Mortgage Performance Summary

North Carolina: First Quarter 2009

July 13, 2009

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A Summary of the Housing Market and Mortgage Performance in North Carolina

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Introduction

This document provides a summary of the housing market and mortgage performance in North Carolina. The first section provides background information on North Carolina's housing stock and how it has evolved during the past decade. The second section offers data on the size and composition of the North Carolina mortgage market. The third section reports mortgage performance in the area. The fourth section details the role of non-owner-occupied housing units in the state's current and future mortgage market. The last section summarizes the document. Finally, an appendix lists more detailed information about mortgage composition and performance at the MSA level.

Section 1: Housing Background

Supply

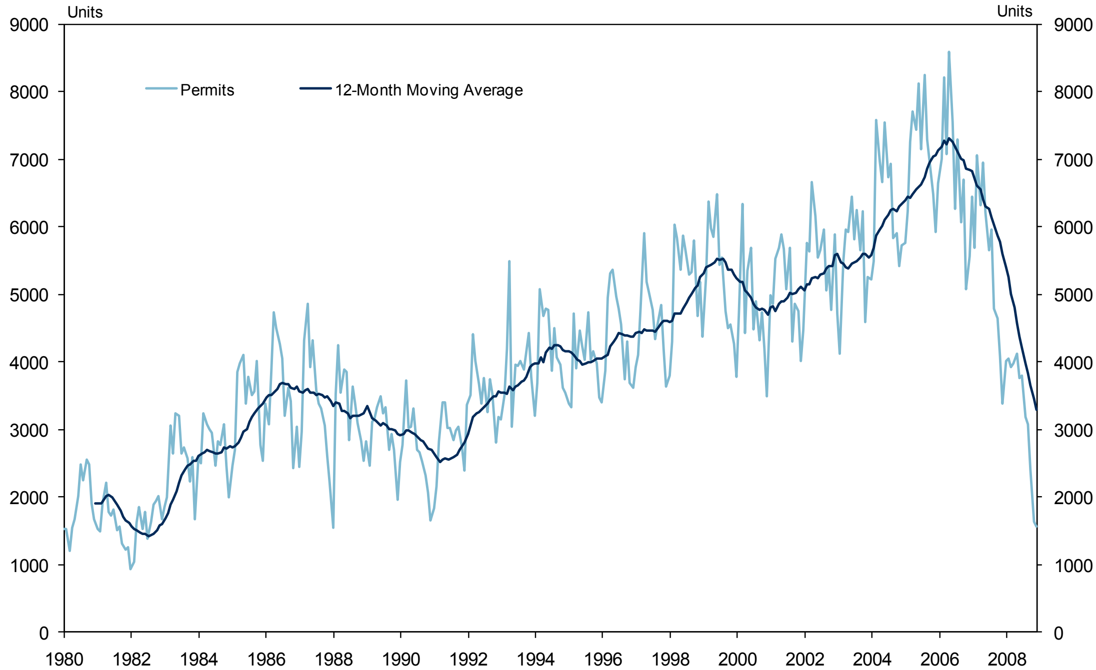
The number of single-family building permits issued in North Carolina (Figure 1) rose considerably in the beginning of the decade. During 2000, a total of 56,437 permits were issued; by 2005, the state posted an annual record of 84,624 permits. During 2008, however, that number fell back to 39,538 permits – its lowest mark since 1991. The Census Bureau's American Community Survey estimates that in 2007 there were 3,540,875 occupied housing units in North Carolina, of which 68.3 percent (2,418,252) were owner-occupied. The total number of housing units rose 17.0 percent in North Carolina between 2000 and 2007.

There was some evidence of excess housing supply in North Carolina in the beginning of the decade. The National Association of Realtors' months' supply of homes measure[1] rose in both the Raleigh and Charlotte metro areas, reaching 8.0 months and 12.9 months, respectively, in the second quarter of 2008.[2] For this measure, six months is a common threshold for sluggish sales. North Carolina's homeowner vacancy rate, meanwhile, has continued to rise to a record 3.6 percent in the first quarter of 2009.

[1] Months' supply is defined as the number of houses for sale divided by the number of houses that sold in a month. It is a rough measure of how long a house will take to sell.

[2] The measure has been only intermittently available for these North Carolina metro areas, and the second quarter of 2008 was the most recent posting for each.

Figure 1
Single-Family Housing Building Permits
North Carolina



Source: Census Bureau (January 1980-March 2009)/Haver Analytics

Demand

Existing home sales in North Carolina, as measured by the National Association of Realtors, grew steadily in the beginning of the decade, peaking at 234,800 units in 2006. Activity was still strong in 2007, with 215,900 units sold, but sales fell to 156,300 units in 2008. There were a number of factors contributing to the rise in home sales. The population in North Carolina age 25 years and over increased 13.4 percent from 2000 to 2007. Nonfarm employment in North Carolina grew steadily from the middle of 2003 through 2007, with 406,800 net jobs added over the period. Real personal income growth also accelerated with annual growth nearly flat from 2001 to 2003, but increasing to 4.0 percent in 2004 and 2005, 3.4 percent in 2006, and 4.2 percent in 2007.

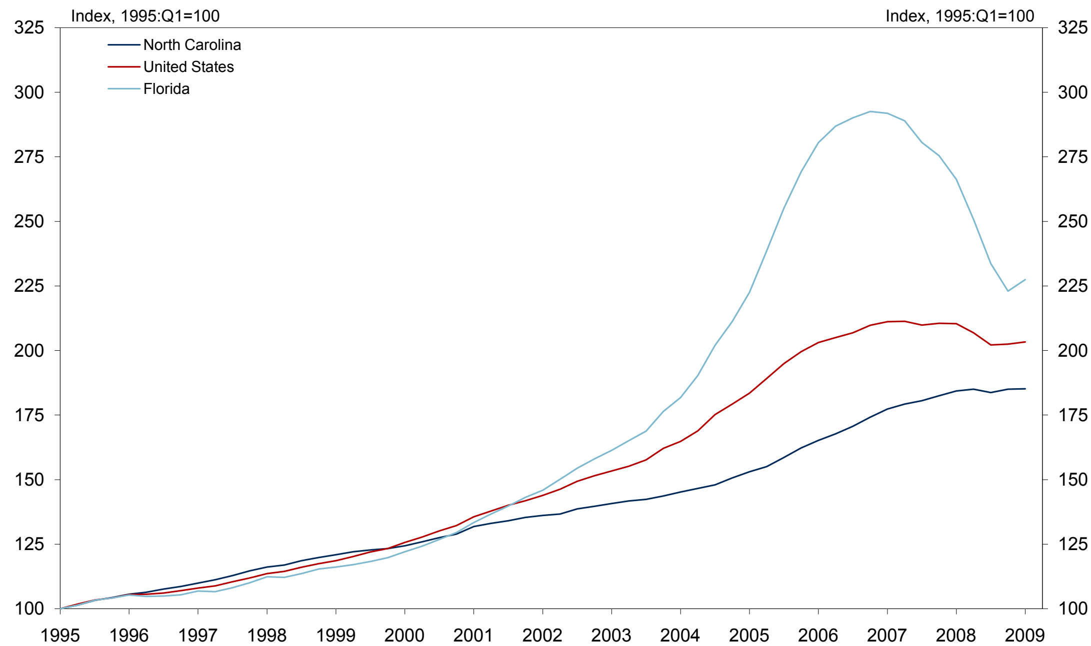
Furthermore, more liberal and innovative lending practices increased credit access to many borrowers previously unable to qualify for mortgages. The new mortgage products, relaxed underwriting standards, and lower interest rates prevalent throughout the nation also helped more residents of North Carolina buy homes. The effective rate on conventional mortgages[3] in North Carolina, according to the Federal Housing Finance Board, has trended downward in the past few years. The rate ranged between 7.0 percent and 10.0 percent throughout the 1990s, but has remained below 7.0 percent since 2001 – falling to as low as 5.8 percent in 2003 and 2004.

[3] The effective rate is the contract rate plus fees and charges amortized over a ten-year period.

House Prices

Research indicates that declines in house prices, even more than unemployment, are the most important factor in mortgage delinquencies and foreclosures.[4] As long as house prices do not drop, a borrower will typically have at least some equity in his house and can sell it to avoid foreclosure in the event of cash-flow problems. However, when house prices decline, fewer borrowers will have an equity cushion to fall back on, increasing the likelihood of default.

