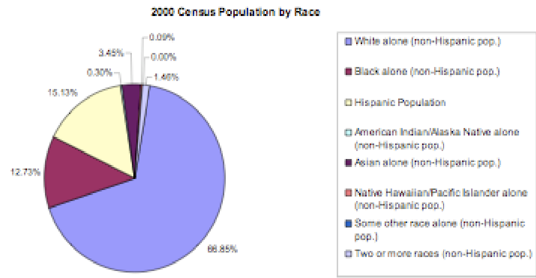
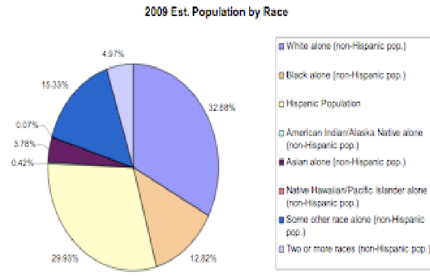
[12] Ibid.
[13] City of Manassas Virginia, *2009 Key Demographics*.
[14] Ibid.
[15] Manassas Office of Community Development Report. All races other than Hispanic are denoted as "non-Hispanic" population.
[16] Manassas Office of Community Development Report.

Charts 7 & 8. Population Estimate in the City of Manassas 2000 and 2009





Source: 2009 Key Demographics, City of Manassas, Virginia

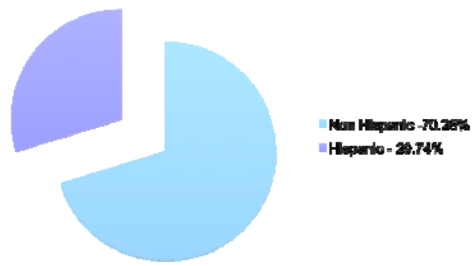
Manassas Park City

Manassas Park City is situated between Manassas City and PWC. As of 2008, Manassas Park City has a relatively small population of 11,319.[17] During 2008, 78.6% of the population was classified as White, 12.1% was classified as Black, and 29.7% of the population was classified as Hispanic.[18] These categories overlap – the data source does not indicate whether individuals classified as White or Black were also non-Hispanic. In this context it is more useful to compare the Hispanic population to the non-Hispanic population; 29.7% of Manassas Park City is classified as Hispanic while 70.3% of the population is classified as non-Hispanic. The pie chart below shows the proportions of the Hispanic and Non-Hispanic population in the City of Manassas Park.

[17] http://www.cityofmanassaspark.us/Public_Documents/ManassasParkVA_Manager/index.

[18] http://www.cityofmanassaspark.us/Public_Documents/ManassasParkVA_Manager/index. These are the three largest ethnic groups in Manassas Park City.

Chart 9. Distribution of Hispanic and Non-Hispanic Population in the City of Manassas Park (2008)



Quantitative Analysis

Statistical Analysis -- Statewide Regression Model

A statewide regression analysis indicated a positive association between percentage of Black and Hispanic population in 134 counties and independent cities in Virginia and the number of foreclosures, controlling for socioeconomic information.

Under ideal conditions, researchers should use individual level data to run a regression using foreclosure rates as the dependent variable and controlling for socioeconomic and demographic variables within the target area. This research first attempted to estimate a regression model at the census tract level within the target area. However, the explanatory variables—percentage of Hispanic, Asian, White, Blacks, and other socioeconomic variables—came from 2000 Census data, while the dependent variable of foreclosure rates (and other types of loan variables) came from the McDash data. Importantly, the target area examined in this project experienced rapid change in the racial composition of the population since 2000, and this valuable information is excluded by using the

Census data from 2000. The regression results were insignificant and not robust, which in part could have been caused by our small sample of only 54 observations (census tracts in PWC and Manassas, Manassas park city).

As an alternative, we attempted to run a regression at the state level using 134 counties and cities in Virginia as observations. The county level foreclosure and unemployment rates came from HUD (2007-2008) data; median household income estimates were obtained from the Census Bureau Small Area Income and Poverty Estimates (2007), and racial (demographic) information came from Weldon and Cooper Center for Public Service at University of Virginia. The objective was to model factors that affect foreclosure rates, controlling for the percentage of Blacks, Hispanics, Asians, people of multiple races, median household income, and unemployment rate in 134 counties and cities in Virginia.

Before interpreting our regression results, it must be noted that some explanatory variables are highly correlated with each other, which can cause multicollinearity. In particular, the percentages of different races add up to one, and therefore it is important to drop one ethnicity, in our case White, to avoid perfect multicollinearity in our regression model. Based on the data constraints, researchers selected to run the OLS regression model because it provides a foundation for future research and produces the BLUE (best, linear, unbiased, and efficient) estimator.

Table 3. OLS regression model of estimated number of foreclosures in Virginia

Variables	Coefficients
% Black	**105.33 (57.16) ***
% Asian American	**-3116.688 (678.82)****
% Hispanics	**1340.096 (258.41) *****
% Multiracial	**2094.338 (2639.72)**
Median household income, 2007	**.005225 (.0008081) ***
Unemployment rate, 2007	**557.5777 (704.216)**
All ages in poverty, 2007	**.029259 (.0030767) ***
Total number of observations	**116**

Source: authors' calculation; Census Bureau, University of Virginia Weldon and Cooper center for public service, HUD
Note: Standard errors in parentheses* p value < 0.10 ; ** p value <0.05

The statewide regression results above indicate that a one percent increase in Black population leads to an additional 105.33 foreclosures in a jurisdiction, holding all else constant. Similarly, a one percent increase in Hispanics leads to an additional 1340.096 foreclosures, ceteris paribus. On the other hand, a one percent increase in the Asian American population has a negative impact on foreclosures. These coefficients are statistically significant, and are consistent with the foreclosure trends in Virginia identified by other studies, which will be explained further in the literature review section. Even when we controlled for several socioeconomic variables, we observed a positive association between foreclosures and the percentage of Blacks and Hispanics.

In order to further understand the implications of this regression result in our target area, we have substituted information from Prince William County in the statewide regression function. Before discussing the result for our target area we have to note that the foreclosure data span more than one year (from 2007 to June 2008). If we plug in the percentage Black, Hispanic, Asian, multiracial, all ages in poverty (number), median household income, and unemployment rate using Prince William County information only, the estimated number of foreclosures is 294.4295, which is substantially lower than the 94,662 foreclosures in the area estimated by HUD. The estimated number of foreclosures is different from the actual number because actual data includes number of foreclosures between 2007 and June 2008 while other covariates contain information from 2007 and 2000. Also, it is highly likely that there are other important explanatory variables that should have been included in the model but were excluded (loan information, education, employment sector, credit scores) in the model. This regression serves as an example model to demonstrate what could be done if we had individual level data for relevant variables.

Kernel Density Plots

Kernel density plots are a non parametric way of estimating the probability density function of a random variable. Kernel density plots can be thought of as a generalized presentation of data composed by the smoothing of histograms. These plots can be used to overlap and compare different distributions of two variables in one chart.

Indicated below in charts 10 and 11,[19] kernel density plots demonstrate that the distribution of subprime loans to minorities is higher in the target area than in the Washington DC metro area. The first kernel density plot indicates that a higher percentage of minorities than non minorities purchase homes with loans made by subprime lenders in the Washington DC, Metro area. The kernel density plot immediately beneath indicates that a higher percentage of minorities

[19] Please note: Additional kernel density plots are included in the appendix.

in the target area purchase homes with loans made by subprime lenders than minorities in the Washington DC metro area.

Chart 10. Kernel density plots (Percent of purchasing loans by subprime lenders to minorities and whites in our target area) Source: HMDA 2004

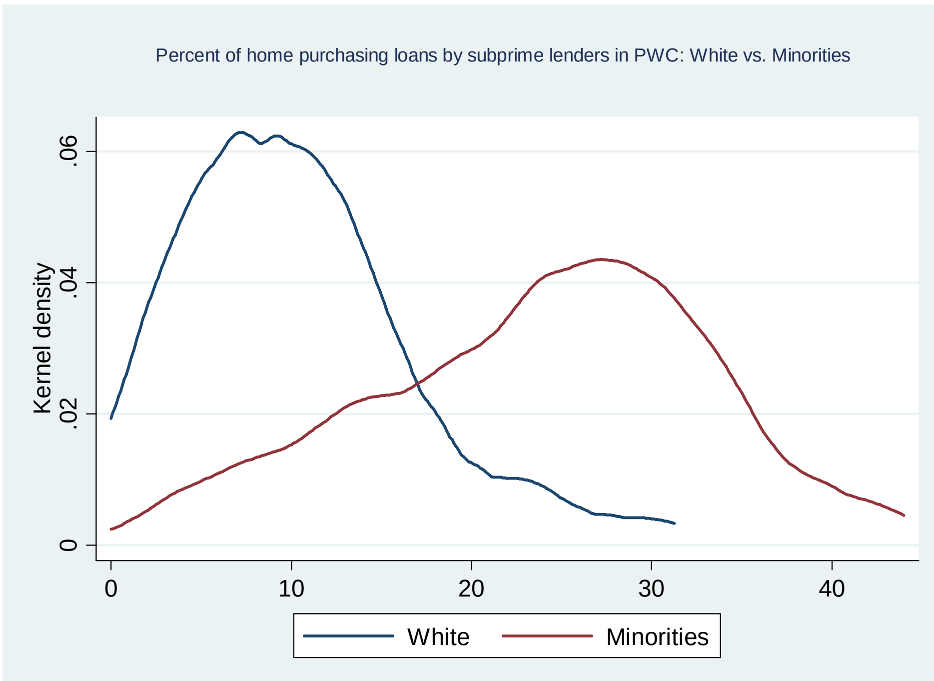
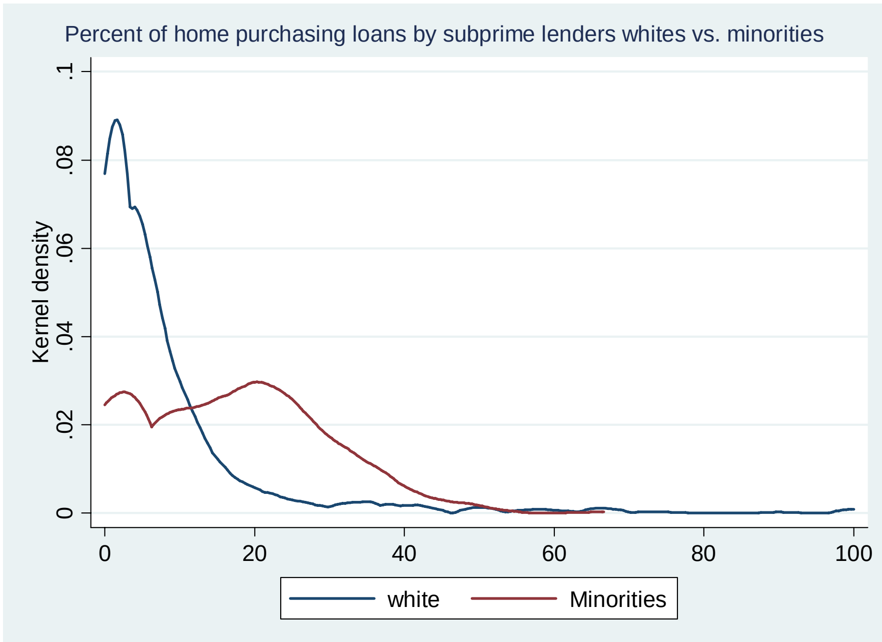


Chart 11. Kernel density plots (Percent of purchasing loans by subprime lenders to minorities and whites in DC metropolitan area) Source: HMDA 2004



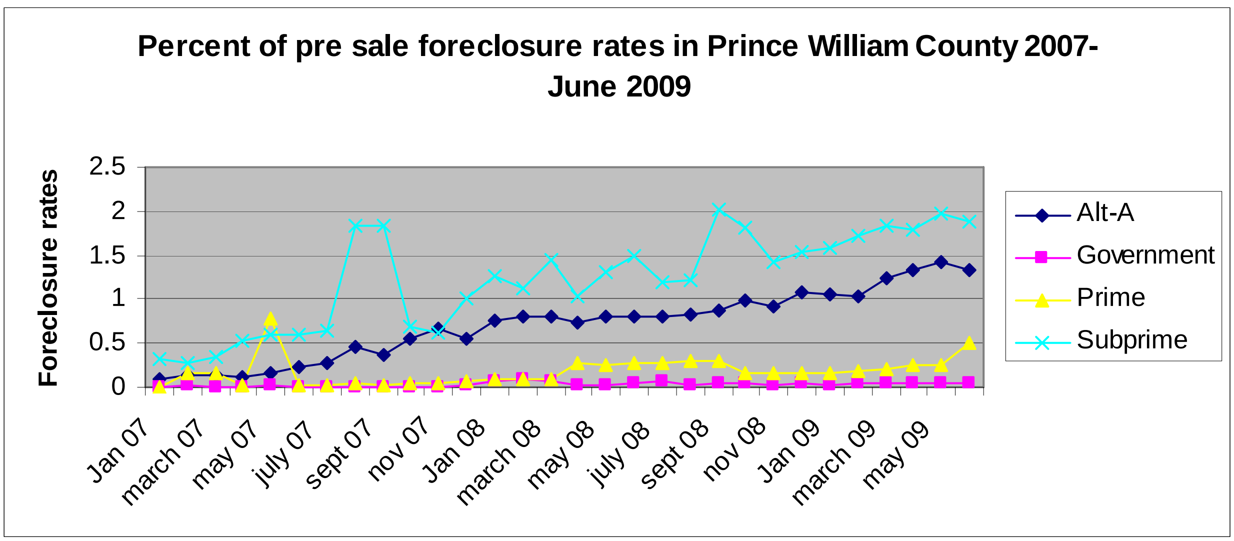
In other words, minority homebuyers within the target area were more likely to receive a loan from a subprime lender than minority homebuyers in the general Washington DC metro area.

