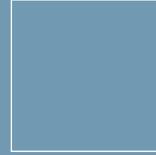


Mortgage Performance Summary



THE FEDERAL RESERVE BANK OF RICHMOND

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A Summary of the Housing Market and Mortgage Performance in West Virginia

By Brian Gaines, Anne Stilwell, Sonya Ravindranath Waddell, and Sarah Watt

Introduction

This document provides a summary of the housing market and mortgage performance in West Virginia. The first section provides background information on West Virginia's housing stock and how it has evolved during the past decade. The second section offers data on the size and composition of the West Virginia mortgage market. The third section reports mortgage performance in the area. The fourth section elaborates on the role of manufactured housing on the state's current and future housing market. The last section summarizes the document. Finally, an appendix lists more detailed information about mortgage composition and performance at the MSA level and for selected counties.

Section 1: Housing Background

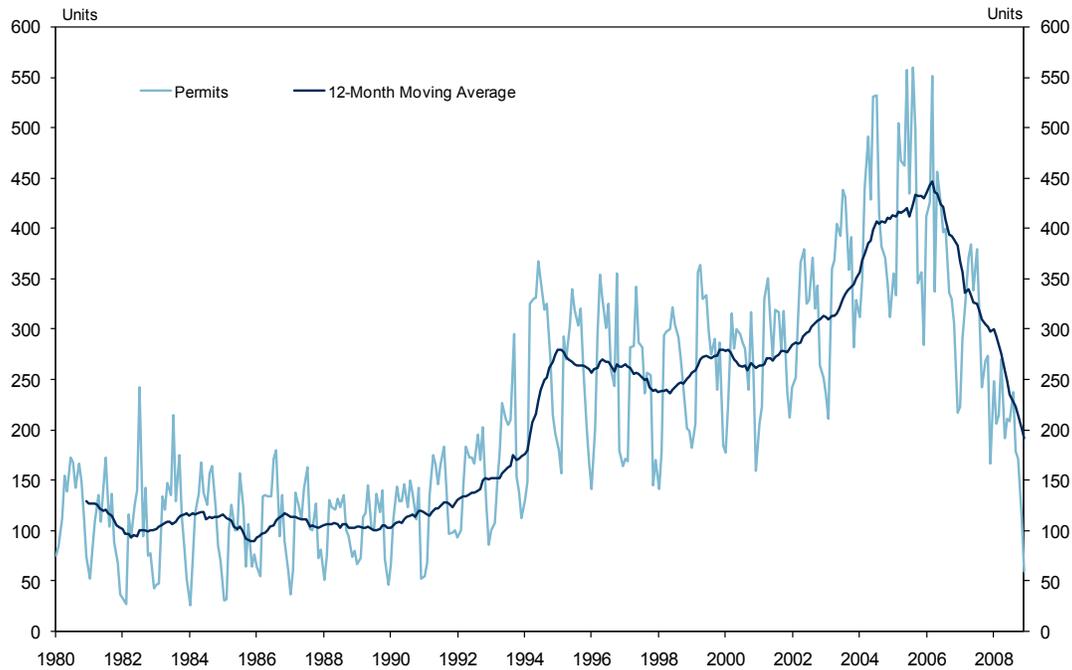
Supply

The number of single-family building permits issued in West Virginia rose every year from 2000 to 2005. In 2005, 5,483 permits were issued – the most on record for any given year. By 2008, however, only 2,560 permits were issued, which was the lowest level since 1993. The Census Bureau's American Community Survey estimates that in 2007 there were 733,849 occupied housing units in West Virginia, of which 74.9 percent (549,401) were owner-occupied. According to these data, the total number of housing units rose 4.5 percent in West Virginia between 2000 and 2007.