Figure 2
FHFA House Price Index
North Carolina



Source: Federal Housing Finance Agency (formerly OFHEO)/Haver Analytics

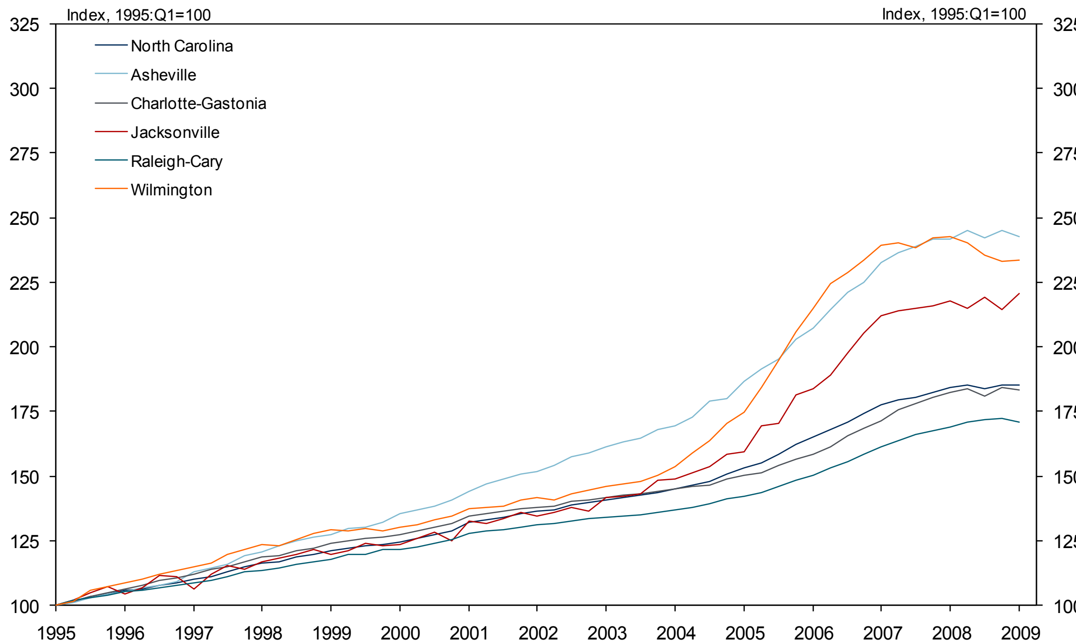
As indicated in Figure 2, house prices in North Carolina, according to the Federal Housing Finance Agency (FHFA), did not appreciate as greatly as they did in the nation nor nearly as much as they did in places like Florida or California. Correspondingly, they have not fallen as steeply. In fact, house prices in North Carolina have never fallen on a year-over-year basis, although the 0.4 percent growth over the year ending in the first quarter of 2009 is the smallest annual increase on record.

There has been some variation, however, in house price movements within North Carolina. Figure 3 shows the FHFA house price index for select metropolitan statistical areas (MSAs). The Wilmington metropolitan area saw the steepest growth and, subsequently, the steepest decline in house prices. From the first quarter of 2003 to the series peak in the first quarter of 2008, house prices in Wilmington rose 66.0 percent, but have fallen 3.7 percent since their

[4] See, for example, Doms, Mark, Fred Furlong, and John Krainer, "Subprime Mortgage Delinquency Rates," Federal Reserve Bank of San Francisco Working Paper 2007-33, November 2007, and Foote, Christopher, Kristopher Gerardi, and Paul S. Willen, "Negative Equity and Foreclosure: Theory and Evidence," Federal Reserve Bank of Boston Public Policy Discussion Papers Series, Paper No. 08-3. (2008).

record high. House prices in the Asheville and Jacksonville metro areas also grew more notably than the state overall, appreciating 50.2 and 53.5 percent, respectively, from the first quarter of 2003 to the first quarter of 2008. House prices in the Jacksonville MSA, however, have continued to increase, and prices in the Asheville MSA have been more or less steady since the first quarter of 2008.

Figure 3
FHFA House Price Index
North Carolina Metro Areas



Source: Federal Housing Finance Agency (formerly OFHEO)/Haver Analytics

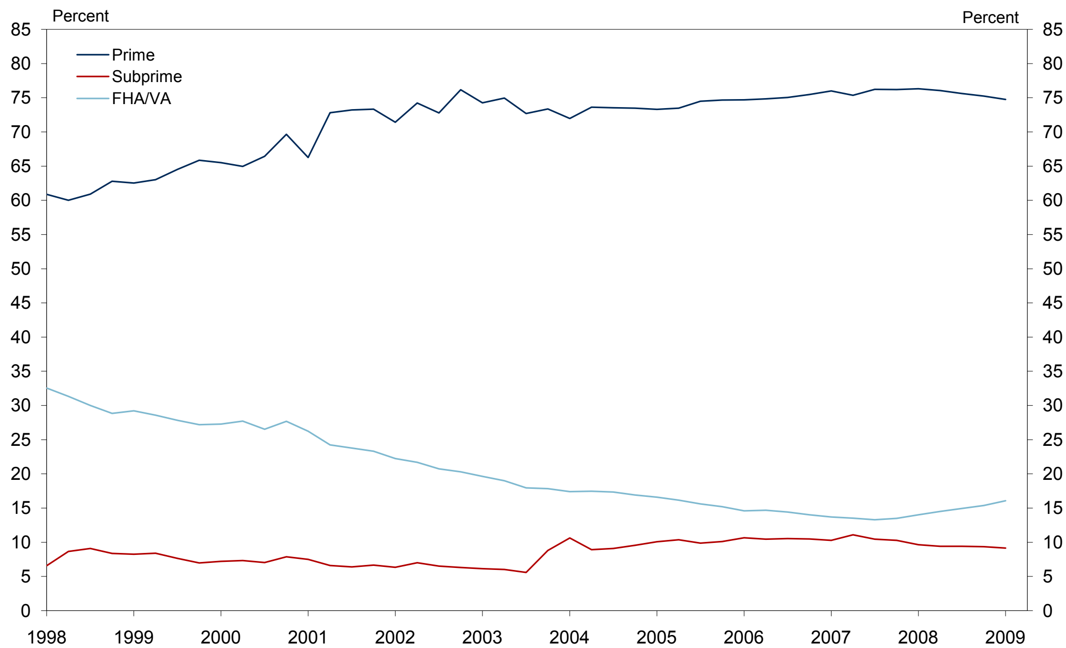
Section 2: Mortgage Composition

Generally, mortgages are classified as either prime or nonprime. Prime mortgages are made to borrowers with strong credit backgrounds. The nonprime mortgage sector is often broken up into the subprime and Alt-A categories. Subprime mortgages are those made to people with poor credit scores; often, a FICO score[5] below 620 is used to identify one of these mortgages. Alt-A loans, on the other hand, are “near-prime” mortgages made to borrowers with good credit scores, but that contain other risk factors, such as relaxed underwriting (e.g., low documentation of the borrower’s income or a high loan-to-value ratio) or risky loan characteristics (e.g., interest-only or negative-amortization features).

According to the Census Bureau, 68.0 percent of the 2,418,252 owner-occupied housing units in North Carolina had an active mortgage in 2007 – slightly lower than the U.S. rate of 68.4 percent. Using the Lender Processing Services Applied Analytics (LPS) mortgage dataset, and scaling to account for this dataset’s approximate coverage, we estimate that North Carolina had about $291 billion of mortgage debt in March 2009, which accounted for 2.6 percent of the outstanding mortgage debt in the nation.

[5] FICO is a commonly used credit score created by Fair Isaac Corporation.

Figure 4
Percent of Mortgages by Type[6]
North Carolina



Notes: Federal Housing Administration (FHA) and Veterans Affairs (VA) mortgages partially protect lenders against losses in case of default.
Source: Mortgage Bankers Association (MBA) National Delinquency Survey (2009:Q1)/Haver Analytics

Although subprime mortgages have been originated for more than two decades,[7] the volume of these mortgages appeared to increase slightly around 2002 and 2003.[8] Figure 4 shows the fraction of subprime loans in North Carolina as measured by the MBA survey. Subprime loans reached a peak of 11.1 percent in the second quarter of 2007. However, even with the rise in subprime lending, Figure 5a illustrates that the majority of outstanding loans remain prime. The overall distribution of mortgage types in North Carolina is similar to that of the United States, although subprime loans in the first quarter of 2009 accounted for a smaller fraction of total loans in North Carolina (9.2 percent) compared with the nation (11.4 percent).