As seen in charts 10 and 11, a higher percentage of minorities than whites received purchasing loans from subprime lenders. More importantly, the data indicate that this disparity is clearer and more pronounced in the target area than in the DC metro area. The average percentage of whites receiving purchasing loans from subprime lenders was 10.2% in the DC metro and 12.4% in the target area. On the other hand, on average 22.6% of minorities in the Washington DC Metro area and 28.7% of minorities in the target area received purchasing loans by subprime lenders. Interestingly, 35% of Hispanics received purchasing loans from subprime lenders on average, which is much higher than the average percentage for whites in our target area.

Relevant to both waves of the foreclosure crisis addressed by stakeholders, foreclosure rates resulting from subprime loans and Alt-A loans have also been increasing in the target area. The first table below shows the percent of pre-foreclosure sale rates in Prince William County while the second shows the percent of pre-foreclosure sale rates in the City of Manassas and the City of Manassas Park.

Charts Examining Foreclosure Rates in the target area only

Chart 12. Foreclosure rates in Prince William County by loan type from 2007 to June 2009

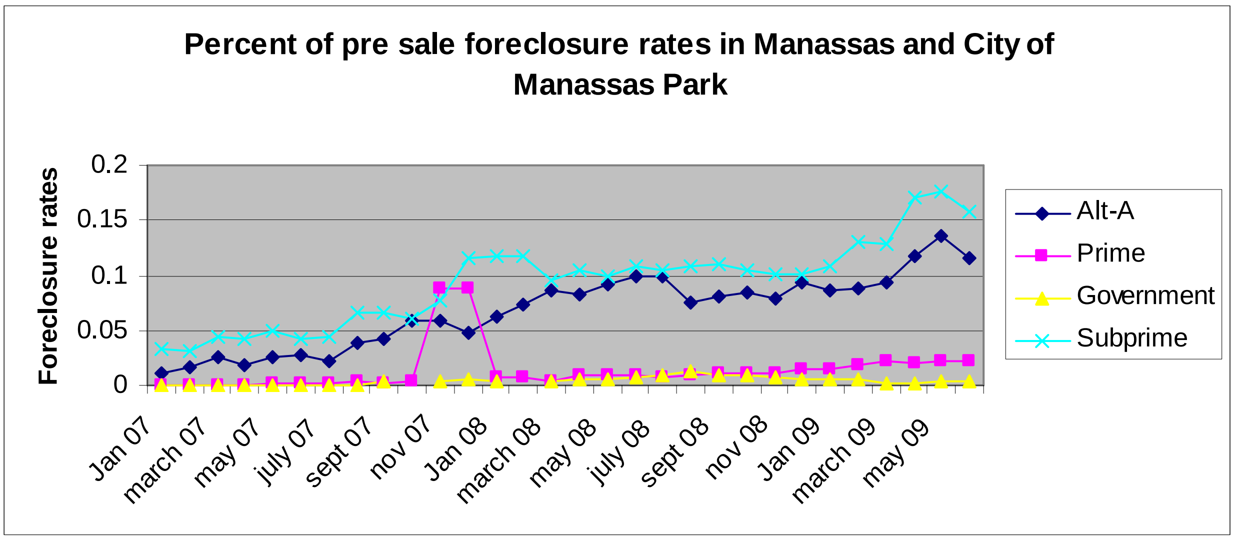


Source: Data from Urban Institute analysis of LPS Applied Analytics, formerly McDash Analytics, LLC.

The table above indicates that the percentage of pre-sale foreclosures in Prince William County is highest for homeowners with subprime loans. The dark blue line indicates that the foreclosure rate for Alt-A loans is also increasing, and towards the end of 2008 into the first half of 2009 the data show that the gap between prime loans and Alt-A loans is increasing. Therefore, the (pre-sale) foreclosure rate for Alt-A loans is increasing at a faster rate than the foreclosure rate for prime loans.

The table below shows that the percentage of pre-sale foreclosures in the City of Manassas and the City of Manassas Park is highest among homeowners with subprime loans. The data indicate that the foreclosure rate for homeowners with Alt-A loans reached the same level as the foreclosure rate for subprime loans around July of 2008 and January of 2009. Both tables indicate that homeowners with subprime loans and Alt-A loans are facing higher pre-sale foreclosure rates within the target area.

Chart 13. Foreclosure rates in Manassas and City of Manassas Park by loan type from 2007 to June 2009



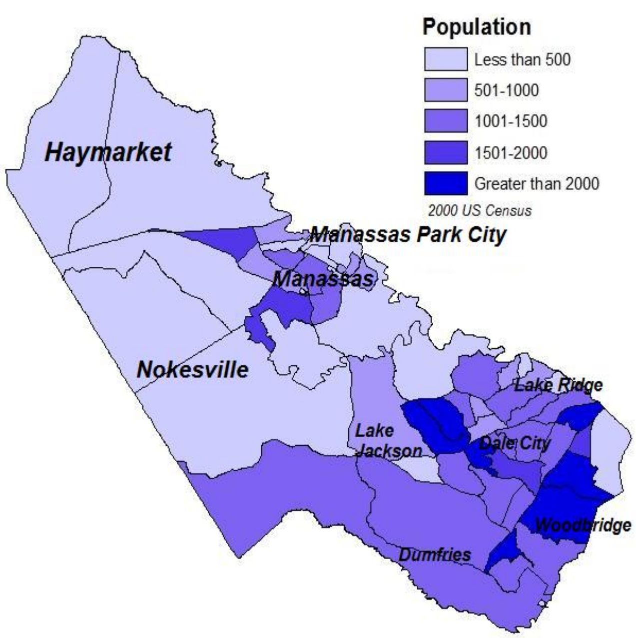
(Source: Data from Urban Institute analysis of LPS Applied Analytics, formerly McDash Analytics, LLC.)

Geospatial Information Systems Mapping

The following GIS map (Map 1) shows the distribution by census tract of the population that self-identifies as Black within the target area. The darkest tracts, which represent the most populous areas, are near the Woodbridge, Dale City, and Lake Ridge neighborhoods. Establishing where the heaviest concentrations of minorities are located is important to establish the connection between minorities and foreclosures in the target area. The following GIS maps provide further visual support for this connection.

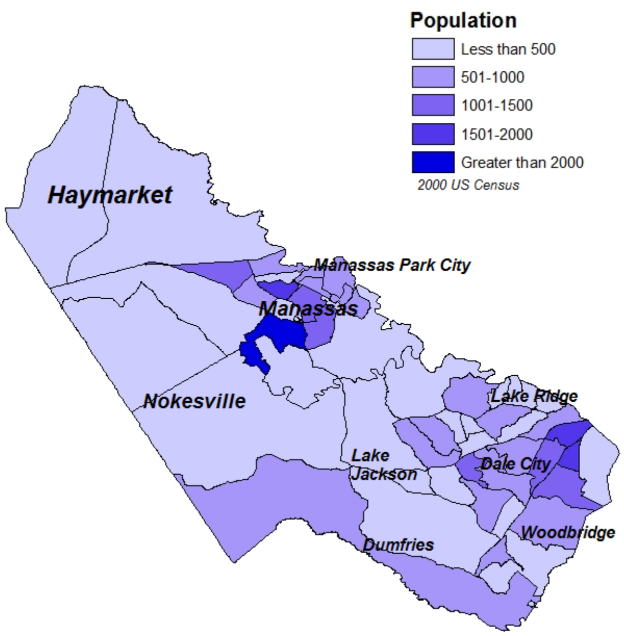
One caveat to remember when considering these maps is the incongruence between the data sets that were available. For example, the population data used came from the US Census Bureau's 2000 census, while other maps that show the distribution of foreclosures and subprime loans come from more recent years. An analysis of this kind would be more accurate using more current data from overlapping years.

Map 1: Black Population by Census Tract in Prince William County, 2000



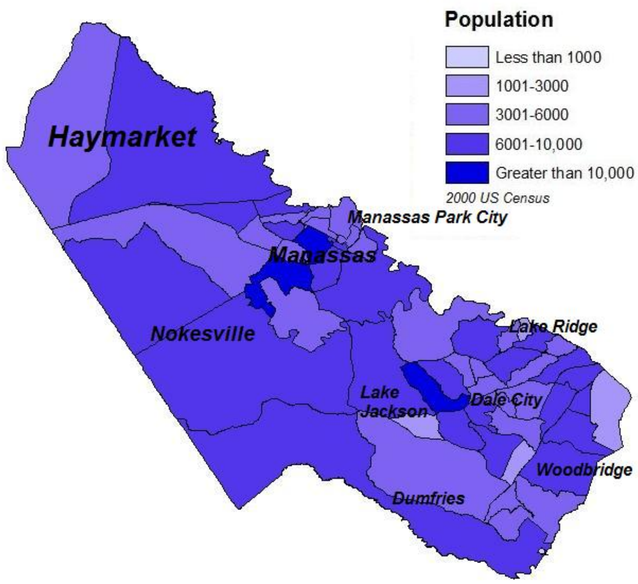
Map 2 demonstrates the distribution by census tract of the population within the target area that self-identifies as Hispanic. The highest concentrations of Hispanics appear to be located near Manassas and Dale City.

Map 2: Hispanic population by Census in Prince William County, 2000



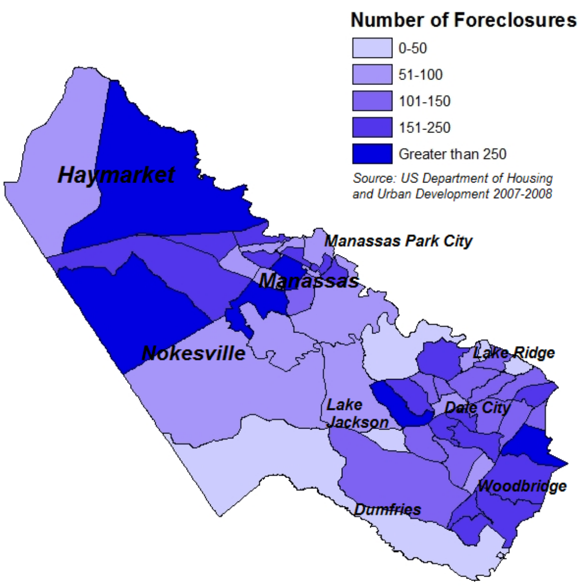
Map 3 shows the distribution of the total population within the target area, regardless of race. The most densely populated areas are near Manassas, Manassas Park City, and near the Lake Jackson/Dale City area, but the Haymarket, Nokesville, and Dumfries areas are also highly populous. It is important to consider the total population's distribution as well as the two prior maps that show the distribution of minorities when making the connection between minorities and foreclosures. This is because, as will be demonstrated in upcoming maps, while census tracts with high numbers of foreclosures are consistently densely populated, *not all densely populated tracts are also experiencing high numbers of foreclosures*.

Map 3: Total Population by Census Tract in Prince William County, 2000



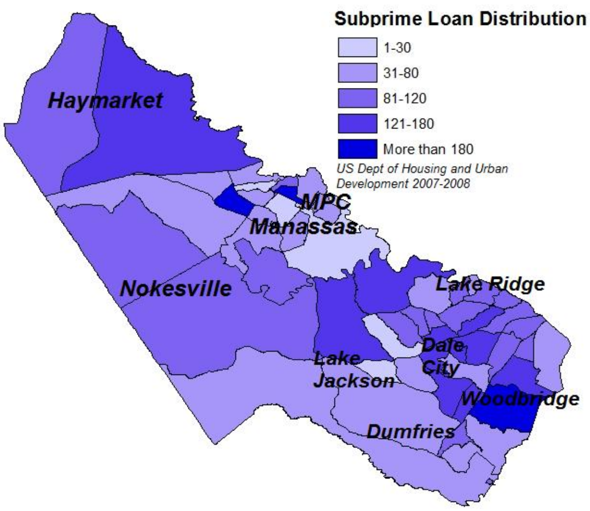
Map 4 shows the distribution of foreclosures by census tract in the target area during the 18-month period from January 2007 to June 2008. Interestingly, we see the highest concentration of foreclosures in parts of Haymarket, Nokesville, Manassas, and near Dale City and Woodbridge. In a comparison of foreclosures and distribution of minorities, Manassas and tracts near Dale City and Woodbridge are consistently represented. In contrast, however, Haymarket and Nokesville, which have large numbers of foreclosures, had relatively low minority populations in 2000.

Map 4: Estimated Number of Foreclosures in Prince William County, 2007-2008



Map 5 shows the distribution of subprime loans associated with conventional mortgages in the target area from 2007 to mid 2008. We examined the distribution of subprime loans in neighborhoods with high minority concentrations, since other research (addressed in the literature review section of this report) indicated the powerful role of subprime loans in the foreclosure crisis. Comparing Map 4 and Map 5, areas with high minority concentrations – near Manassas, Manassas Park City, and Woodbridge – are consistently represented as problem areas.

Map 5: Distribution of Subprime Loans for Conventional Mortgages in Prince William County, 2007-2008



Targeted Literature Review

The following section contains a review of the existing literature on foreclosures and their effects on communities and families. The work that is mentioned was found using academic search engines such as JSTOR and through general internet searches. Many of the sources are academic papers. However, some are reports by federal banks, while others are annual or bi-annual reports issued by institutions, such as the Urban Institute, that are concerned with trends in the foreclosure market. The literature supports the argument this paper makes of the strong link between subprime loans and foreclosures, subprime loans and minorities, and foreclosures and minorities. The literature also provides evidence of the existence of negative health impacts as a result of foreclosure. This section also presents background on financial literacy education in order to lay a foundation for policy recommendations presented in later sections of the paper.

Subprime Loans and Foreclosure Connection

Research on Racial Disparities

Research indicates that an increasing share of households in neighborhoods with concentrated minority populations have experienced foreclosure; this high concentration is particularly striking when compared to the foreclosure crisis in the early 1990s.[20] Gerardi and Willen calculated the median ratio of mortgage debt to

[20] Gerardi KS, Willen PS. "Subprime Mortgages, Foreclosures, and Urban Neighborhoods." Federal Reserve Bank of Atlanta Working Paper series, February 2009; Gerardi and Willen conducted a study on subprime mortgages and foreclosures in

income at purchase (DTI) and median initial, cumulative loan-to-value ratio (CLTV) for homeownerships by subprime mortgages for each year in their sample. In general, both median DTI and CLTV increased.[21] Notably, the DTI ratio increased significantly for Black and Hispanic subprime borrowers in comparison to white borrowers,[22] indicating a greater debt burden within these populations.

Among homeowners with subprime mortgages, 15% of black homeowners, 10% of Hispanic homeowners, and 6.5% of white homeowners experienced foreclosure between 2005 and 2007.[23] Gerardi and Willen used proportional hazard models to analyze the determinants of foreclosures, using HMDA data and controlling for individual level demographic and socioeconomic variables.[24] Homeowners who utilized a subprime mortgage to purchase a home are about five times more likely to experience foreclosure than prime borrowers (holding all other factors constant in the model).[25] The results of this study also indicate that Black households are three times more likely to experience foreclosure than White households.[26] Gerardi and Willen reason that differences in credit scores and financial wealth account for this disparity. The authors recommend that the borrowers work with the lender to find a new buyer (e.g. a community organization) that is willing to pay off the reduced principal rather than reducing the principal owed by the borrower.

According to Fowler and McClain, one reason that some localities have fairly high foreclosure rates is the disproportionate share of subprime loans issued in these

urban neighborhoods of Massachusetts linking the HMDA data with foreclosure data (obtained from private corporation called Warren Group) on residential purchase, sale, and foreclosure documents for Georgia back to 1990.

21 Gerardi KS, Willen PS. "Subprime Mortgages, Foreclosures, and Urban Neighborhoods." Federal Reserve Bank of Atlanta Working Paper series, February 2009

22 Ibid.

23 Ibid

24 Ibid

25 Ibid

26 Ibid

counties.[27] Another reason is the rapid increase in home construction over the past five years.[28] For example, in 1999, only 10.2% of all new building permits issued in the Washington, D.C. metropolitan area were issued in PWC.[29] In stark contrast, in 2003, 18.3% of all new building permits issued were for new construction in PWC.[30] "Some of this new inventory was purchased by speculators; some was purchased by first-time and other homebuyers using subprime loans."[31] In both cases, the increase in the supply of new housing contributed to the foreclosure problem in some counties.[32]

Subprime Loans and Minorities

Background on Different Types of Homebuyer Loans

The three main types of mortgage loans are prime, subprime, and Alt-A. The main difference between these mortgages is the interest rate set by the lender based on the risk profile of the borrower. Borrowers with "high risk" characteristics are typically given higher interest rates. Indicators of a high-risk borrower include late payments on prior mortgages, late payments on rental properties, a low credit score, and past bankruptcy filings.

Low-risk borrowers typically receive prime mortgage loans. Prime mortgage loans have the lowest interest rates and composed approximately 80% of the entire mortgage market in 2006.[33] Borrowers who have good credit scores and characteristics that the lender may consider risky typically receive alt-A mortgage loans.[34] Alt-A mortgages have a relatively low interest rate and are considered the "least risky" of the

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[27] McClain J and Fowler L. "Foreclosures in the Washington DC region: Evaluating the scope of the crisis." Prepared for the Metropolitan Washington Council of Governments. June 18th 2008.

[28] Ibid

[29] Ibid

[30] Ibid

[31] Ibid

[32] Ibid

[33] Ibid.

[34] Mayer, Christopher J., Pence, Karen M., and Sherlund, Shane M. "The Rise in Mortgage Defaults." Finance and Economics Discussion Series: Divisions of Research & Statistics and Monetary Affairs of the Federal reserve Board. Washington, DC. 2008.

nonprime loans.[35] Alt-A loans compose 5% of the mortgage market,[36] and may have a fixed interest rate for the entire term of the loan or an adjustable interest rate over the course of the loan.

Government-insured loans are another type of mortgage available to certain borrowers. These loans target low- and middle-income first-time borrowers or low down-payment borrowers with good credit and are intended to encourage lenders to extend credit lines to otherwise "unworthy" borrowers. Government-insured loans have provided unintended incentives for lenders to seek out high-risk borrowers, because if the borrower defaults, the government will repay the loan. If the borrower defaults, the government can seize the defaulted property, which has led to the phenomenon of government-owned foreclosures.[37]

Defining Predatory Lending and Briefly Addressing Redlining

Predatory lending is described by the Federal Reserve Bank of New York as any lending practice that reduces welfare or where lenders use excessive borrowing and delinquency as "debt traps." [38] The U.S. Department of Housing and Urban Development defines predatory lending as the use of illegal and/or discriminatory practices by "lenders, appraisers, mortgage brokers, and home improvement contractors." According to the U.S. Department of Housing, predatory lending can include use of false appraisals to inflate property values, encouraging borrowers to include false information on loan applications, "knowing[ly] lending more money than a borrower can afford to repay," and targeting borrowers with low incomes with higher interest rate loans.[39]

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[35] Agarwal, Sumit and Ho, Calvin T. "Comparing the Prime and Subprime Mortgage Markets." The Federal Reserve Bank of Chicago. Number 247; August 2007.

[36] Federal Reserve Bank of Chicago: http://www.chicagofed.org/publications/fedletter/cflaugust2007_241.pdf

[37] "FHA Loans." *Mortgage Help and Mortgage News | The Truth About Mortgage.com*.

[38] Morgan, Donald P. "Defining and Detecting Predatory Lending." Federal Reserve Bank of New York: Staff Report No. 273. January 2007.

[39] US Department of Housing and Urban Development. "Don't be a Victim of Loan Fraud." Accessed November 18, 2009. <http://www.nls.gov/offices/hsg/sfh/buying/loanfraud.cfm>.

Because of the ethically questionable and high-pressure marketing used by predatory lenders, borrowers who feel that they have weak credit scores or limited income are particularly vulnerable. These borrowers may be, or may think that they are, ineligible for regular, lower-risk loans.

The concept of reverse redlining is pertinent to discussions on predatory lending. Reverse redlining occurs when lenders intentionally market to individuals based on minority status, residence in a struggling neighborhood, income bracket or other characteristics. Using this tactic, lenders may market to higher-risk borrowers to access monetary incentives provided by the federal government.

Research on Race, Homeownership, and Loan Type

The subprime lending market has grown significantly during the past decade. One impact of this growth has been higher homeownership rates among minority groups. Minority homeownership rates have also grown significantly. From 1996 to 2004, subprime lending activity in the United States increased by approximately 23%.[40] This increase in activity indicates that there was a demand for loans for which subprime lenders were providing a supply. In 2001 one in four Black borrowers obtained a home mortgage from a subprime lender. Between 1998 and 2008, nationwide homeownership rates have increased by 1.9% among Blacks and by 4.2% among Hispanics.[41]

Gains in homeownership rates are quickly being erased by the impact of the foreclosure crisis. According to a Pew Hispanic Center report, the 1990s boom in the housing market saw steadily increasing homeownership rates for minorities –

[40] *Rural Borrowers More Likely to be Penalized for Refinancing Subprime Home Loans*. Center for Responsible Lending, 2004.

[41] Kochar, Rakesh, and Gonzalez-Barrera, Ana, with Dockterman, Daniel. *Through Boom and Bust: Minorities, Immigrants and Homeownership.* Pew Hispanic Center. May 2009.

particularly among Blacks and Hispanics.[42] However, since 2005 and the onset of the housing market bust, homeownership losses have been more severe among Blacks and Hispanics than among Whites.[43]

The subprime mortgage foreclosure crisis has been the subject of numerous high-quality reports. Despite extensive research on the subject, effective remedial strategies to curb the foreclosure crisis are limited. Though many community-based nonprofits have expended vast quantities of time, planning and resources, the underlying structural elements that facilitated the subprime mortgage crisis have not been addressed.[44] According to the findings in *Foreclosed: State of the Dream 2008*, minorities are three times more likely than Whites to receive subprime loans.[45] High cost loans account for 55% of mortgage loans to Blacks compared to 17% of loans to Whites.[46]

There are several factors that affect access to prime loans, two of which are household income and credit rating. The higher an applicants' credit score, the lower the level of risk signaled to the lender. Generally, subprime loans are thought to cater to applicants with lower credit ratings. There is evidence that individual credit history is not necessarily the most important determinant of receiving a subprime loan. Dan Immergluck noted in *Foreclosed: High-Risk Lending, Deregulation, and the Undermining of America's Mortgage Market* that Black borrowers had a higher likelihood of receiving a high-rate loan than did White borrowers.[47]

For example, "after controlling for credit history, location, and other variables… the probability of a home purchase borrower receiving a subprime loan… increased by

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[42] Ibid.
[43] Ibid.
[44] Cohen, Rick. "A structural racism lens on subprime foreclosures and vacant properties," Kirwan Institute, Oct 2008.
[45] Rivera, Cotto-Escalera, Desai, Huezo, and Muhammad. *Foreclosed: State of the Dream.* United for a Fair Economy. January 2008.
[46] Ibid.
[47] Immergluck, Dan.. ***Foreclosed: High-Risk Lending, Deregulation, and the Undermining of*** *America's Mortgage Market.* Ithaca, NY: Cornell University Press, 2009

approximately one-third . . . if the borrower was black."[48] A second study focusing on refinance loans and purchase loans supported these results. A third study published in 2008 "found that Black homebuyers are 31 percent more likely than a similarly situated white borrower to receive a high-rate (versus low-rate), fixed-rate mortgage with a prepayment penalty."[49]

Foreclosures and Minority Populations

In September 2009, the Center for American Progress (CAP) released a report indicating that race was a statistically significant factor influencing the probability that an applicant would receive a high-cost loan.[50] Using HMDA data, CAP found that higher priced mortgages accounted for 21.8% of the entire mortgage market.[51] Without controlling for income, Black borrowers received 41.5% of the higher-priced mortgages, Hispanic borrowers 30.9%, White borrowers 17.8%, and Asian borrowers 11.5%.[52]

When the CAP analysis controlled for income, the total share of higher-priced mortgages (among higher income borrowers) fell to 14.1%.[53] Black higher-income borrowers received 32.1% of higher-priced mortgages to higher-income borrowers while Hispanic higher-income borrowers received 29.1%, Asian higher-income borrowers received 11.5% and White higher-income borrowers received 10.5% of all higher-priced mortgages to higher income borrowers.[54] The likelihood of receiving a subprime loan increases for minority borrowers, but particularly for Black borrowers.[55] "Among higher income borrowers, the distinction between subprime lending to Whites and subprime lending to minorities is stark."[56]

[48] Ibid.
[49] Ibid.
[50] Chapman and Jakabovics. *Unequal Opportunity Lenders? Analyzing Racial Disparities in Big Banks' Higher-Priced Lending*. Center for American Progress. 2009.
[51] Ibid.
[52] Ibid.
[53] Ibid.
[54] Ibid
[55] *Analysis Finds New Link Between Racial Segregation and Subprime Lending*. Furman Center for Real Estate & Urban Policy. New York, NY. November 2009.
[56] Minority Subprime Borrowers (Consumers Union, October 2002).

Subprime loans, Foreclosures, and Minority Neighborhoods

Subprime loans are concentrated in geographical areas with comparatively high concentrations of minority residents.[57] During 2006, Blacks were 2.7 times more likely and Hispanics were 2.3 times more likely to receive a high-cost loan than were White borrowers.[58] In 2008, 74.9% of Whites were homeowners compared to 47.5% of Blacks and 48.9% of Hispanics.[59] Discussed in greater detail below, this comparative disparity persists among higher income Whites, Blacks and Hispanics.[60] Minorities are disproportionately represented in the state and national subprime lending market.[61]

As noted above, subprime mortgages are concentrated in Census tracts containing neighborhoods with high concentrations of low-income and minority households.[62] Growth in subprime lending represents an increase in the supply of accessible mortgage credit among households who do not meet "prime market underwriting standards."[63] Nonetheless, the high concentration of subprime loans in minority and lower income neighborhoods has generated concern that minority and low income populations are being deprived of equal opportunity within the prime mortgage market.[64]

The U.S. Department of Housing and Urban Development and the U.S. Treasury calculated the relative frequencies of subprime refinance lending in predominantly

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57 Vedantam, Shankar. "Subprime Mortgaegs and Race: A Bit of Good News May be Illusory." Washington Post. June 2008.

58 Ojeda, Jacquez, and Takash. "The End of the American Dream for Blacks and Latinos: How the Home Mortgage Crisis is Destroying Black and Latino Wealth, Jeopardizing America's Future Prosperity and How to Fix It." The William C. Velasquez Institute. June 2009.

59 Kochar, Rakesh, and Gonzalez-Barrera, Ana, with Dockterman, Daniel. *Through Boom and Bust: Minorities, Immigrants and Homeownership.* Pew Hispanic Center. May 2009.

60 National Council of Negro Women, "Income is No Shield, Part III - Assessing the Double Burden: Examining Racial and Gender Disparities in Mortgage Lending." Report in partnership with the National Community Reinvestment Coalition: http://www.ncrc.org/images/stories/pdf/research/ncrc%20nosheild%20june%2009.pdf

61 Kochar, Rakesh, and Gonzalez-Barrera, Ana, with Dockterman, Daniel. *Through Boom and Bust: Minorities, Immigrants and Homeownership.* Pew Hispanic Center. May 2009.

62 Calem, Paul S., Gillen, Kevin., Wachter, Susan. "The Neighborhood Distribution of Subprime Mortgage Lending." Journal of Real Estate Finance and Economics, 29:4, 393-410, 2004

63 Ibid.

64 Ibid.

minority neighborhoods and in low and/or moderate income neighborhoods nationally, focusing on five individual metropolitan areas (NY, Chicago, Baltimore, LA, Atlanta).[65] On average, nationwide, subprime loans were three times more frequent in low-income neighborhoods than in upper income neighborhoods.[66] Subprime loans were five times more frequent in predominantly black neighborhoods than in predominantly white neighborhoods.[67] These departments also found that one in every two refinance loans made in predominantly Black neighborhoods were subprime, compared to only one in every 10 in predominantly White neighborhoods.[68]

A Brief Note on Regulation

According to Apgar, Bendimerad and Essene, many factors influence the relationship between the speed of foreclosure and the prevalence of higher-priced lending. First, considerable variation in legislative details, as well as in other aspects of state level regulations, may influence higher-priced lending patterns. [69] Faster foreclosures may reduce the costs associated with foreclosures, which in turn may lower the costs to the lender (and the "ultimate note holder") of making riskier loans, increasing the probability that borrowers with similar credit history and risk characteristics will receive a higher-priced loan.[70] The authors argue that this evident correlation between state level foreclosure laws and the time it takes to complete a foreclosure, warrants further review.[71]

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[65] Ibid.
[66] Ibid.
[67] Ibid.
[68] Ibid.
[69] Apgar W, Bendimerad A, Essene RS. Mortgage market channels and fair lending: An analysis of HMDA data. Joint center for housing studies. Harvard University. April 25th 2007.
[70] Ibid.
[71] Ibid.