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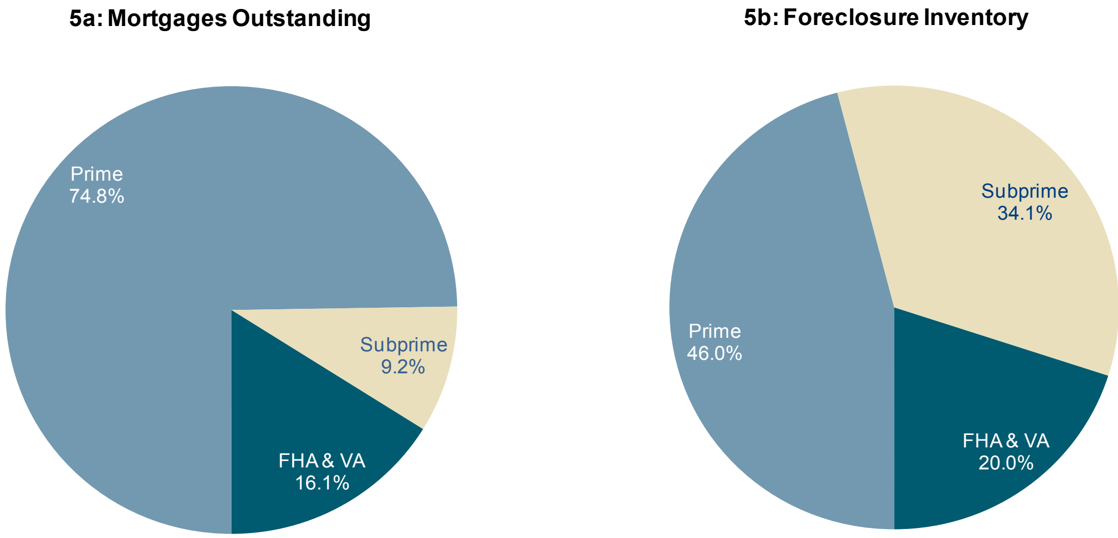
[6] The MBA National Delinquency Survey and the LPS dataset do not have a separate category for Alt-A mortgages, so in both cases Alt-A loans can be either in the prime or subprime category.
[7] Ben S. Bernanke, "The Subprime Mortgage Market," speech delivered at the Conference on Bank Structure and Competition, Chicago, IL, May 17, 2007.
[8] For a variety of reasons, defining the size of the subprime market is difficult. For the best estimates see Mayer, Chris and Karen Pence, "Subprime Mortgages: What, Where, and to Whom." Federal Reserve Board, FEDS Working Paper 2008-29. For convenience, we use the MBA numbers, which are discussed in more detail in footnote 9. The spike in subprime lending in mid-2003 in that graph is due to the addition of a large subprime servicer to their survey at that time.

Figure 5
North Carolina Mortgage Distribution



Source: Mortgage Bankers Association (2009:Q1)/Haver Analytics. Percentages may not sum to 100 due to rounding.

Section 3: Mortgage Performance[9]

Not surprisingly, mortgage performance differs by mortgage type. Much of the recent increase in foreclosure activity has been in subprime mortgages as their performance has been notably weaker. While subprime loans make up a relatively small fraction of outstanding mortgages, they account for a much larger share of the loans in foreclosure.[10] Figure 5b shows that in North Carolina, subprime mortgages accounted for about 34 percent of all foreclosures.

Table 1: Foreclosure Rates by Mortgage Type

	North Carolina		United States
Loan Type	Percent in Foreclosure	National Rank	Percent in Foreclosure
Prime Fixed-Rate	0.75	42	1.46
Prime Adjustable-Rate	2.44	51	7.55
Subprime Fixed-Rate	3.80	48	6.98
Subprime Adjustable-Rate	9.54	50	23.32

Source: Mortgage Bankers Association (2009:Q1)/Haver Analytics

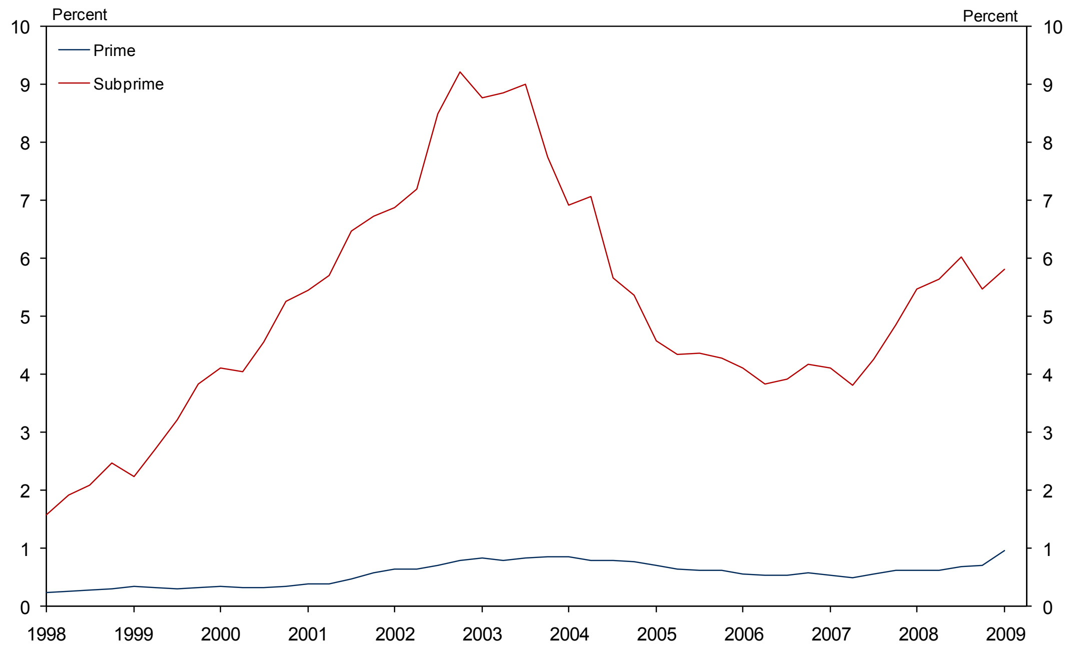
Mortgage performance also differs by whether the loan is an adjustable-rate or fixed-rate mortgage. Table 1 reports performance for these categories. Subprime adjustable-rate mortgage loans perform substantially worse than all other categories, including subprime fixed-

[9] For mortgage performance data, we use two sources: the MBA National Delinquency Survey and Lender Processing Services Inc. (LPS). The MBA survey has broad coverage, but only provides information down to the state level. The LPS survey is a proprietary loan-level database that covers an estimated 60 percent of the market. Its coverage of the prime market is much more extensive than that of the subprime market.

[10] By "foreclosure rate" we refer to the inventory of foreclosures. A state with a longer legal foreclosure process is likely to have a higher inventory of foreclosures than a state with a shorter process. Policy changes that affect the length of the foreclosure process can, therefore, alter the foreclosure rate.

rate loans. The main reason these loans have performed so poorly is that they seem to have been underwritten based on the expectation of continued home price appreciation.[11]

Figure 6
Foreclosure Inventory Rate by Type
North Carolina



Source: Mortgage Bankers Association (2009:Q1)/Haver Analytics

Prime Loans

As already noted, prime mortgages account for the majority of the outstanding loans in both North Carolina and the United States, and perform better than subprime mortgages. North Carolina's foreclosure rate for prime mortgages is below the national average according to both the LPS measure (0.8 percent) and the MBA measure (1.0 percent).

[11] For more information on differences between subprime adjustable- and fixed-rate mortgages, see Frame, Scott, Andreas Lehnert, and Ned Prescott, "A Snapshot of Mortgage Conditions with an Emphasis on Subprime Mortgage Performance," Manuscript, August 2008.