Some Additional Effects of Foreclosures

Impact of Foreclosures on Neighborhoods and Communities

Declining property values,[72] stagnation of the national economy,[73] and strain on local government fiscal budgets[74] are some of the broader impacts of the foreclosure crisis. High foreclosure rates also impact health, safety and criminal activities within neighborhoods.[75] For those homeowners who have fulfilled their mortgage requirements, the increase in foreclosures within their neighborhood affects them through decreasing property values; if such a homeowner wants to sell their home, they are forced to compete with the lower-priced foreclosed homes within their neighborhood.[76]

Potential homebuyers also incur a cost; the reduced availability of credit in the national market makes it difficult for applicants with anything less than stellar credit to secure a home mortgage.[77] In the locations where subprime mortgage foreclosures are concentrated there is a shortage of available resources to mitigate the problems outlined above.[78] Even in small communities with active subsidy programs, generally the subsidies are not large enough to make significant progress in acquiring and rehabilitating foreclosed properties.[79] Neighborhoods in larger cities have access to larger foundations such as the John D. and Catherine T. MacArthur Foundation (in Chicago), the Kresge Foundation (Detroit), the Lilly Endowment (Indianapolis), and

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[72] According to Dan Immergluck and Geoff Smith study using data on 1997–1998 foreclosures in Chicago to 9,600 single-family property sales transactions in 1999, each new foreclosure within one-eighth mile of a home resulted in a 0.9 percent decline in the value of that home (i.e., more foreclosures means more declines at that amount). In low and moderate-income neighborhoods, they found that the marginal drop in property value from one new foreclosure in the same radius was 1.8 percent. Dan Immergluck and Geoff Smith, "The External Cost of Foreclosure: The Impact of Single-FamilyMortgage Foreclosures on Property Values," *Housing Policy Debate,* 17(6), 2006, pp. 57–79.

[73] McClain J and Fowler L. Foreclosures in the Washington DC region: Evaluating the scope of the crisis. Prepared for the Metropolitan Washington Council of Governments. June 18th 2008.

[74] Ibid. Local government budgets are in trouble because of the rapid decline in residential property tax revenue that has occurred as home values decline after the foreclosure crisis. Local counties and cities need to deal with the budget issue by raising taxes, reducing services or both. (McClain Article)

[75] Ibid.

[76] Ibid.

[77] Ibid.

[78] Ibid.

[79] Cohen, Rick. "A Structural Racism Lens on Subprime Foreclosures and Vacant Properties," Kirwan Institute, October 2008.

others that have the capacity to provide philanthropic funding for tackling the foreclosure problems within neighborhoods.[80]

Health Effects

There is a lack of research on the impact of foreclosure on the health and well-being of households. The foreclosure process is intense, stressful and (generally) lengthy. Since the risk of depression increases with the number of stressful events experienced, chronic stress (i.e. foreclosure) can directly impact health outcomes. Bennett, Scharoun-Lee and Tucker-Seeley (2009) speculate that foreclosure may be connected to a range of psychological and health outcomes (e.g. decreased visits to physicians) which can increase the risk of disease. Prior medical conditions can render individuals more vulnerable to the impact of stress.

Minority households and households at a lower socioeconomic status, who may be at greater risk of experiencing foreclosure, are also likely to have difficulty in accessing stress-cushioning resources. Additional stressors that can accompany foreclosure, such as unemployment and the costs of food and healthcare, can further aggravate the impact of foreclosure on households. We suggest that future research should examine the impact of foreclosure on partners and dependent children, and examine whether health outcomes differ along with racial and socioeconomic status. [81]

Research on the Impact of Financial Literacy Education

Impact of Financial Literacy Education

As noted above, this paper presents a brief examination of the research on the impact of financial education on homeownership outcomes. The purpose of presenting this research is to provide a foundation for policy recommendations presented later in

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[80] Ibid

[81] Bennett GG, Shcaroun-Lee M, and Tucker-Seeley R. "Will the Public's Health Fall Victim to the Home Foreclosure Epidemic?" Plos Medicine. June 2009 (6)

the paper, and to increase awareness among stakeholders of the need to conduct additional research in order to ensure that the allocation of financial resources towards financial education are in fact producing improved homeownership outcomes. To further this objective, this section presents an in-depth examination of an effort by policymakers in Illinois to increase financial awareness among potential homebuyers.

Context – Introduction

As the mortgage crisis continues to deepen, policymakers have had increasingly greater incentive to intervene in the lending market. This intervention has taken two major forms: tightening scrutiny of lenders, and developing programs to increase financial literacy among borrowers.

Increasing financial literacy, or financial education, has been known to have a positive causal relationship with credit outcomes for quite some time. One researcher investigated whether borrowers who participated in a Philadelphia city housing counseling program experienced changes in financial behavior within five years of buying a home.[82] The result was mixed; some aspects of financial performance improved while others did not.[83] A large portion of respondents stated that they prioritized mortgage costs above all other bills.[84] More Asian household participants paid their mortgages on time in comparison to Black households who participated in the housing counseling.[85] However, the author also found that the vast majority of counseled households showed no indications of improvement in mortgage payment behavior relative to their prior rent payment behaviors following the housing counseling.[86] This lack of improvement in financial performance may result from the failure of housing counseling; however it may be also a result of statistical anomalies in

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[82] Carswell AT. Does housing counseling change consumer financial behaviors? Evidence from Philadelphia. Journal of family economic issues (2009) 30:339-356

[83] Ibid

[84] Ibid

[85] Ibid.

[86] Ibid

which the borrower failed to report difficulties in making rent payments or mortgage payments on time.[87]

Another more recent study on this general topic was done by Courchane and Zorn in 2005. These authors used regression analysis to demonstrate the strong positive connection between financial knowledge, financial behavior, and ultimate credit outcome. They found that, after race, behavior is the most important variable for explaining credit outcomes.[88] Another recent study was done in 2002 by the Credit Research Center of Georgetown University in conjunction with the National Foundation for Credit Counseling. This study involved a three-year field experiment to assess the impact of financial education on credit outcomes, and found that "borrowers who received … budget/financial counseling reduced their debt and improved their credit profile over three subsequent years, compared to similar borrowers who did not receive counseling."[89] These improvements were directly observed in participants' credit scores, reduced late payments, smaller credit card balances, and decreased reliance on credit lines overall.

Based on a deeper understanding of the current crisis in the target area, we have made policy recommendations along both of these lines. At this time we would like to delve further into our suggestion of a mandatory financial education program. There have been dozens of theoretical studies done on this topic within the past 10 years, but only a few that have actually used field experiments to assess such a program's effectiveness in raising the financial knowledge of high-risk borrowers. One such program was established in pilot form in Illinois in 2005. The program's overall goal was to reduce the prevalence of predatory lending across the state.

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[87] Ibid.

[88] Courchane, Marsha, and Peter Zorn. 2005. "Consumer Literacy and Creditworthiness."

[89] National Foundation for Credit Counseling. National Foundation for Credit Counseling Announces Study Results on the Impact of Credit Counseling on Consumer Credit and Debt Payment Behavior. Personal Finance Foundation. 21 Mar. 2002.

Background of HB 4050

Before enacting HB 4050, Illinois had several anti-predatory regulations already in place based on loan characteristics. However, some policymakers had concerns about these anti-predatory programs that allowed different leeway and loopholes (Agarwal et al (2007) give examples such as replacing regulatory targeted "balloon mortgages" with adjustable rate mortgages with short fixed rate and abrupt rearranging slopes). As a result, legislators sought to focus on educating loan applicants rather than regulating the loan issuing institutions.[90]

The pilot-program enacted by HB 4050 required financial education for high risk borrowers in certain zip codes of the state based on their credit scores as well as product choice. Those mortgage borrowers who had "sufficiently" low credit scores or those choosing sufficiently high risk loan products were subject to mandatory financial education. Borrowers with FICO scores in the 621-650 range were subject to mandatory counseling if they also chose high risk products (these include "interest-only" loans, adjustable loans within 3 years, repeat refinancing within previous year). However, if borrowers had mortgages with prepayment penalties, loans that permit negative amortization or loans with closing costs greater than 5% they were required to take mandatory counseling regardless of their FICO scores.[91] The criteria for this program were based on a successful FHA program that existed in the 1970s.[92] It should be noted that these requirements applied only to loans offered by licensed mortgage lenders in the state of Illinois.[93]

According to HB 4050, these high risk borrowers were required to attend a counseling program through a local HUD (U.S. Department of Housing and Urban

[90] Agarwal, Sumit., Amromin, Gene., Ben-David, Itzhak., Chomsisengphet, Souphala., Evanoff, Douglas D. "Do Financial Counseling Mandates Improve Mortgage Choice and Performance? Evidence from a Legislative Experiment" *Fisher College of Business Working Paper 2008-03-019*, June 2009.

[91] Ibid.

[92] Merrick, Ann. "Illinois Tries New Tack Against Predatory Loans" *Wall Street Journal*, August 22, 2007.

[93] Agarwal, Sumit., Amromin, Gene., Ben-David, Itzhak., Chomsisengphet, Souphala., Evanoff, Douglas D. "Do Financial Counseling Mandates Improve Mortgage Choice and Performance? Evidence from a Legislative Experiment" *Fisher College of Business Working Paper 2008-03-019*, June 2009.

Development) certified loan counseling agency. Borrowers would find out whether they needed to take the mandatory counseling program when they submitted their applications. They were then required to participate in a counseling session within 10 days of submission. These mandatory programs lasted between 1-2 hours and explained to participants the meaning and outcomes of the loan offer for purchasing homes or refinancing mortgages. The main goal was not to "advise" potential borrowers about their mortgage choice but rather to alert and prevent them from making common mistakes.[94]

Loan counselors involved in the program were expected to confirm a borrower's income and expenses as they were stated in the loan application and also to provide specific recommendations about that loan. These would range from assessing whether the applicant was aware of the transaction and could actually afford the mortgage payments based on the applicant's stated salary, to whether the applicant was being charged fees or an interest rate considered excessively high based on market conditions. The program was mandatory in the sense that certain high risk borrowers had to go through a loan counseling session, but applicants were not required to abide by the recommendations set forth by the counselors. Also, according to HB 4050, the cost of participation in the program ($300) was to be borne by the mortgage originator and not the borrower.[95]

Implementation of HB 4050

When HB 4050 was passed in 2005 some in the political community responded with concern toward "the apparent ease with which the trigger criteria for the predatory programs could be avoided by creative loan packaging." This concern led the legislature to emphasize borrower education in HB 4050 rather than lender regulation. Noted in the section above and implicated in the policy proposals included

[94]Ibid.
[95]Ibid.

below, the legislation targeted borrowers who fell within a particular FICO score range for participation in mandatory financial counseling. The bill required borrowers designated as "'high-risk'" to "attend a counseling session with one of the HUD-certified loan counseling agencies." The goals of the financial counseling noted in the paragraphs above indicate that HB 4050 was designed to reduce the prevalence of foreclosures resulting from a lack of borrower foresight or an absence of fiscal capability on the part of the borrower.

Important to this report, one could argue that HB 4050 attempted to prevent initiation of the foreclosure process by targeting borrower education. The impact of requiring the borrower and the financial counselor to interact in pursuit of the goals discussed above formed a line of communication between the borrower and the lender that did not previously exist. For example, within the program counselors were able to "form an assessment of borrower creditworthiness that potentially went beyond what was conveyed by the lender" and "counselors were able to elicit private information . . . and make it a matter of public record by entering their recommendations in the State-maintained database." Agarwal et al. note that including these recommendations in the database "may . . . have induced the lenders to screen better prior to referring approved applications to counseling for the fear of regulatory . . . or legal . . . response."[96]

Since state-licensed mortgage lenders were required to pay the $300 cost of counseling, and state-licensed mortgage lenders provide most of the lending in disadvantaged neighborhoods (some of which were among the selected pilot areas for HB 4050), some voiced concern that regulatory costs would increase for "the very entities providing credit in the selected pilot areas." Lenders were required to ensure that HB 4050's certification requirements were fully satisfied in order to secure their "right to foreclose on the property" in the event of default. In response to HB 4050

[96] Ibid.

lenders indicated concern that they would lose "some of their ability to steer borrowers toward high margin products."[97]

Community activists and residents were also widely opposed to the geographic focus and uniform application of HB 4050 in the target areas. Lawsuits were filed alleging discriminatory intent on behalf of lawmakers. Opposition grew so strong that "mortgage bankers threatened to withdraw from the pilot zip codes." Escalating concerns about the subprime mortgage market along with accompanying "demand and supply effects in the real estate market" coincided with this opposition, and eventually "the pilot program was suspended indefinitely in January 2007, after only 20 weeks of operation."[98]

Data gathered from the participation of 1,200 borrowers in the HB 4050 pilot program indicated that 9% of cases involved mortgages with "'indications of fraud'" or a "discrepancy between the documents and the verbal description of the mortgage." Notably, Agarwal et al. did emphasize that "'an overwhelming majority of borrowers who were receiving adjustable rate loans' did not understand that their mortgage payment was not fixed over the life of the loan."[99]

Though the pilot program was discontinued in its original form in January 2007, a more permanent form of HB 4050 was implemented in a "modified . . . form that covers all of Cook County" in July of 2008. In its modified form, the program targets first-time homebuyers and home refinancers with "'risky'" products without the emphasis on geography.[100]

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[97] Ibid.
[98] Ibid.
[99] Ibid.
[100] Agarwal, Sumit; Amromin, Gene; Ben-David, Itzhak; Chomsisengphet, Souphala; Evanoff, Douglas D. *Do Financial Counseling Mandates Improve Mortgage Choice and Performance? Evidence from a Legislative Experiment*. Fisher College of Business Working Paper No. 2008-03-019. June 2009.