Table 2
Prime Mortgage Delinquency Rates

Geographic Area	Percent 90+ Days Past Due	National Rank	Percent in Foreclosure	National Rank
District of Columbia	1.61	17	1.54	23
Maryland	2.18	6	1.77	17
North Carolina	1.56	22	0.96	45
South Carolina	1.56	22	1.78	16
Virginia	1.57	20	1.31	36
West Virginia	1.39	28	1.41	32
United States	2.21	--	2.49	--

Source: Mortgage Bankers Association (2009:Q1)/Haver Analytics

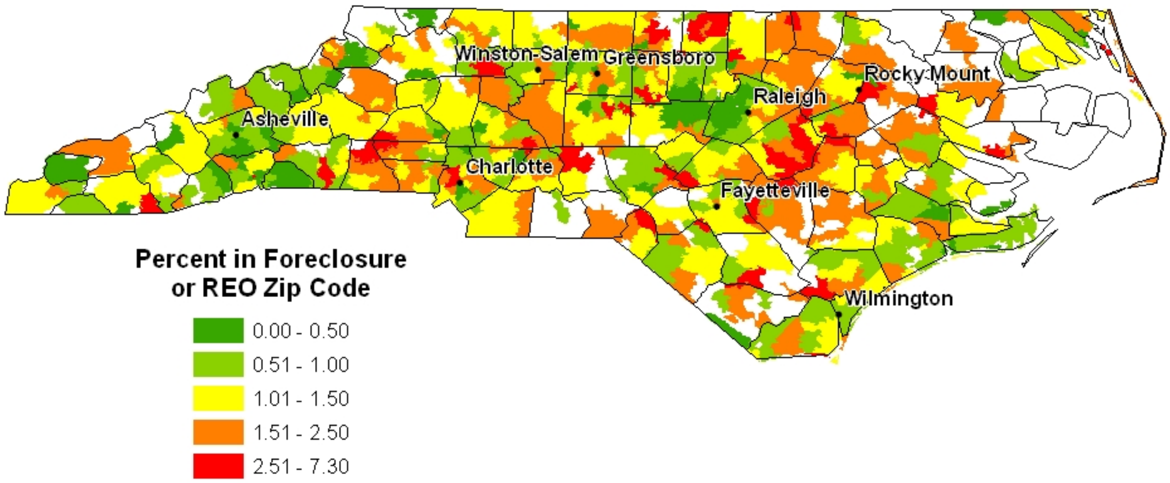
In the first quarter of 2009, the percentage of North Carolina's prime mortgages in foreclosure and the share with payments at least 90 days past due (Table 2) were at their highest marks since recording began in 1998. Nonetheless, both measures registered below the national averages and North Carolina's foreclosure rate on prime mortgages was the lowest in the Fifth District.

Figure 7 and Table 6 (Appendix A) illustrate prime foreclosure and REO rates[12] on owner-occupied units throughout the state using LPS data. Of all of the metropolitan and micropolitan statistical areas in North Carolina, the Kill Devil Hills micropolitan area located on the eastern shore of North Carolina had the highest prime foreclosure rate of 1.6 percent in March 2009, although the area had fewer than 8,000 active prime loans at the time. On the other hand, although the Charlotte MSA had a much lower share – 0.8 percent – of prime loans in foreclosure, it had more than 395,000 prime loans in March, leaving Charlotte with a considerably higher number of prime foreclosures than Kill Devil Hills. Hyde County had the highest prime foreclosure rate of all North Carolina counties (2.6 percent) but only had 320 prime loans.

Other pockets of high foreclosure rates in North Carolina include Montgomery County (1.6 percent), Warren County (1.5 percent), Sampson County (1.5 percent), Vance County (1.4 percent), and Washington County (1.4 percent).[13] Of the North Carolina zip codes colored red in Figure 7 (greater than 2.5 percent in foreclosure/REO), however, only one has over 10,000 prime loans while almost 70 percent have fewer than 1,000 prime loans. In other words, although a relatively high percentage of loans in these areas are in foreclosure or REO, the absolute number of prime loans in foreclosure, in many cases, is quite low. In fact, when examining Figure 7, it is important to recognize the low absolute number of loans in many areas across North Carolina. A little less than 40 percent of the 549 zip codes pictured in Figure 7 have fewer than 1,000 total loans and only about 7 percent have more than 10,000 loans.

[12] Real Estate Owned (REO) properties are in the possession of the lender because of foreclosure or forfeiture.
[13] See Appendix D for a map of North Carolina's counties.

Figure 7
Percentage of Owner-Occupied Prime Loans in Foreclosure or REO



Notes: FHA and VA loans are included in the count of prime loans. Uncategorized zip codes have fewer than 100 loans or no data available. Almost 40 percent of the 549 North Carolina zip codes have fewer than 1,000 loans; 7.0 percent (one in the red category) have more than 10,000 loans.
Source: Federal Reserve Bank of Richmond estimates using data from Lender Processing Services (LPS) Applied Analytics (March, 2009)

Subprime Loans

As illustrated in Figure 5a and shown in Table 3, 9.2 percent of mortgages in North Carolina are subprime. This ranks North Carolina 33rd among U.S. states in the prevalence of subprime lending.

Table 3
Subprime Share of all Loans

Geographic Area	Percent Subrime	National Rank
District of Columbia	8.72	36
Maryland	10.83	19
North Carolina	9.16	33
South Carolina	10.49	24
Virginia	8.49	38
West Virginia	10.85	18
United States	11.36	--

Source: Mortgage Bankers Association (2009:Q1)/Haver Analytics

Table 4 reports the performance of these mortgages. Although the foreclosure and delinquency rates on subprime loans are clearly higher than the rates on prime loans, North Carolina's subprime sector has low delinquency and foreclosure rates compared with the rest of the Fifth District and compared with the nation. The percentage of subprime mortgages in foreclosure is the lowest in the Fifth District and even the 90+ day delinquency rate (9.6 percent) is below the national rate (10.5 percent).

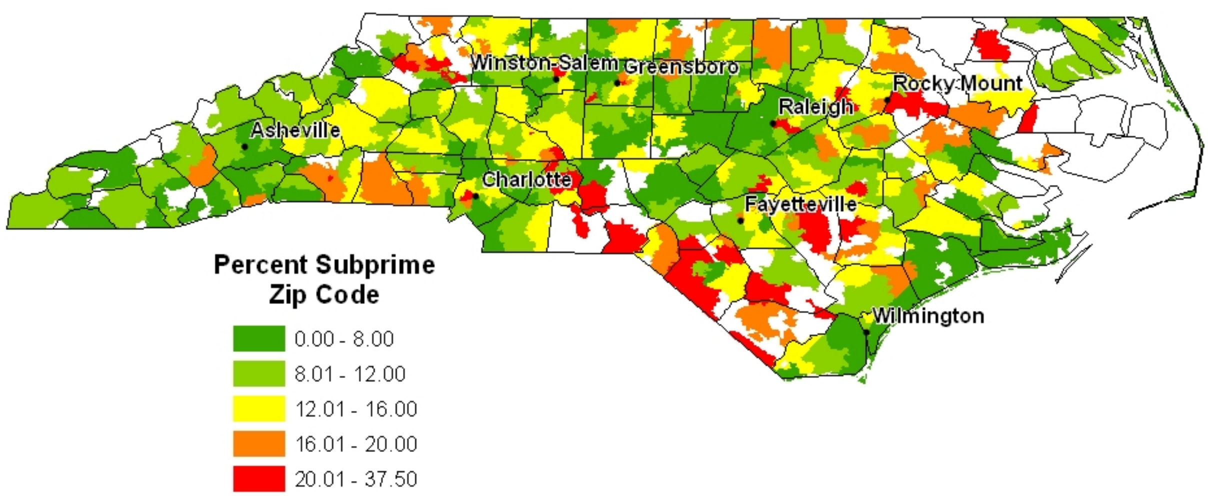
Table 4
Subprime Mortgage Delinquency Rates

Geographic Area	Percent 90+ Days Past Due	National Rank	Percent in Foreclosure	National Rank
District of Columbia	9.59	28	14.16	12
Maryland	11.95	7	13.31	17
North Carolina	9.60	27	5.81	49
South Carolina	8.78	33	9.49	31
Virginia	9.69	25	9.76	27
West Virginia	9.63	26	6.24	44
United States	10.54	--	14.34	--

Source: Mortgage Bankers Association (2009:Q1)/Haver Analytics

As shown in Figure 8, subprime loans are scattered throughout North Carolina, with concentrations along the eastern part of the state's border with South Carolina and around the Rocky Mount MSA. It is again important, however, to consider the absolute number of loans in those areas of the state that have a relatively high share of subprime loans. Five out of seven counties where the subprime share of the mortgage market exceeds 20 percent have fewer than 3,000 total loans, and none have more than 5,000 loans.

Figure 8
Percentage of Owner-Occupied Mortgages with Subprime Loans

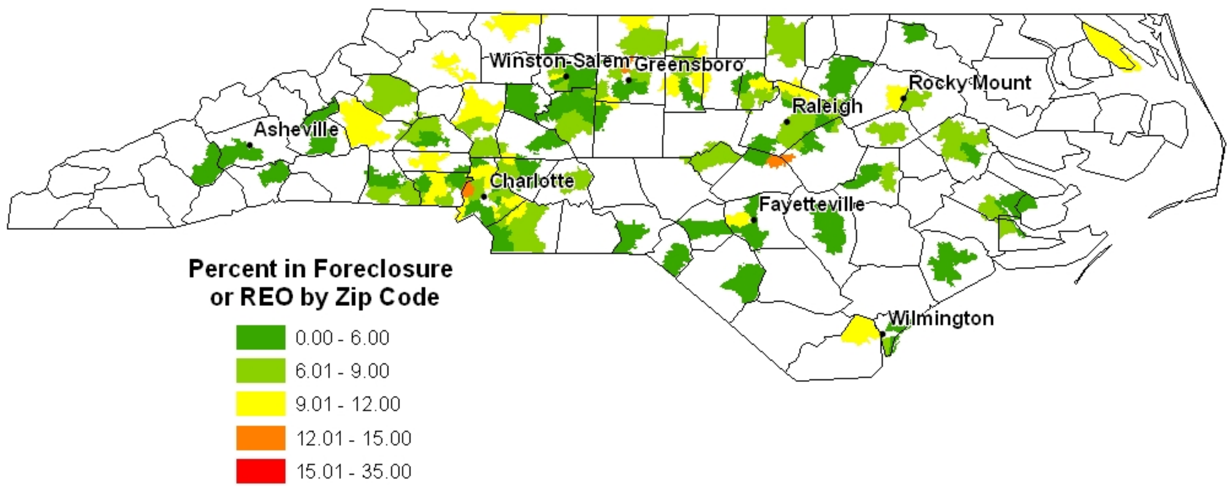


Notes: FHA and VA loans are included in the count of prime loans. Uncategorized zip codes have fewer than 100 loans or have no data available.
Source: Federal Reserve Bank of Richmond estimates using data from Lender Processing Services (LPS) Applied Analytics (March, 2009), Mortgage Bankers Association (2009:Q1)/Haver Analytics.

Figure 9 uses the LPS data to illustrate the performance of owner-occupied subprime loans in North Carolina for any zip code that contains more than 50 subprime loans. Unlike Table 4, here we report both homes that are in foreclosure and homes in REO. According to the LPS data (Table 7), the foreclosure rate for subprime loans in North Carolina actually decreased slightly from 5.1 percent to 5.0 percent between March 2008 and March 2009. On the other hand, the percentage of subprime loans with payments more than 90 days past due jumped from 10.0 percent in March 2008 to 18.3 percent in March 2009.

Clearly, most zip codes in North Carolina, particularly those outside of the major metropolitan areas, have fewer than 50 subprime loans. At the county level, a few counties have foreclosure/REO rates higher than 10 percent: Dare County (11.9 percent), Vance County (11.6 percent), Harnett County (11.5 percent), Pasquotank County (11.1 percent), and Carteret County (10.2 percent). Other than Harnett County, which noted around 1,300 subprime loans, all of these counties have approximately 600 subprime loans.

Figure 9
Percentage of Owner-Occupied Subprime Loans in Foreclosure or REO



Notes: FHA and VA loans are included in the count of prime loans. Uncategorized zip codes have fewer than 100 loans, fewer than 50 subprime loans, or have no data available.
Source: Federal Reserve Bank of Richmond estimates using data from Lender Processing Services (LPS) Applied Analytics (March, 2009).

Understanding the Past and Moving Forward

It does not appear that the subprime housing sector was the initial driving force of the economic downturn in North Carolina. Subprime delinquency and foreclosure rates did not rise as quickly, nor to as unprecedented levels, in North Carolina as in other parts of the District. At 5.8 percent, North Carolina not only has one of the lowest subprime foreclosure rates in the nation, but the rate is well below its peak of 9.0 percent in the third quarter of 2003 (Figure 6).

North Carolina's 90+ day subprime delinquency rate, according to MBA data, is at a record 9.6 percent. Much of the increase, however, was in the last quarter of 2008 and the first quarter of 2009, during which time the rate jumped 3.9 percentage points. North Carolina's subprime delinquency rise has lagged the rise in other parts of the country and the District.

Furthermore, in the first quarter of 2009, homes with subprime loans made up a smaller share of the foreclosure inventory in North Carolina (34.1 percent) than in the United States (42.3 percent) or in other Fifth District jurisdictions such as the District of Columbia (46.6 percent), Maryland (47.4), or Virginia (41.6 percent).

Although North Carolina has relatively low delinquency and foreclosure rates compared with other states, 90+ day delinquency rates, in particular, have risen considerably in the past 6-9 months. There is also concern going forward that with flattening or even declining house prices in some areas and general recessionary conditions across the state, foreclosures will grow, particularly among Alt-A and/or jumbo mortgages.[14] Generally, borrowers of Alt-A loans have a better credit history than subprime borrowers and thus are more likely to be able to absorb declines in home equity. However, many Alt-A borrowers put little money down for their purchase and had interest-only or negative amortization features in the mortgage in order to afford the payments for the first few years after purchase. In areas where property values have leveled off or fallen, these loans are particularly likely to end up with negative equity, making foreclosure more likely.

One category of Alt-A mortgages consists of loans that have a period over which only interest payments are required. Using LPS data, Table 5 in Appendix A reports the fraction of mortgages that have interest-only characteristics in North Carolina's MSAs. North Carolina has a much lower percentage of these types of loans than the Fifth District (4.2 percent versus 8.4 percent). Only one geographic area exceeds the District's average; 11.3 percent of loans in the Kill Devil Hills micropolitan statistical area are interest-only loans.

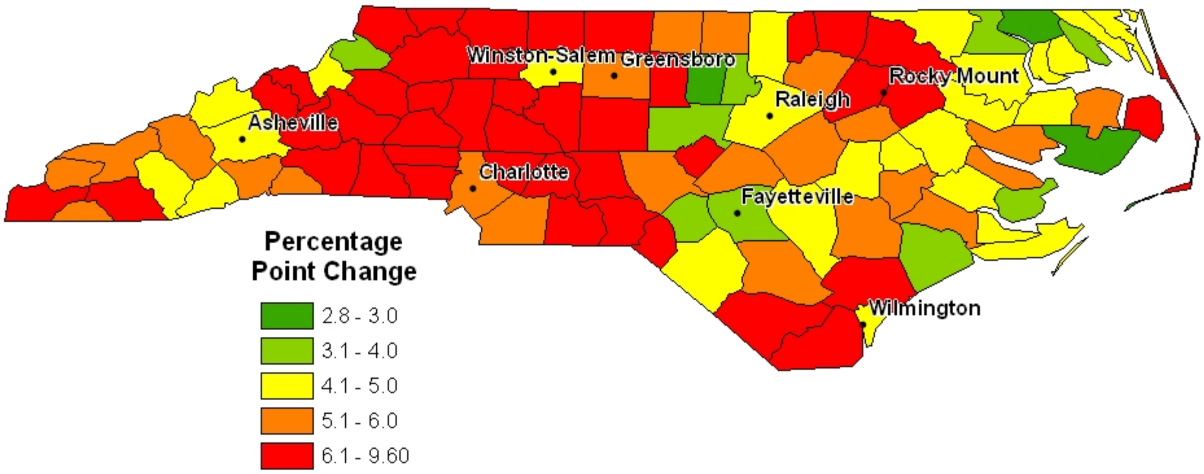
Table 8 reports the performance of interest-only loans for North Carolina MSAs. In the state as a whole, the 90+ day delinquency rate for interest-only loans is more than a percentage point above the prime loan 90+ day delinquency rate (although it is still far below the subprime rate).[15] In addition to having the highest share of interest-only loans, the Kill Devil Hills micropolitan area also has one of the highest rates of foreclosure and REO in the interest-only loan category.

Many people with negative equity in their house still pay their mortgage, although this is much more difficult to do if the borrower faces a negative shock to his income, such as losing a job or incurring an unexpectedly large expense.[16] The unemployment rate is a good proxy for negative income shocks that borrowers potentially face.