Results of HB 4050

Approximately 1,200 borrowers ultimately participated in the pilot phase of the HB 4050 program. An evaluation of program results was compiled by Housing Action Illinois in cooperation with eleven of the HUD-certified agencies that provided counseling to participant borrowers. These agencies included ACORN Housing, the Chicago Urban League, the Institute for Consumer Credit Education, Neighborhood Housing Services of Chicago, and the Spanish Coalition for Housing.[101] Among the evaluation's most important findings were:

a) Review by HUD-certified agencies and subsequent counseling "led to better-informed decision-making" by borrowers;
b) The program provided services that would otherwise not have been available to borrowers seeking refinancing loans (75% of participants);
c) There was no indication that the program in any way limited borrowers' access to credit, nor did it make the target area less attractive to new homebuyers; and
d) In many cases, borrowers were being approved for loans they could not afford, and more than 60% of those reviewed by HUD agencies were obtaining adjustable-rate loans.[102]

After application review and counseling, the HUD-certified counseling agencies were required to judge the extent of the borrower's understanding of the terms of the loan transaction. Additionally, the agencies were required to state for each file whether there was any evidence of fraudulent behavior on the part of the lender. This represents a clearly active approach to assessing both borrower literacy and lender

[101] Housing Action Illinois. "Findings from the HB 4050 Predatory Lending Database Pilot Program." April 2007. < http://www.nlihc.org/doc/repository/IL-Findings.pdf>.

[102] Ibid.

behavior, each of which we believe are vital to the success of any financial education program.

Regarding the 10-day statutory time frame in which a borrower was required to participate in a counseling session, the HUD counseling agencies saw no delays due to either a lack of available counselors or delays in the application review process. Among the 11 agencies, there were 41 individual financial counselors trained and available to provide services to borrowers. Of the delays that were documented, the majority were the result of incorrect information entered on the part of the lenders or the failure of borrowers to schedule and complete a counseling session.

The debt-to-income ratio (DTI) was used to determine a loan's affordability in the pilot program—a DTI of 45% or more was considered unaffordable. The HUD-certified counseling agencies found that more than half of participant borrowers either could not afford the loan they applied for or were considered "precipitously close" to not being able to afford the loan (a DTI of 40-45%).[103] Nine percent of cases had evidence of fraud, 22% had interest rates that were deemed to be 'above market rate', and in total only 12% had no issues reported. [104] In practice, 'no issues' meant that there was no evidence of fraud, the loan was ruled affordable based on the applicant's DTI, and the borrower appeared to understand the terms of the transaction.

The Housing Action Illinois evaluation also found that "borrowers tend to trust what they are told by [lenders] … rather than reading and understanding what is written in the Disclosures given to them." However, interviews with borrowers showed that lenders were generally not concerned about an applicant's inability to afford the terms of a loan – and in nearly 90% of cases the lender over-stated the applicant's income, putting the applicant in serious risk of default.[105] Perhaps most

103 Ibid.
104 Ibid.
105 Ibid.

troubling of all was the finding that "the overwhelming majority of borrowers receiving adjustable-rate loans had been told that they were receiving a fixed-rate loan."

Regarding its broader effects, the pilot program was not shown to have had any adverse effect on the real estate or lending markets. 25% of participants were buying homes with the intent to move into the pilot program area. This shows that the requirements of HB 4050 did not halt home purchasing within the affected area. There was also no conclusive evidence that HB 4050 resulted in borrowers being denied credit. On the contrary, more than 300 different lenders were able to originate loans for borrowers in the affected area during the period of the pilot program.[106]

The results of the pilot program in Cook County were very telling about the practices of and conditions in the lending market in that area. We suggest that a similar program implemented in our target area of Prince William County, Manassas, and the city of Manassas Park could be equally as effective both in increasing financial literacy and in spotlighting issues in the lending market that have gone untreated. However, few would agree 20 weeks is long enough to assess the full value of such a program.

Qualitative Analysis

Interviews

The Approach

As discussed in the methodology section above, the interview component of the research was designed to collect targeted anecdotal information in order to increase our knowledge on the impact of the foreclosure crisis in the target area, direct future

[106] Ibid.

research, and lead to data sources which focused on the target area specifically. By reaching out to stakeholders, the researchers anticipated a snowball effect would occur; as the researchers made contact with each stakeholder the research would build on one contact after another, gathering more information and more steam as the project progressed.

The interview template presented in the appendix was designed to give the researchers a base from which to ask questions. The researchers utilized a flexible approach during interviews, so that through conversation, the information obtained would not be limited to the questions on the template, but extend to additional relevant and important information.

Due to difficulties in receiving responses from stakeholders, the anticipated snowball effect did not occur. The researchers also encountered challenges in contacting stakeholders within the target area versus stakeholders from other areas of the region.

Each researcher attempted to contact approximately nine stakeholders, resulting in a total of nine stakeholder interviews (via telephone or email). Stakeholders interviewed include Legal Services of Northern Virginia, several nonprofit agencies, and several housing counselors. The results of these interviews are discussed below.

Legal Services

Legal Services of Northern Virginia (www.lsnv.org) is a nonprofit law firm that serves clients throughout Northern Virginia, including Prince William County and Fairfax. It receives funding primarily from local governments. Along with other services, LSNV provides holistic legal counseling to families and individuals before, during, and after the foreclosure process.

A contact at LSNV reported on the trends the firm has been observing within its clientele during the past five years. The following points were brought up regarding these trends:

- In the past, one of the populations hardest hit by foreclosures has been Hispanic families, in particular families in which both parents were formerly employed and one parent had recently lost a job or experienced a significant reduction in hours;

- The foreclosure crisis is becoming more and more blind to demographics, with no particular age, social, racial, or economic group being affected disproportionately;

- There are increasing numbers of middle-class families, and families with young children who are seeking legal counseling related to foreclosure; and

- The current upswing in foreclosure rates is not likely to plateau soon, due to Alt-A loans that are about to begin rolling over.

Related to mitigating the negative impact of foreclosures, the LSNV contact specifically cited the federal program HAMP (Home Affordable Modification Program)[107] as a means by which those at risk of foreclosure can delay or even halt the foreclosure process. HAMP was introduced by the Obama administration earlier this year as part of the Making Home Affordable plan for 2009.[108] HAMP is a federal loan modification program that seeks to reduce the monthly mortgage payments of borrowers facing foreclosure down to 31% of net income.[109] It is a valuable tool, but the implementation of the program is proving difficult in Northern Virginia according to LSNV. One issue is that the population in Northern Virginia seeking loan modification through HAMP is very large. As a result, there are not enough housing counselors to accommodate the need. Given that HAMP is a very new federal program, it is difficult

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[107] For more information, please see the official HAMP website, located at: http://makinghomeaffordable.gov/.
[108] HAMP website: http://makinghomeaffordable.gov/.
[109] Ibid.

to equip a housing counselor with thorough knowledge about HAMP's guidelines and approval process.[110]

The LSNV contact addressed other significant issues experienced by homeowners facing foreclosure. One mistake that is highly detrimental to homeowners experiencing foreclosure is waiting too long to ask for help. The contact reported that while legal counseling is beneficial on the whole to these individuals and families, there are a number of mechanisms which could reduce the negative impact of foreclosure which are underutilized simply because the families are at an advanced stage of the foreclosure process by the time they meet with a counselor.

To qualify for the federal HAMP loan modification program, a borrower must be either in eminent default or in default. The closer the borrower is to foreclosure, the harder it will be to qualify for loan modification. In addition, although the foreclosure process should take no longer than 60 days, the approval services for HAMP are presently delayed, so that approval of a loan modification is taking even longer. The challenges faced in maximizing the effectiveness of HAMP indicate that families need to seek counseling as early as possible. This will improve the possibility that the negative impacts of foreclosures (or potential foreclosures) on families will be reduced.[111]

The LSNV contact also indicated that they noticed a disparate racial or ethnic pattern, where subprime loans were concentrated among immigrant populations, claiming that members of the immigrant population are more vulnerable to lending scams than non-immigrants. The LSNV contact indicated that the Black population is somewhat less vulnerable to scams. Notably, some of the individuals perpetuating these home-buying scams were members of the racial or ethnic group that they were scamming. The foreclosure crisis can be thought of in waves; the first wave

[110] LSNV contact: see appendix for more information.
[111] LSNV contact: see appendix for more information.

disproportionately affected minority populations, while the current and/or upcoming waves are impacting middle- and upper-class families experiencing the ripple effects of the current economic crisis. During the first wave of the foreclosure crisis, the homeowners seeking assistance typically were sub-prime lending recipients within the Hispanic and Black populations, and low-income Whites.

The LSNV contact characterized the level of foreclosure regulation in Virginia as sparse. The foreclosure regulations do not require that very many notices be sent to homeowners experiencing foreclosure prior to the foreclosure sale. This contact also indicated that the foreclosure process in Virginia is non-judicial; therefore there is no guidance or oversight by the judiciary over the foreclosure process. In contrast, other states within the nation have a quasi-judicial or judicial foreclosure process.

The renting population seeks assistance frequently from this organization. Prior to the passage of the Helping Families Save Their Homes Act on May 19, 2009, there were very few protections for renters living in residences facing foreclosure. The contact viewed as positive the availability of additional protection permitting renters to remain in the residence for 90 days as long as they kept paying rent.

Nonprofit Stakeholder

Housing Counselor One

A contact at the Prince William County Office of the Virginia Cooperative Extension discussed the general causes of foreclosures, who is affected by foreclosures, and what population is seeking the most help. According to this contact, most cases of foreclosures generally impact families across the economic spectrum. This respondent suspected that the primary causes of rapid increase in foreclosures in the target area seem to be (1) lack of financial literacy, (2) the desire of homeowners to purchase more home than they can afford, and (3) the actions of the lending industry. Further, the rapid increase in home values around the target area in the months leading up to the foreclosure crisis led potential homebuyers to adopt an optimistic outlook on future home values. For example, at one point, home prices in the PWC subdivision of Montclair were increasing in value at a rate of $6,000 per month. Our contact mentioned that not many people anticipated the breakdown of the real estate bubble, and the majority of homebuyers purchased their home based on the expected continued increase in home property values.

Our contact also addressed whether minority or foreign born populations are more substantially affected by the foreclosure crisis in the target area. For instance, the contact felt that foreign born individuals are at a greater risk for being negatively affected than the native born. The contact speculated that to some extent, foreign born populations (among those who have sought assistance from our contact) tend to rely more on the lender, realtor, or home seller during the home buying process. In addition, the contact mentioned that approximately 75% of the clients seeking help are members of minority populations, either U.S. citizens or resident aliens. Furthermore, our contact indicated that the cultural differences between minority populations, the foreign born, and the parties involved in a home purchase transaction could have had some adverse impact on the buyer. According to the contact, there seems to be a common reaction among those who sought help; they did not suspect that an investment in a home could possibly go wrong.

The contact felt that the foreclosure crisis was a reaction to the liberal approval of innovative loan products to fund home purchases for individuals who should not have been approved for loans. Further, the contact asserts that both the home buyer and lending and investment industries bear some responsibility for the foreclosure crisis. With respect to whether minority or foreign born populations were concentrated in neighborhoods that were disproportionately affected by the foreclosure crisis, the contact mentioned that differences in foreclosure patterns stems from the economic strata affected most by the loss of jobs and income during the recent recession. Rather than distinguishing between minority versus non-minority populations, the general trend seems that the neighborhoods where the cost of purchasing a home was lower are experiencing a higher foreclosure rate than higher income neighborhoods.

Housing Counselor Two

We also interviewed another housing counselor from an organization that focuses on providing counseling and assistance for homeowners experiencing foreclosure in the Reston-Fairfax region. This stakeholder indicated that members of some populations in Prince William County typically relied on income from renters in order to pay monthly mortgage bills. In some instances, a homebuyer purchased a second home, anticipating that through renting, they would be able to satisfy the mortgage requirements. However, a large proportion of the renting population was employed in sectors of the economy which were severely affected by unemployment during the economic crisis. This affected the stability of the renting population, and by derivative, the homeowners satisfying mortgage payment requirements by providing rental housing.

This contact noted that research indicated that Black and Hispanic populations received a disproportionate number of subprime loans. According to the contact, these populations were targeted for a variety of reasons, including (1) predators chose to target these populations, (2) some consumers misperceive whether they are in a financial position to purchase a home, or a second home, (3) there was a low level of regulation and weak monitoring of loan applicant credit scores by banks (e.g. banks selling loans to third parties), and (4) connection between pursuit of the American dream of home ownership by minority populations and the actions of individuals willing to facilitate the American dream without taking responsibility for the outcome and/or impact on homebuyers.

Discussing a paper by Audrey Singer of the Brookings Institution,[112] the contact indicated that areas where foreclosures are concentrated overlap with the concentration of immigrant population on the outskirts of the Washington DC metro area. This contact also indicated that in the first wave of homeowners seeking assistance, recipients of subprime loans were disproportionately represented. In this wave, those seeking assistance typically needed a loan modification or had already lost their home. Currently, the people seeking assistance are typically affected by high levels of unemployment. According to the contact, the homeowners in the current wave face a very difficult choice, because they are experiencing unemployment or underemployment and may have to choose to sell their home and rent rather than use their home solely as their primary residence. Compared to the first wave, the current foreclosure wave is affecting middle and upper class families who have Alt-A loans that will reset within the next upcoming year.