The unemployment rate in North Carolina climbed 5.7 percentage points from March 2008 to March 2009, ending the period with 11.0 percent joblessness – the third highest rate in the nation. Figure 10 shows the change in the unemployment rate in each of North Carolina's counties from March 2008 to March 2009. Clearly, labor market conditions have been, and will continue to be, a concern for North Carolina's housing markets. It is likely that increased unemployment has already contributed to increased delinquency and foreclosure rates in the Tarheel state.

[14] The MBA National Delinquency Survey and the LPS dataset do not have a separate category for Alt-A mortgages. These can be in either their prime or subprime category.
[15] Note that interest-only and VA/FHA loans are included in the prime loan count.
[16] See Foote, Christopher, Kristopher Gerardi, and Paul S. Willen, "Negative Equity and Foreclosure: Theory and Evidence," Federal Reserve Bank of Boston Public Policy Discussion Papers Series, Paper No. 08-3. (2008).

Figure 10
Change in the Unemployment Rate



Notes: Twelve-month change is between March 2008 and March 2009.
Source: Bureau of Labor Statistics

Section 4: The Role of Non-Owner-Occupied Housing

Non-occupant owners – those who own housing units other than their primary residence – differ from owner occupants in their credit characteristics and their motives, leading to differences in their behavior. Not surprisingly, non-occupant owners tend to have higher income than owner occupants and higher credit scores. However, because non-occupant owners do not live in the home, they tend to put more weight on the (net) profit they can make from rental income and capital gains. Therefore, despite their superior risk credentials, non-occupant owners may be no more likely than owner occupants to make their mortgage payments. In fact, since a non-occupant owner might not face the noninvestment losses associated with foreclosure, such as moving costs, credit impairment effects,[17] or emotional stress, they may be more likely to default on an unprofitable housing investment. This is particularly true for investors, as compared with owners of second homes.

In March 2009, 12.4 percent of foreclosures in North Carolina and 11.7 percent of loans in REO were non-owner-occupied. Only nine other states had a higher share of non-owner-occupied foreclosures.

As detailed in Table 10, some of the coastal areas of North Carolina have a particularly high percentage of non-owner-occupied loans. Particularly, in the Kill Devil Hills micropolitan area and the Wilmington MSA, 51.7 percent and 23.6 percent of loans, respectively, are non-owner-

[17] This is the case only for investors. If the housing investment is held in a limited liability corporation, then a default would not affect the owner's personal credit rating. See Haughwout, Andrew, Richard Peach, and Joseph Tracy, "Juvenile Delinquent Mortgages: Bad Credit or Bad Economy," Federal Reserve Bank of New York Staff Reports, Staff Report No.341. (August 2008).

occupied. The Jacksonville MSA also has a relatively high percentage of non-owner-occupied loans: 19.9 percent.[18]

Given the generally better risk credentials of non-occupant owners, it is, perhaps, not surprising that a higher share of non-owner-occupied mortgages are in the prime market. In the Kill Devil Hills micropolitan area, for example, 51.9 percent of prime loans are non-owner-occupied, compared with 37.7 percent of subprime loans. In the Wilmington MSA, 23.9 percent of prime loans are non-owner-occupied, compared with 9.4 percent of subprime loans.

Non-owner/investor properties have often been found to have higher rates of foreclosure and delinquency than owner-occupied properties,[19] as is true in many North Carolina metro areas, such as Jacksonville and Wilmington (Table 11). Second homes in these metro areas, however, are less likely to be in foreclosure than owner-occupied properties. One explanation is that owners of second homes tend to have the higher incomes and better credit ratings of investors while facing some of the same noninvestment losses, such as credit impairment or emotional stress, as owner occupants.

It follows from the higher foreclosure rate on non-owner-occupied housing units that those loans make up a sizeable percentage of total foreclosures in certain areas. In the Kill Devil Hills micropolitan area, non-owner-occupied mortgages make up 31.7 percent of foreclosures and 29.4 percent of loans in REO. In the Wilmington MSA, 23.6 percent of foreclosures and 28.5 percent of loans in REO are non-owner occupied. Meanwhile, in the Jacksonville MSA, 22.0 percent of foreclosures are non-owner-occupied, as are 33.8 percent of loans in REO. Delinquency rates foreshadow further problems in this market: 90+ day delinquency rates are 39.5 percent non-owner-occupied in the Kill Devil Hills micropolitan area, 17.5 percent in the Wilmington MSA, and 32.6 percent in the Jacksonville MSA.

Section 5: Summary

The North Carolina housing and labor markets have progressed somewhat differently than those in the northern areas of the Fifth District such as the District of Columbia, Maryland, and Virginia. Although subprime foreclosures have not risen as much and house prices have not fallen in most areas, unemployment in the state has climbed more quickly and to higher levels in North Carolina. In addition, certain parts of the state – particularly in the coastal areas – have higher shares of non-occupant owners. If unemployment rates continue to rise and house price depreciation becomes more widespread, we expect to see further deterioration in mortgage performance across North Carolina's prime and subprime markets, particularly in areas with high shares of non-owner-occupied, interest-only, or adjustable-rate mortgages.

For more information on foreclosures, please visit the Richmond Fed's Foreclosure Center at: http://www.richmondfed.org/community_development/foreclosure_resource_center/

The views expressed in this article are those of the authors and do not necessarily reflect the views of the Federal Reserve Bank of Richmond or the Federal Reserve System.

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[18] The high percentage of non-owner-occupied loans does not necessarily mean a high absolute number of those loans. The Kill Devil Hills micropolitan area had only around 8,000 total loans in March 2009, while the Wilmington and Jacksonville MSAs had around 71,000 and 32,000 total loans, respectively.

[19] See Haughwout, Andrew, Richard Peach, and Joseph Tracy, "Juvenile Delinquent Mortgages: Bad Credit or Bad Economy," Federal Reserve Bank of New York Staff Reports, Staff Report No.341. (August 2008).

Appendix A: Metropolitan Area Data

Table 5
General Housing Statistics

	Housing Units						Percent of Owner-Occupied Mortgages With:			
					Owner-Occupied					
Geographic Area	Total	Vacant	Occupied		Total	With a Mortgage	Prime Loan	Subprime Loan	Adjustable Rate	Interest Only
Asheville	198,224	26,100	172,124		123,457	71,308	91.88	8.12	9.72	4.92
Burlington							89.33	10.67	7.96	2.17
Charlotte-Gastonia										
Entire MSA	708,149	69,440	638,709		429,931	338,251	-	-	-	-
NC Portion	-	-	-	-	-	-	91.14	8.86	14.30	6.26
Durham	213,245	23,630	189,615		115,794	85,820	91.82	8.18	14.79	4.72
Fayetteville	150,916	21,458	129,458		80,366	58,776	90.10	9.90	6.96	0.77
Goldsboro							89.50	10.50	7.92	0.80
Greensboro	312,304	32,422	279,882		184,109	128,442	90.27	9.73	10.20	2.97
Greenville							89.10	10.90	16.67	1.98
Hickory-Lenoir	157,319	20,598	136,721		101,076	65,744	88.25	11.75	6.66	1.80
Jacksonville	64,676	10,958	53,718		32,908	22,557	95.00	5.00	5.90	1.74
Kill Devil Hills	-	-	-	-	-	-	95.57	7.43	16.60	11.34
Raleigh-Cary	426,193	32,933	393,260		270,210	214,773	93.44	6.56	13.05	4.89
Rocky Mount	66,089	7,512	58,577		36,932	22,560	82.52	17.48	9.15	1.37
Wilmington	195,653	48,516	147,137		97,700	66,501	92.92	7.08	11.35	6.69
Winston-Salem	206,822	23,863	182,959		127,127	88,529	90.26	9.74	9.94	2.48
North Carolina	4,124,066	583,191	3,540,875		2,418,252	1,644,260	90.84	9.16	11.06	4.15
Fifth District	12,904,601	1,661,582	11,243,019		7,766,133	5,395,627	90.44	9.56	14.40	8.35

Notes: FHA and VA loans as well as interest-only loans are included in the count of prime loans.
Source: Housing units are 2007 estimates from the Census Bureau. Mortgage estimates are Federal Reserve Bank of Richmond calculations using data from Lender Processing Services (LPS) Applied Analytics (March, 2008) and Mortgage Bankers Association (2009:Q1)/Haver Analytics.
Definitions of the metropolitan areas are provided in Appendix C.

Table 6
Owner-Occupied Prime Loan Statistics

Geographic Area	March, 2008 Percent 90+ Days Past Due	March, 2008 Percent in Foreclosure	March, 2009 Percent 90+ Days Past Due	March, 2009 Percent in Foreclosure	March, 2009 Percent in REO
Asheville	0.54	0.26	1.63	0.52	0.20
Burlington	1.38	0.54	2.70	0.92	0.34
Charlotte-Gastonia*	1.27	0.56	2.75	0.84	0.34
Durham	1.29	0.43	2.30	0.54	0.25
Fayetteville	1.42	0.55	2.16	0.72	0.39
Goldsboro	1.96	0.69	3.03	0.88	0.64
Greensboro	1.29	0.59	2.74	0.78	0.39
Greenville	1.13	0.56	2.44	0.77	0.26
Hickory-Lenoir	1.16	0.55	2.36	0.91	0.39
Jacksonville	0.82	0.40	1.84	0.61	0.25
Kill Devil Hills	0.84	0.47	2.63	1.57	0.84
Raleigh-Cary	0.86	0.33	1.74	0.58	0.21
Rocky Mount	2.11	0.56	3.33	1.09	0.67
Wilmington	0.73	0.39	2.00	0.75	0.26
Winston-Salem	1.39	0.51	2.66	0.91	0.33
North Carolina	1.24	0.59	2.46	0.77	0.32
Fifth District	1.19	0.49	2.24	1.16	0.43

*Only the North Carolina portion of this MSA is included here.

Notes: FHA and VA loans as well as interest-only loans are included in the count of prime loans. REO numbers for 2008 are not included due to changes in coverage.

Source: Federal Reserve Bank of Richmond estimates using data from Lender Processing Services (LPS) Applied Analytics (March, 2009)

Table 7
Owner-Occupied Subprime Loan Statistics

	March, 2008		March, 2009		
Geographic Area	Percent 90+ Days Past Due	Percent in Foreclosure	Percent 90+ Days Past Due	Percent in Foreclosure	Percent in REO
Asheville	7.31	2.37	15.97	3.60	1.80
Burlington	12.38	3.62	21.31	6.56	0.94
Charlotte-Gastonia*	9.99	4.68	19.39	5.75	1.64
Durham	12.34	4.77	19.70	5.68	1.89
Fayetteville	9.24	3.54	13.89	4.97	2.12
Goldsboro	13.01	3.42	18.18	6.06	1.30
Greensboro	11.69	3.72	17.09	5.66	1.69
Greenville	12.45	3.26	21.43	5.71	1.43
Hickory-Lenoir	8.69	4.05	17.23	3.77	2.14
Jacksonville	4.44	2.54	10.97	4.64	1.27
Kill Devil Hills	11.11	4.27	20.43	8.60	2.15
Raleigh-Cary	10.05	4.03	20.02	4.99	1.51
Rocky Mount	12.06	5.25	18.34	3.91	3.42
Wilmington	7.95	2.58	20.27	3.60	1.33
Winston-Salem	10.79	3.46	19.78	2.98	1.74
North Carolina	9.96	5.14	18.32	5.04	1.65
Fifth District	10.05	3.80	17.95	7.55	2.97

*Only the North Carolina portion of this MSA is included here.

Notes: FHA and VA loans as well as interest-only loans are included in the count of prime loans. REO numbers for 2008 are not included due to changes in coverage.

Source: Federal Reserve Bank of Richmond estimates using data from Lender Processing Services (LPS) Applied Analytics (March, 2009)

Table 8
Owner-Occupied Interest-Only Loan Statistics

Geographic Area	March, 2008 Percent 90+ Days Past Due	March, 2008 Percent in Foreclosure	March, 2009 Percent 90+ Days Past Due	March, 2009 Percent in Foreclosure	March, 2009 Percent in REO
Asheville	1.27	0.66	3.10	1.38	0.72
Burlington	3.07	0.68	3.11	3.11	0.78
Charlotte-Gastonia*	1.23	1.17	3.78	1.88	0.89
Durham	1.30	0.88	4.40	2.80	0.80
Fayetteville	1.99	1.32	4.40	2.80	0.80
Goldsboro**	0.00	1.56	1.92	0.00	3.85
Greensboro	1.56	0.78	3.31	1.87	1.01
Greenville	2.72	0.78	8.89	3.56	0.00
Hickory-Lenoir	0.49	0.98	4.20	2.52	0.00
Jacksonville	0.68	1.35	2.77	2.37	1.19
Kill Devil Hills	2.45	0.82	6.76	3.96	3.03
Raleigh-Cary	1.25	0.63	3.35	1.45	0.50
Rocky Mount**	5.77	3.85	10.00	4.44	1.11
Wilmington	1.01	1.01	4.00	1.58	0.61
Winston-Salem	1.23	0.57	3.50	1.97	1.20
North Carolina	1.29	0.94	3.80	1.84	0.74
Fifth District	1.93	1.47	4.66	4.66	3.88

*Only the North Carolina portion of this MSA is included here.
**This area has less than 100 interest-only loans.
Notes: FHA and VA loans as well as interest-only loans are included in the count of prime loans. REO numbers for 2008 are not included due to changes in coverage.
Source: Federal Reserve Bank of Richmond estimates using data from Lender Processing Services (LPS) Applied Analytics (March, 2009)

Table 9
Unemployment Rates

Geographic Area	Unemployment Rate	Percentage Point Increase from March 2008
Asheville	9.4	5.1
Burlington	11.9	6.6
Charlotte-Gastonia	11.6	6.4
Durham	7.6	3.5
Fayetteville	9.1	3.7
Goldsboro	9.2	4.3
Greensboro	11.4	6.1
Greenville	10.5	4.9
Hickory-Lenoir	15.4	9.1
Jacksonville	8.3	3.3
Kill Devil Hills	14.6	6.7
Raleigh-Cary	8.7	4.7
Rocky Mount	14.0	6.9
Wilmington	10.2	5.5
Winston-Salem	10.2	5.3
North Carolina	11.0	5.7
5th District	8.8	4.2

Source: Census Bureau (March, 2009)

Appendix B: Non-Owner-Occupied Data

Table 10
Percent of Loans by Occupancy Type

Geographic Area	All Loans		Prime Loans		Subprime Loans	
	Percent Second Homes	Percent Non-Owner/ Investment	Percent Second Homes	Percent Non-Owner/ Investment	Percent Second Homes	Percent Non-Owner/ Investment
Asheville	7.37	6.39	7.50	6.47	1.93	2.73
Burlington	1.58	4.27	1.58	4.34	1.55	2.21
Charlotte-Gastonia*	2.64	5.73	2.67	5.76	1.60	4.62
Durham	2.67	5.85	2.72	5.79	0.83	8.01
Fayetteville	1.46	5.99	1.46	6.02	1.34	5.03
Goldsboro	1.57	2.71	1.55	2.74	2.05	2.05
Greensboro	1.59	5.02	1.61	5.03	0.90	4.67
Greenville	3.53	7.36	3.59	7.50	1.79	3.14
Hickory-Lenoir	2.44	3.48	2.50	3.50	0.60	2.90
Jacksonville	9.68	10.24	9.76	10.32	3.75	4.49
Kill Devil Hills	39.10	12.60	39.39	12.54	21.43	16.23
Raleigh-Cary	2.20	4.52	2.21	4.53	1.79	4.36
Wilmington	15.13	8.51	15.31	8.58	4.88	4.52
Winston-Salem	1.47	4.48	1.50	4.48	0.62	4.35
North Carolina	5.13	5.70	5.22	5.75	1.85	4.14
Fifth District	3.71	5.32	3.79	5.36	1.13	3.84

*Only the North Carolina portion of this MSA is included here.
Notes: (1) FHA and VA loans as well as interest-only loans are included in the count of prime loans.
(2) Percentages do not sum to 100 due to the occupancy status on some observations being unknown.
Source: Federal Reserve Bank of Richmond estimates using data from Lender Processing Services (LPS) Applied Analytics (March, 2009)