This contact presented a number of ways that the foreclosure crisis could be dealt with more effectively:

(1) Increase the number of trained foreclosure counselors.
(2) Have lenders place a moratorium on home foreclosures in order to give homeowners the opportunity to address employment challenges.
(3) Increase efforts to prevent scammers from targeting additional potential and current homeowners.
(4) Consider that the non-profit sector may be the best sector in which to increase the magnitude of the response to the foreclosure crisis.

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112 Singer, Audrey, Jill H. Wilson, and Brooke DeRenzis, "Immigrants, Politics, and Local Response in Suburban Washington." Brookings Institution, Washington, DC: February 2009. http://www.brookings.edu/~/media/Files/rc/reports/2009/0225_immigration_singer/0225_immigration_singer.pdf

(5) In the long term, equip homeowners with a more holistic perspective on the responsibilities entailed in purchasing a home. This will require teaching homeowners strategies for living on a budget consistently and how to utilize credit effectively. Empower homeowners, so that they do not rely on the lender to protect their investment and are realistic about the steps they may need to take to save their home (i.e. take on a renter, adjust expenses etc.).

Housing Counselor Three

A third contact indicated that their organization was experiencing an increase in the number of calls from renters seeking advice on how to deal with foreclosure. This information was focused on Fairfax County; this contact noted that the downturn in the economy is the most important factor currently impacting foreclosure in Fairfax. However, this stakeholder acknowledged that the foreclosure crisis in Prince William County was much more severe than the crisis in Fairfax. Similar to the information from other stakeholders presented above, this contact indicated that early in the foreclosure crisis, homeowners seeking assistance were recipients of subprime loans. However the current wave is affecting homeowners who are facing unemployment and reduced work hours. The contact also indicated that additional regulation is needed at both the federal and state levels. This contact asserted that the increase in federal regulation has not resulted in a corresponding increase in regulation at the state level. Notably, this stakeholder did not think that there was any relationship between social tension in Prince William County and the foreclosure crisis.

Recommendations

The following sections include our recommendations for policies which should be further explored and adopted within the target area. The goal of each policy is to mitigate the negative impacts of foreclosures sustained either by communities or by individuals.

Recommendations for Future Research

Targets for Recommendations indicated in italics directly above each section.

1. Financial Education
Research Organizations

Based on the analysis above, local government agencies and nonprofits should continue to monitor and investigate the impact of financial education on homeownership outcomes. Various studies have presented positive and negative indications as to whether financial literacy education improves financial awareness among homebuyers and leads homebuyers to pay their mortgages in a timely manner. Resources dedicated to financial literacy education should be tailored and actively monitored to ensure that potential homebuyers obtain the financial knowledge necessary to precisely assess whether they can afford to purchase a home. Steps that should be taken are outlined below.

1) Gather individual level data on different types of loans as well as foreclosures
    a. Specifically, research organizations should work with non-profit organizations to gather individual level data on demographic and socioeconomic information (ethnicity, foreign born, income, education level, employment and industry sector), housing information (household size, neighborhoods, housing type), the credit scores of home mortgage recipients, and additional relevant financial information such as whether the homeowner experiencing foreclosure

participated in loan counseling, housing counseling or financial education.

b. Systematic data collection can be accomplished through conducting a mandatory "exit survey" for homeowners experiencing foreclosure.

2) Research organizations should design various statistical models in order to investigate the type of factors which can predict the relationship between homebuyer delinquency, foreclosure, and the type of home loan received by the homebuyer.

  a. After some years of gathering data, researchers can conduct panel data analysis using random or fixed effects models. A cross-sectional unit of analysis can be at either the individual level or the neighborhood level.
  b. In order to further investigate the characteristics that affect the type of loan received by potential homebuyers, researchers should conduct a multinomial logit and/or probit analysis using different mortgages as the dependent variables, and various socioeconomic and demographic variables as the independent variables.
  c. Researchers should conduct a tobit analysis to examine the factors that lead homebuyers to cross the threshold of "delinquency" into "default" and "foreclosure" status.

3) Research organizations should examine the effectiveness of housing and loan counseling or financial literacy education.

  a. Over time, researchers should examine whether financial literacy education improves the homeownership outcomes for individuals who participate in financial education.

b. To evaluate the effectiveness of financial education and/or literacy programs, researchers should examine the impact of participation on outcomes such as foreclosure, submission of mortgage payments on time, level of mortgage delinquency among homeowners, and the level of mortgage default among homeowners.

c. Research organizations should consider conducting regular surveys of participants in financial education programs, or alternatively, conducting randomized field experiments comparing the homeownership outcomes of participants in financial education to the homeownership outcomes of homeowners who did not participate in financial education prior to homeownership.

d. Based on the outcome of this research, fiscal resources should be directed towards the financial education programs that have the largest positive impact on homeownership.

2. Qualitative Survey of Stakeholders

Research Organizations

Research organizations should conduct a survey of stakeholders in order to identify trends in the population seeking assistance from non-profit organizations. Such a survey would enable the foreclosure response community to identify the challenges faced by individuals seeking assistance from stakeholders *and* the stakeholders providing the services. The results of this survey would assist the foreclosure response community in allocating limited resources most effectively. This stakeholder survey should be confidential, so that the information gathered will be as in-depth and candid as possible. Conducting this survey would also enhance interconnectedness between research organizations and service providers by calling for their cooperation, and this would result in more efficient provision of services to homeowners over time.

3. Mandatory Financial Education

Research Organizations, Non-profit Organizations, and Government Leaders

Localities within the target area should consider mandatory financial education for populations which may be disproportionately likely to experience foreclosure. Potential homeowners with a credit score beneath a certain number should receive financial education to ensure that the potential homeowner makes an informed decision on whether to take on the burden of homeownership. This targeted approach is admittedly controversial. In order to reduce the controversy and still ensure that populations most in need of financial education receive it, this research proposes that providers of financial education take a more holistic perspective. For example, if the entire potential homeowner population is targeted for financial education, regardless of income level, then the stigma associated with seeking financial education (and potentially housing counseling at a later point) may decrease. If the sigma decreases, then the populations most in need of housing counseling may be more likely to participate in financial education programs.

As evidence to support this proposal, Cook County, Illinois successfully implemented a mandatory financial education program which required lenders to require certain home mortgage applicants to complete financial education before they are given a loan to purchase their home. The implementation of this program at the county level in Illinois may indicate to government, research, and non-profit leaders that similar programs can be successfully implemented within the target area (please refer back to our targeted literature review section on financial literacy education).

4. Who Should do What and When

Research Organizations, Non-profit Organizations, and Government Leaders

The foreclosure crisis has had a profound impact on every segment of the American population.

It is important to empower homeowners to make an informed financial decision on whether to purchase a home. Stakeholder interviews suggest that more work needs to be done to ensure that homeowners are equipped to realistically assess whether they can afford to purchase a home *and* maintain their other financial responsibilities. Stakeholder interviews also suggest that homeowners should be encouraged and supported in becoming more proactive about asking for help *at the time that they begin to experience mortgage payment difficulties*.

Researchers, nonprofits, and government leaders all have a role to play in empowering homeowners. Research organizations can contribute to this empowerment by identifying whether and how improvements in financial literacy result in improved homeownership outcomes.

Non-profit organizations can conduct targeted outreach to increase awareness of the purposes and availability of housing counseling in their region so that homeowners and potential homeowners maximize the incredible resources provided by these organizations.

Lastly, government leaders can also engage in a targeted marketing campaign encouraging constituents to seek out assistance prior to and after purchasing a home. Government leaders can also direct funding towards programs which provide these essential services to homeowners in their communities. By increasing the connections among these three sectors, forces aimed at foreclosure impact mitigation will have a larger impact on stemming the foreclosure crisis and preventing future foreclosure crises.

5. Dealing with the foreclosure waves

Government leaders, Non-profit organizations

Within the target area, the foreclosure crisis is having the greatest impact on recipients of subprime mortgages and Alt-A mortgages. As emphasized above, stakeholder interviews indicate that the first wave of the foreclosure crisis disproportionately affected recipients of subprime mortgages while the second wave is affecting recipients of Alt-A loans and middle and upper class families experiencing the effects of the downturn in the economy.

Going forward, it is necessary to objectively evaluate the existing programs offered by local government agencies in our target area in order to find out whether there are any improvements necessary to prepare for the next wave of foreclosures. Therefore, research organizations, non-profit organizations and government leaders need to coordinate in order to allocate resources to mitigate the effects of the first wave of the foreclosure crisis while preparing to stem the effects of the second wave before the wave peaks. Therefore, strategies designed to maximize the impact of limited resources on both waves of the foreclosure crisis need to be created now.

Appendix

Kernel Density Plots

Chart 5. Kernel density plots (Percent of purchasing loans by subprime lenders minorities and whites in our target area) Source: HMDA 2005

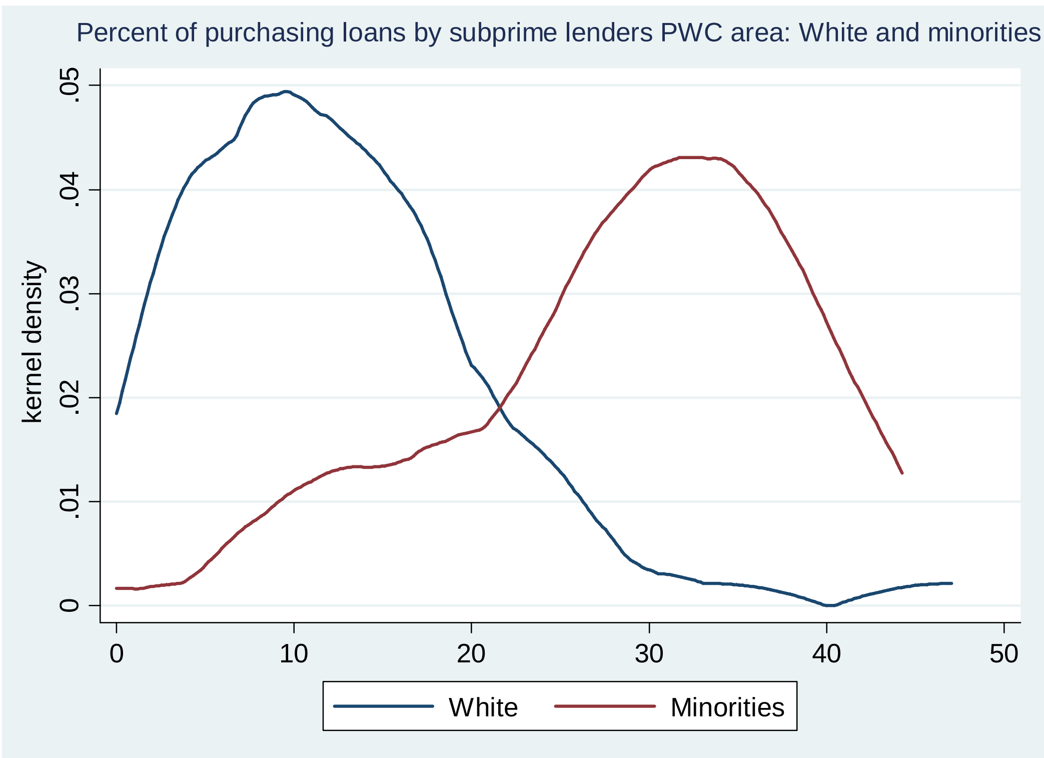
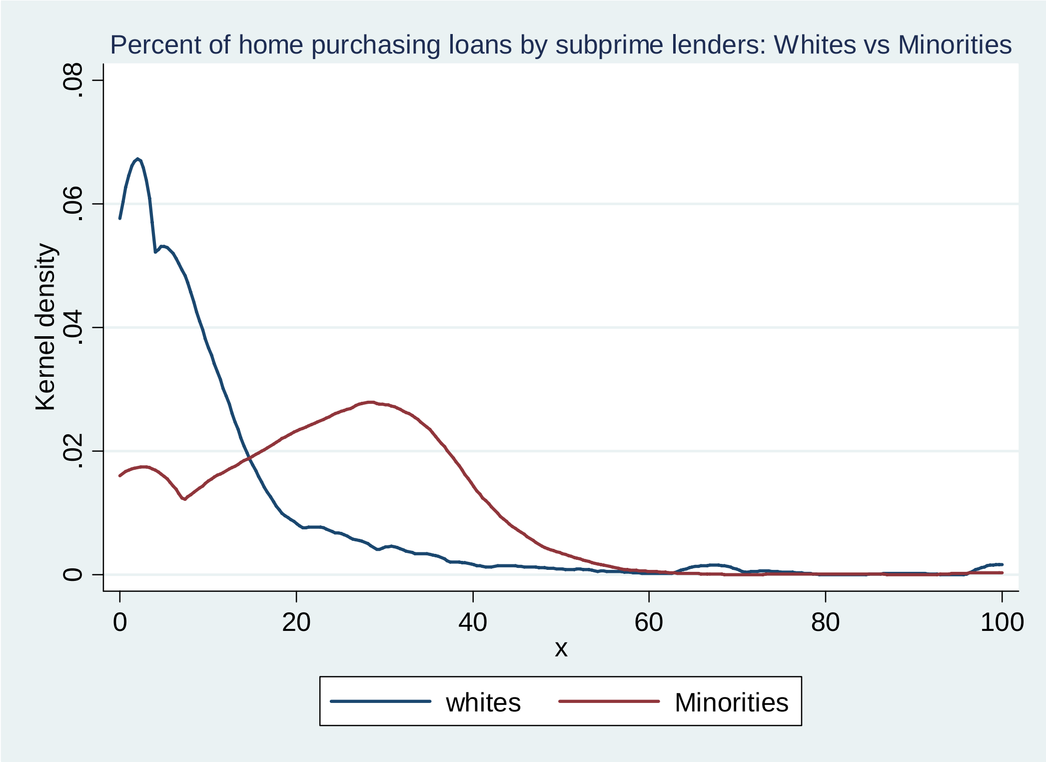
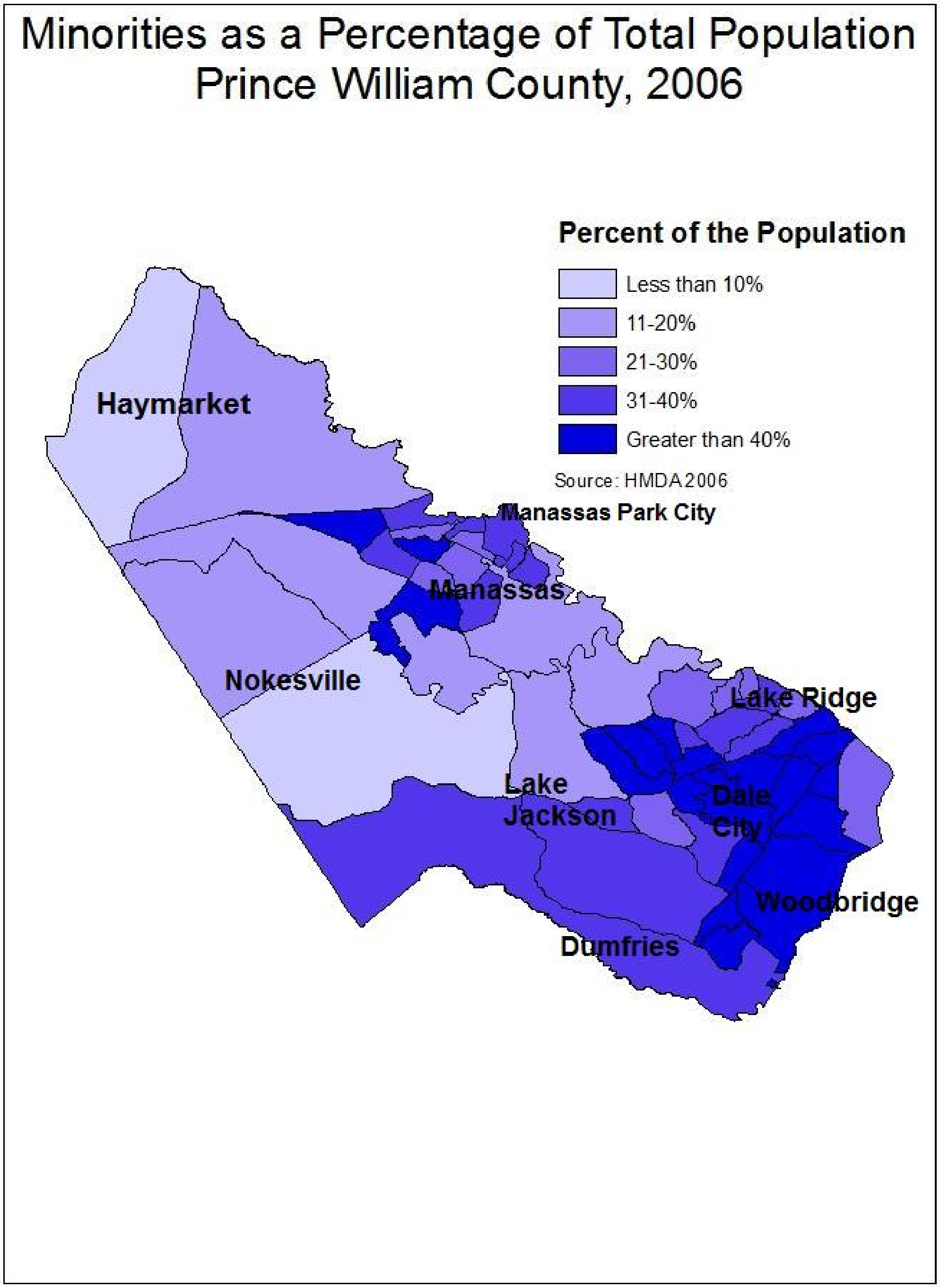


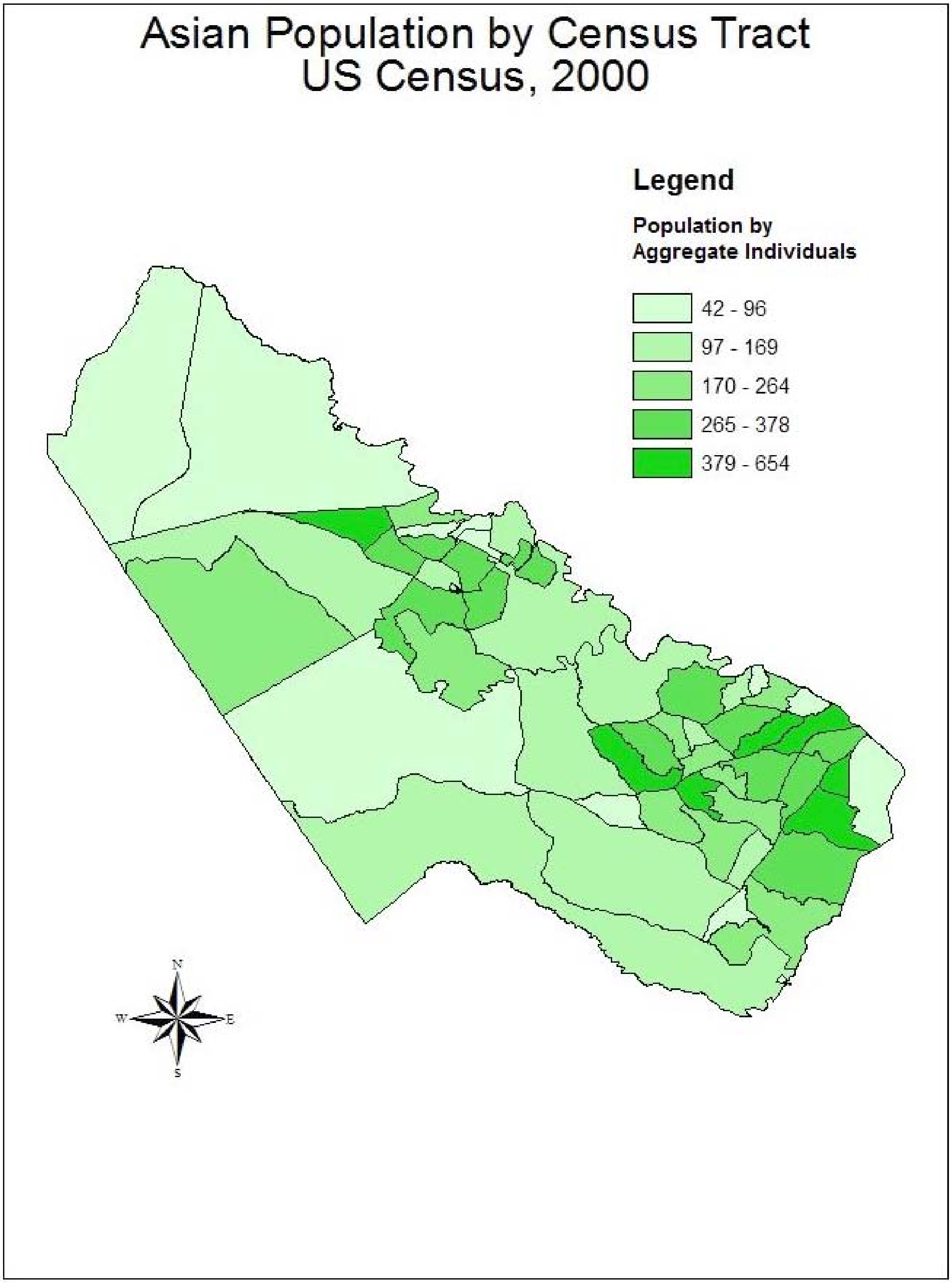
Chart 6. Kernel density plots (Percent of purchasing loans by subprime lenders minorities and whites in DC Metropolitan area) Source: HMDA 2005

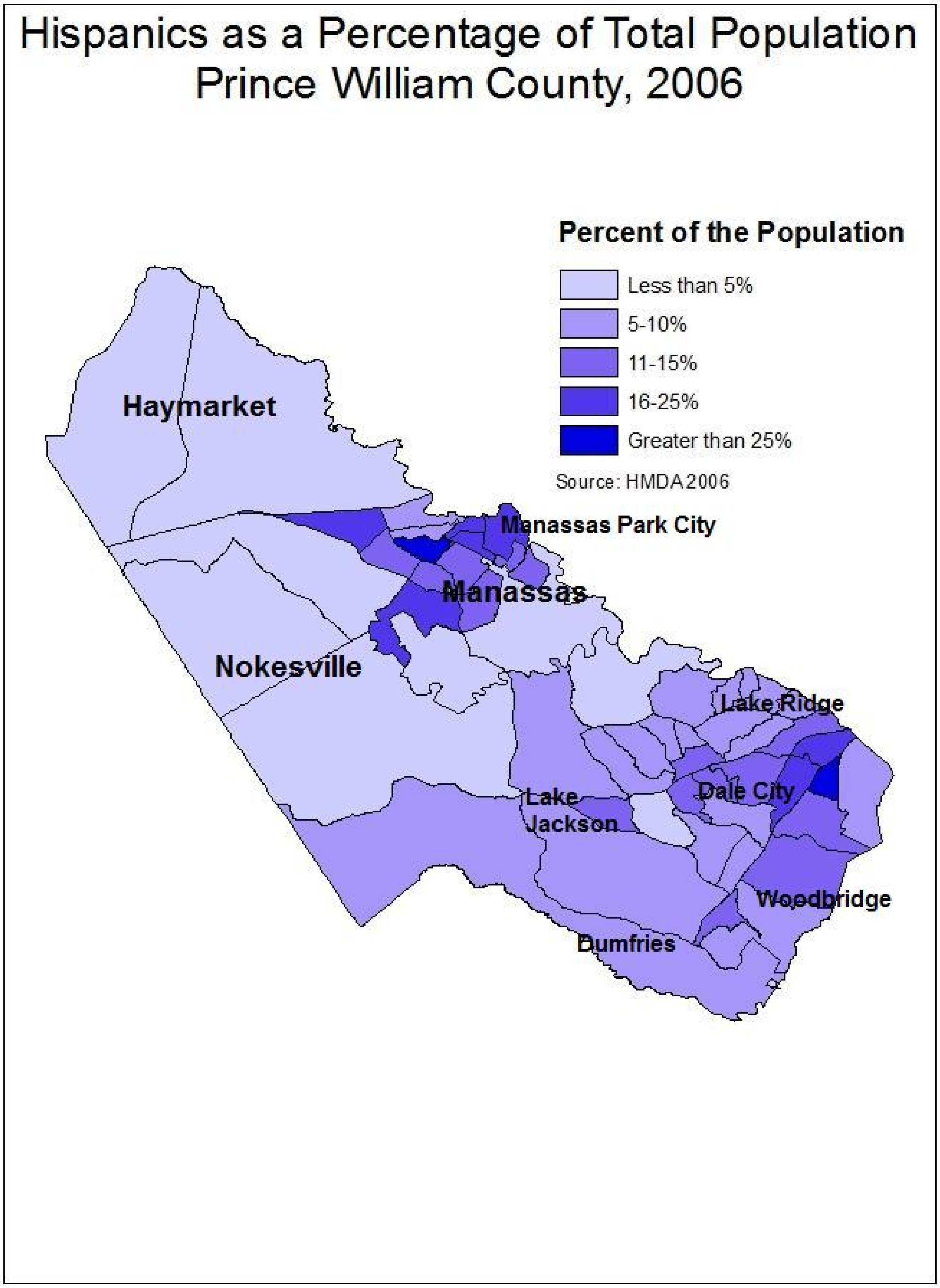


Charts 5 and 6 which are the exactly same kernel density plots but in different years, 2005, produced similar patterns of distribution as the plots in 2004.