Table 11
Owner- and Non-Owner-Occupied Total Loan Statistics

Geographic Area	Owner-Occupied Homes: Percent 90+ Days Past Due	Owner-Occupied Homes: Percent in Foreclosure	Owner-Occupied Homes: Percent in REO	Second Homes: Percent 90+ Days Past Due	Second Homes: Percent in Foreclosure	Second Homes: Percent in REO	Non-Owner/ Investment Properties: Percent 90+ Days Past Due	Non-Owner/ Investment Properties: Percent in Foreclosure	Non-Owner/ Investment Properties: Percent in REO
Asheville	2.01	0.60	0.24	0.90	0.45	0.03	2.42	0.60	0.28
Burlington	3.38	1.13	0.36	1.37	0.91	0.00	2.19	1.69	0.51
Charlotte-Gastonia*	3.25	0.98	0.38	2.42	1.42	0.15	2.73	1.65	0.64
Durham	2.77	0.68	0.29	0.89	0.65	0.00	1.85	1.37	0.56
Fayetteville	2.56	0.87	0.45	1.37	0.85	0.17	1.67	1.29	0.54
Goldsboro	3.57	1.06	0.66	1.74	0.87	0.00	2.51	1.51	0.50
Greensboro	3.21	0.94	0.43	1.94	1.27	0.25	2.44	1.15	0.70
Greenville	3.15	0.95	0.30	1.44	0.21	0.41	2.77	1.88	0.40
Hickory-Lenoir	2.96	1.03	0.46	0.86	0.52	0.35	2.78	1.57	0.48
Jacksonville	1.99	0.67	0.27	1.07	0.59	0.64	6.49	0.91	0.51
Kill Devil Hills	3.07	1.74	0.87	0.97	0.35	0.19	3.44	1.59	0.67
Raleigh-Cary	2.13	0.68	0.24	1.57	0.86	0.10	1.84	1.09	0.47
Wilmington	2.42	0.81	0.29	1.16	0.62	0.25	2.31	1.05	0.57
Winston-Salem	3.22	0.98	0.37	1.22	1.22	0.30	4.46	1.75	0.80
North Carolina	2.94	0.90	0.36	1.32	0.74	0.20	2.92	1.24	0.57
Fifth District	2.78	1.38	0.52	1.21	0.96	0.27	2.48	1.93	0.82

*Only the North Carolina portion of this MSA is included here.
Notes: FHA and VA loans as well as interest-only loans are included in the count of prime (and total) loans.
Source: Federal Reserve Bank of Richmond estimates using data from Lender Processing Services (LPS) Applied Analytics (March, 2009)

Table 12
Non-Owner-Occupied Prime Loan Statistics

Geographic Area	Second Homes: Percent 90+ Days Past Due	Second Homes: Percent in Foreclosure	Second Homes: Percent in REO	Non-Owner/ Investment Properties: Percent 90+ Days Past Due	Non-Owner/ Investment Properties: Percent in Foreclosure	Non-Owner/ Investment Properties: Percent in REO
Burlington	0.00	0.94	0.00	2.06	1.72	0.51
Charlotte-Gastonia*	2.15	1.30	0.13	2.45	1.53	0.59
Greensboro	1.72	1.20	0.26	2.04	0.96	0.72
Winston-Salem	1.08	1.23	0.31	4.22	1.70	0.67
North Carolina	1.22	0.70	0.20	2.68	1.11	0.54
Fifth District	1.13	0.91	0.26	2.27	1.76	0.75

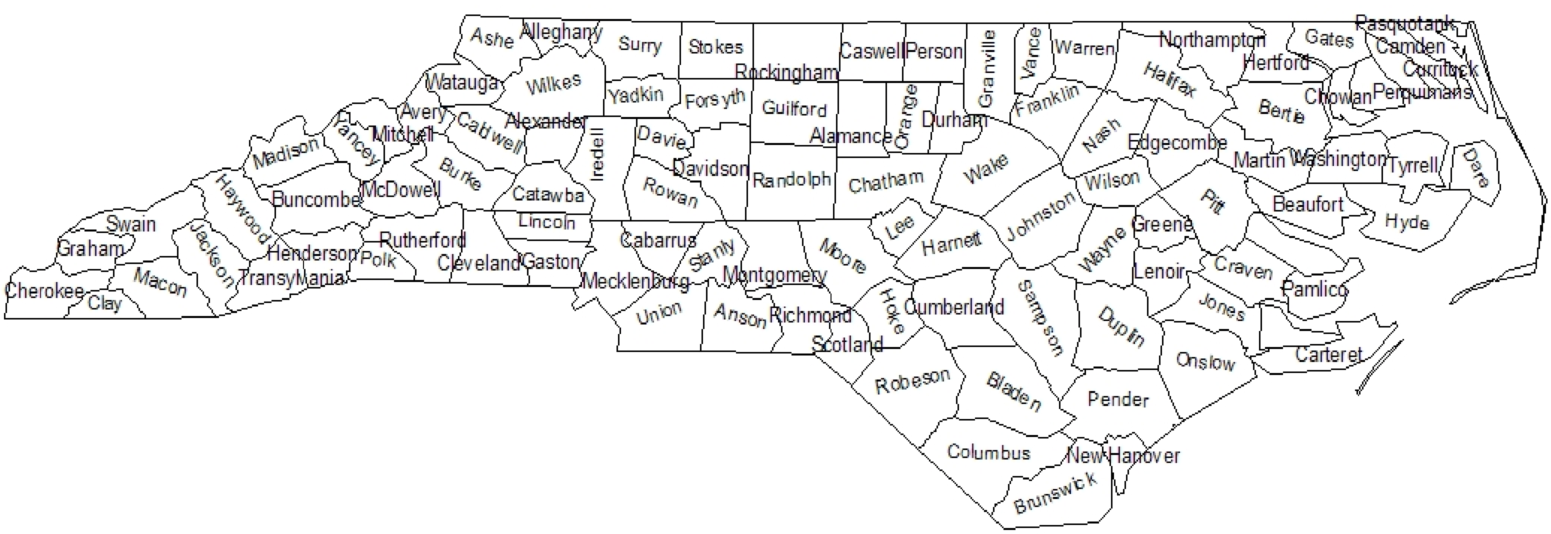
Source: Federal Reserve Bank of Richmond estimates using data from Lender Processing Services (LPS) Applied Analytics (March, 2009)

Appendix C: MSA Definitions

1. **Asheville, NC MSA –** Buncombe County, NC; Haywood County, NC; Henderson County, NC; Madison County, NC
2. **Burlington, NC MSA –** Alamance County, NC
3. **Charlotte-Gastonia-Concord, NC MSA –** Anson County, NC; Cabarrus County, NC; Gaston County, NC; Mecklenburg County, NC; Union County, NC; York County, SC
4. **Durham-Chapel Hill, NC MSA –** Chatham County, NC; Durham County, NC; Orange County, NC; Person County, NC
5. **Fayetteville, NC MSA –** Cumberland County, NC; Hoke County, NC
6. **Goldsboro, NC MSA –** Wayne County, NC
7. **Greensboro-High Point, NC MSA –** Guilford County, NC; Randolph County, NC; Rockingham County, NC
8. **Greenville, NC MSA –** Greene County, NC; Pitt County, NC
9. **Hickory-Lenoir-Morganton, NC MSA –** Alexander County, NC; Burke County, NC; Caldwell County, NC; Catawba County, NC
10. **Jacksonville, NC MSA –** Onslow County, NC
11. **Kill Devil Hills*, NC MSA –** Dare County, NC
12. **Raleigh-Cary, NC MSA –** Franklin County, NC; Johnston County, NC; Wake County, NC
13. **Rocky Mount, NC MSA –** Edgecombe County, NC; Nash County, NC
14. **Wilmington, NC MSA –** Brunswick County, NC; New Hanover County, NC; Pender County, NC
15. **Winston-Salem, NC MSA –** Davie County, NC; Forsyth County, NC; Stokes County, NC; Yadkin County, NC

*Indicates a micropolitan statistical area
Source: Office of Management and Budget, 2008

Appendix D: North Carolina Counties



Appendix E

Loan Processing Services, Inc. Applied Analytics Mortgage Data (LPS Data) does not have as complete coverage of subprime loans as it does of prime loans. To compensate for this, we scaled the LPS subprime and prime data for each locality by common factors such that the LPS totals matched the MBA data at the state level. While this method of dealing with LPS's underrepresentation of loans is far from perfect, it only impacts the figures and tables that report the prevalence of subprime loans within geographic areas of North Carolina. It has no impact on the subprime performance numbers.

The LPS data in this document is subject to revision.