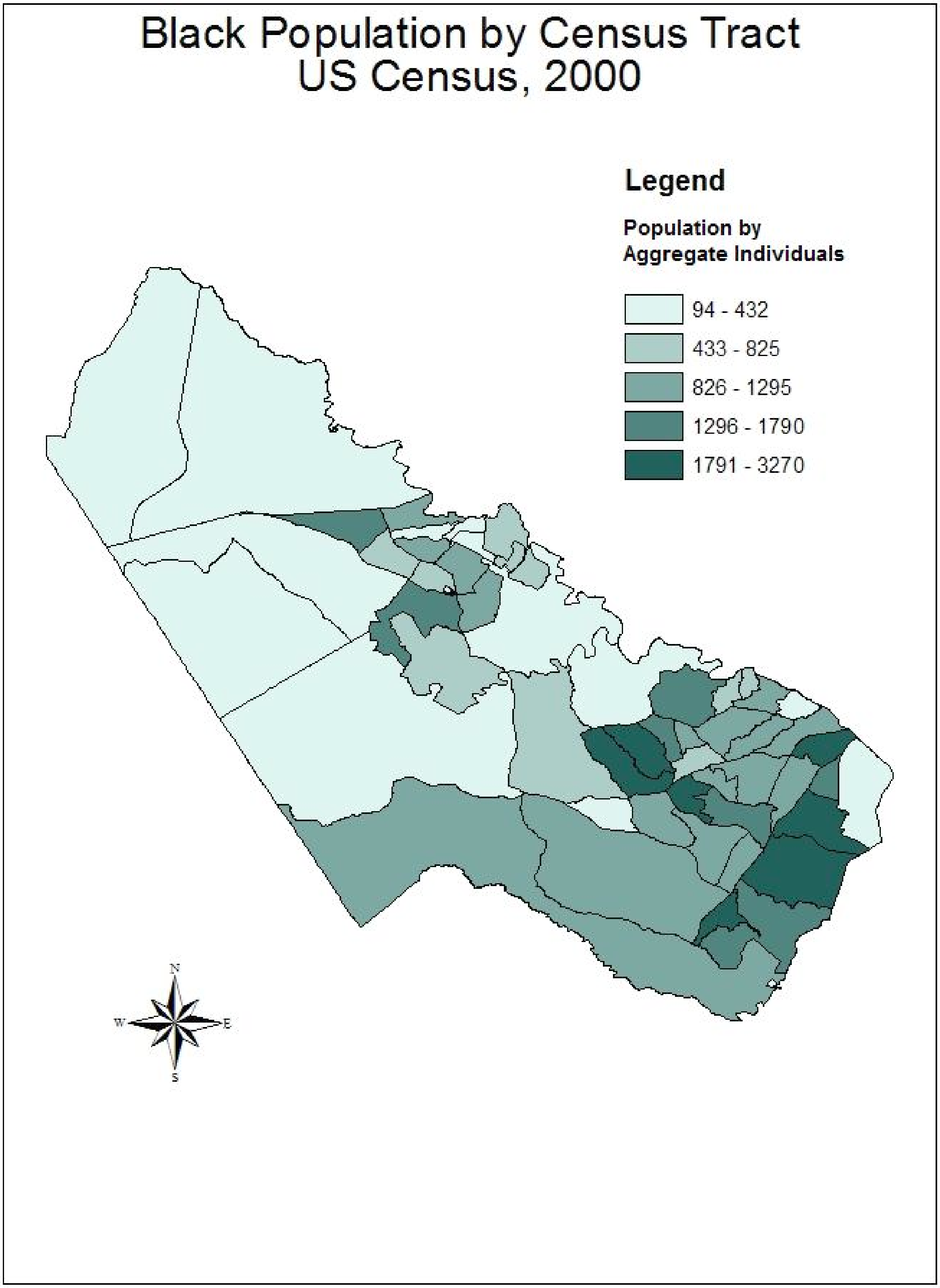
Geospatial Information Systems Mapping

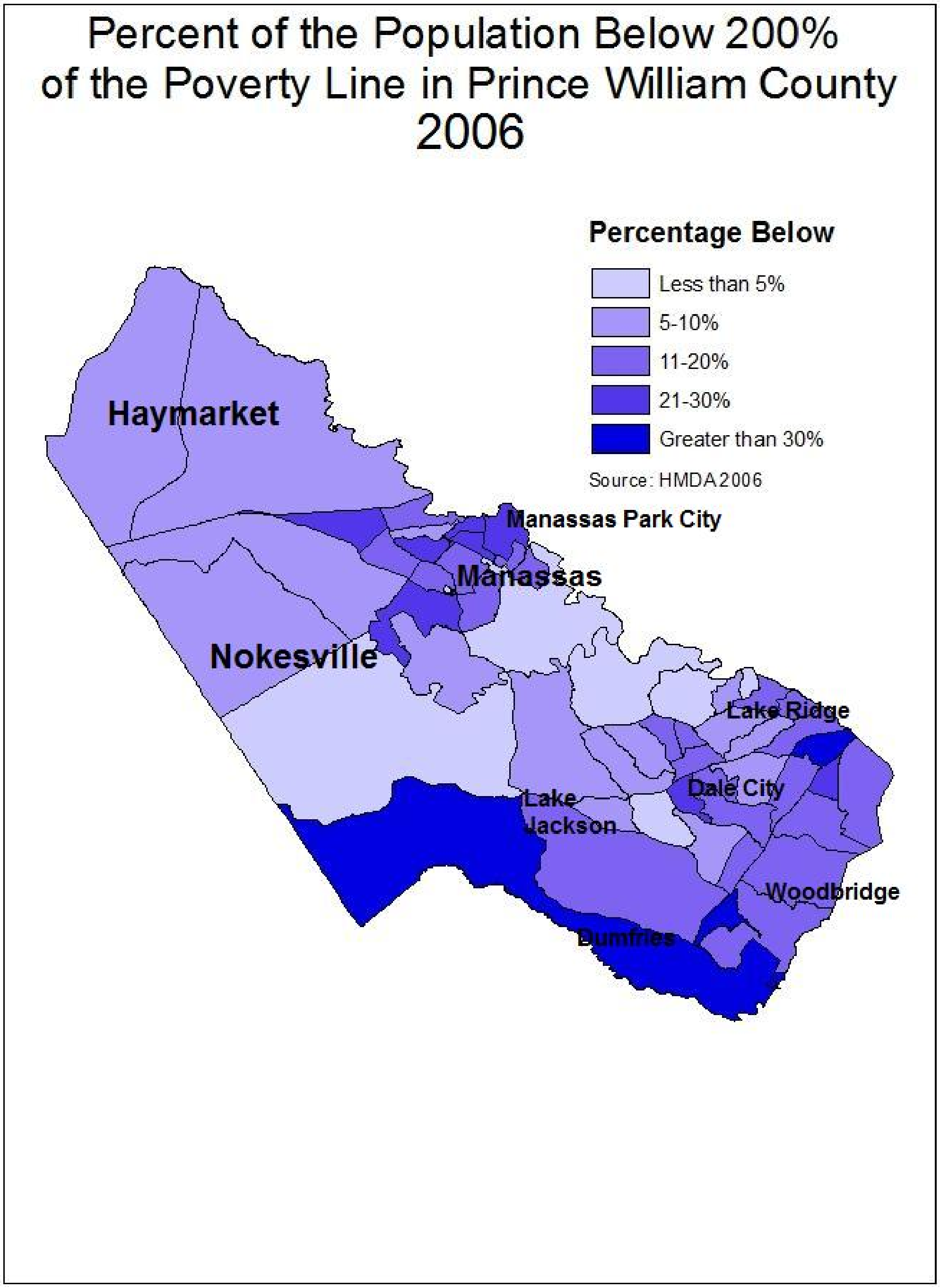


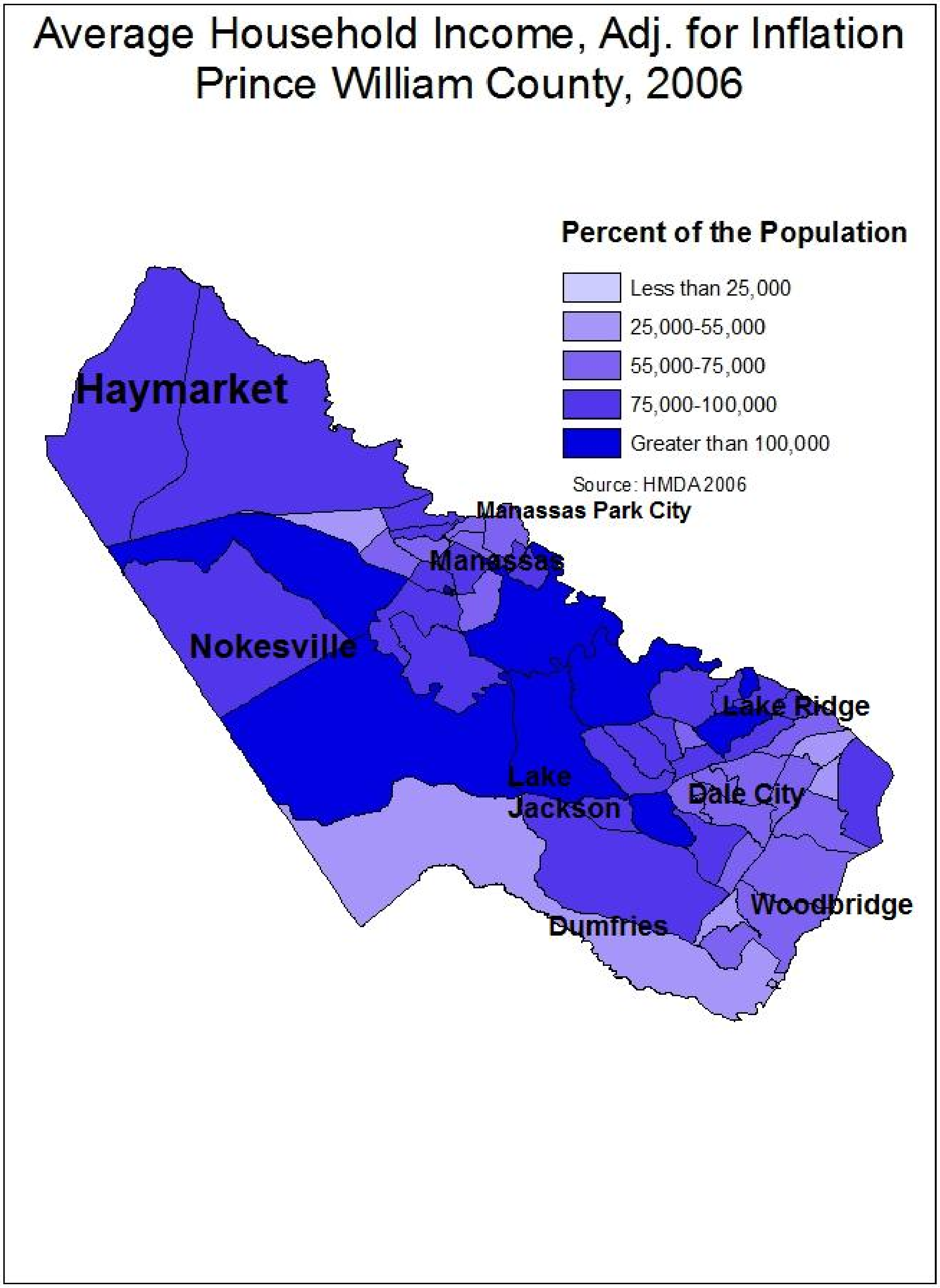

Asian Population by Census Tract
US Census, 2000
Legend
Population by
Aggregate Individuals
42 - 96
97 - 169
170 - 264
265 - 378
379 - 654
N
W
E
S



Hispanics as a Percentage of Total Population
Prince William County, 2006
Percent of the Population
Less than 5%
5-10%
11-15%
16-25%
Greater than 25%
Source: HMDA2006
Haymarket
Manassas Park City
Manassas
Nokesville
Lake Ridge
Dale City
Lake Jackson
Woodbridge
Dumfries


Black Population by Census Tract
US Census, 2000
Legend
Population by
Aggregate Individuals
94 - 432
433 - 825
826 - 1295
1296 - 1790
1791 - 3270
N
W
E
S


Percent of the Population Below 200% of the Poverty Line in Prince William County 2006
Percentage Below
Less than 5%
5-10%
11-20%
21-30%
Greater than 30%
Source: HMDA 2006
Haymarket
Manassas Park City
Manassas
Nokesville
Lake Ridge
Dale City
Lake Jackson
Woodbridge
Dumfries


Average Household Income, Adj. for Inflation
Prince William County, 2006
Percent of the Population
Less than 25,000
25,000-55,000
55,000-75,000
75,000-100,000
Greater than 100,000
Source: HMDA 2006
Haymarket
Manassas Park City
Manassas
Nokesville
Lake Ridge
Lake Jackson
Dale City
Woodbridge
Dumfries

Interview Templates

We divided the existing contact list provided by our client at the outset of the project by type of stakeholder in order to ask the questions that were most relevant for each type of stakeholder. We did not strictly adhere to interview templates, but (as discussed above) instead followed the flow of the conversation during each interview.

1. Housing Counselors
    1. What resources are available to support families experiencing foreclosures in Prince William County (or Northern Va. if that is their focus)?
    2. To what extent are renters being evicted due to foreclosure?
    3. Is there a disparate racial or ethnic pattern?
    4. Are foreclosures dispersed across various neighborhoods or are they concentrated in minority neighborhoods?
    5. Are you noticing trends in the populations that are seeking foreclosure assistance over time?
        1. For example - Are more or fewer minorities currently seeking assistance? Are more or fewer middle class individuals/families seeking assistance? Are the recipients of particular types of mortgages seeking assistance? Has this changed since the beginning of the foreclosure crisis?
2. Homeless Shelters
    1. What characteristics are you observing in the individuals seeking your services?
    2. Have you observed an increase in homelessness over time?
    3. What kind of usage have you observed in your facility over the past five years?
    4. Are there any economic events that you think influenced the use of your facilities?
    5. Are there any social events in Prince William County that you think influenced the use of your facilities?
    6. How long do people typically come to the shelters to meet their housing needs?
    7. Would you characterize the people who use the shelters as employed or unemployed?
        1. Wealthy or poor?
        2. Educated or uneducated?
    8. What happens to the children who come to the shelters?
    9. How would you describe the ethnic composition of the people who use the shelters?
    10. What are the factors that placed people in a circumstance where they need your services?

    11. How would you describe the ethnic composition of the people who seek assistance from your organization?
    12. What do you think are the major long and short term needs of the people who seek your services?
3. Food/Free meal providers (Government)
    1. Have you observed any trends in the demand for your services over the past five years?
    2. Which populations utilize your services the most?
    3. Do you think that there are any social or community events that have influenced the use of your services?
    4. What are the major factors that contribute to the use of your services?
4. TANF, Free school lunch (Government)
    1. Have you noticed an increase in the request for free meals?
    2. Has the increase in demand been concentrated in any ethnic group?
    3. Have you noticed an increase in requests during the school year rather than at the beginning of the school semester?
    4. What are some of the characteristics of the population that requests free school means?
5. Health/SCHIP (Government)
    1. Have you noticed an increase in the applications for your services?
    2. Has this increase been concentrated in any particular ethnic population?
    3. (If there has been an increase in demand) What are the social or community events that have led to an increase in applications?
6. Journalists
    1. How would you characterize the regulation of the housing market in Northern Virginia as compared to other states?
    2. Of the counties in Northern Virginia, which would you say have been affected the most by the foreclosure crisis?
    3. What trends have you noticed regarding the foreclosure crisis?
        1. Concentrated in particular neighborhoods?
        2. Concentrated among particular ethnic groups?
    4. Are there any social or community events that you think are connected to the foreclosure crisis?
    5. Do you think that the foreclosure crisis in Prince William County could have been avoided through additional regulation by the federal government or by the Virginia state government?
7. County government, state legislators, PWC commissioners
    1. How would you characterize the state's regulation of mortgage lenders prior to the foreclosure crisis?
    2. How would you characterize the state's regulation of mortgage lenders today?
    3. Have you noticed any trends in foreclosure?

    1. By ethnic group?
    2. By neighborhood?
    3. Among immigrants?
4. What factors do you think contributed to the foreclosure crisis in Prince William County?
5. What steps has the county government taken to alleviate the foreclosure crisis in Prince William County?
6. What steps has the state government taken to alleviate the foreclosure crisis in Virginia?
7. Who bears the primary responsibility for regulating the lending market?
    1. The federal government or state governments?