Recently, there has been some evidence of excess housing supply in certain West Virginia metropolitan statistical areas (MSAs). Months' supply of homes¹ has been rising in the Cumberland MSA over the past few years, climbing above six months – a common threshold for sluggish sales – in 2006. By the first quarter of 2009, months' supply in Cumberland reached a series' high of 13.7 months. Months' supply has also grown considerably in the Hagerstown-Martinsburg MSA since 2005, reaching a level as high as 19.7 months in the first quarter of 2008 and remaining elevated at 18.2 months 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. (National Association of Realtors/Haver Analytics)

Figure 1
Single-Family Housing Building Permits
West Virginia



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

Demand

Existing home sales, as measured by the National Association of Realtors, grew steadily in the beginning of the decade, peaking at 38,600 units sold in 2005. Activity in 2006 was still strong for West Virginia, at 32,600 units sold, although sales fell to 25,500 units sold in 2008. There were a few factors contributing to the rise in home sales early in the decade. The population in West Virginia aged 25 years and over increased 2.6 percent from 2000 to 2007. Nonfarm employment in West Virginia grew from the beginning of 2003 through 2007, with 35,900 jobs added over this period. Real personal income also increased every year since 2000, with the exception of 2003.

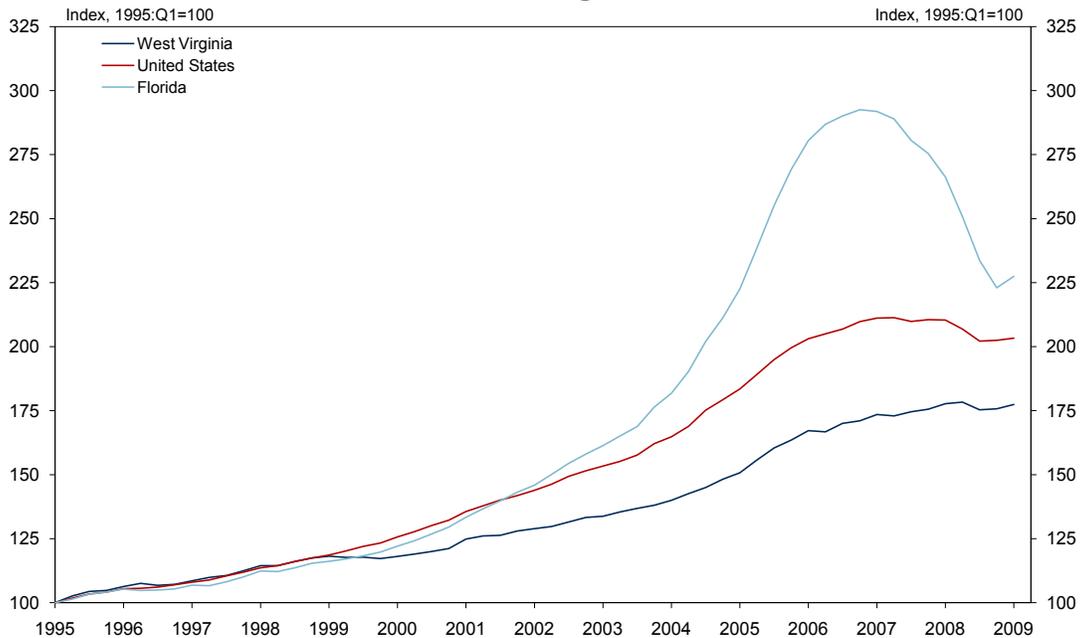
Furthermore, more liberal and innovative lending practices increased credit access to many borrowers previously unable to qualify for mortgages. The new mortgage products, relaxed underwriting standards, and lower interest rates prevalent throughout the nation also helped more residents of West Virginia buy homes. The effective rate on conventional mortgages² in West Virginia, according to the Federal Housing Finance Board, has trended downward in the past few years. The rate was between 7.0 percent and 11.0 percent throughout the 1990s but fell to below 7.0 percent in 2002, hitting a low of 6.0 percent in 2004.

² 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.³ 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 defaulting on their mortgage.

Figure 2
FHFA House Price Index
West Virginia



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

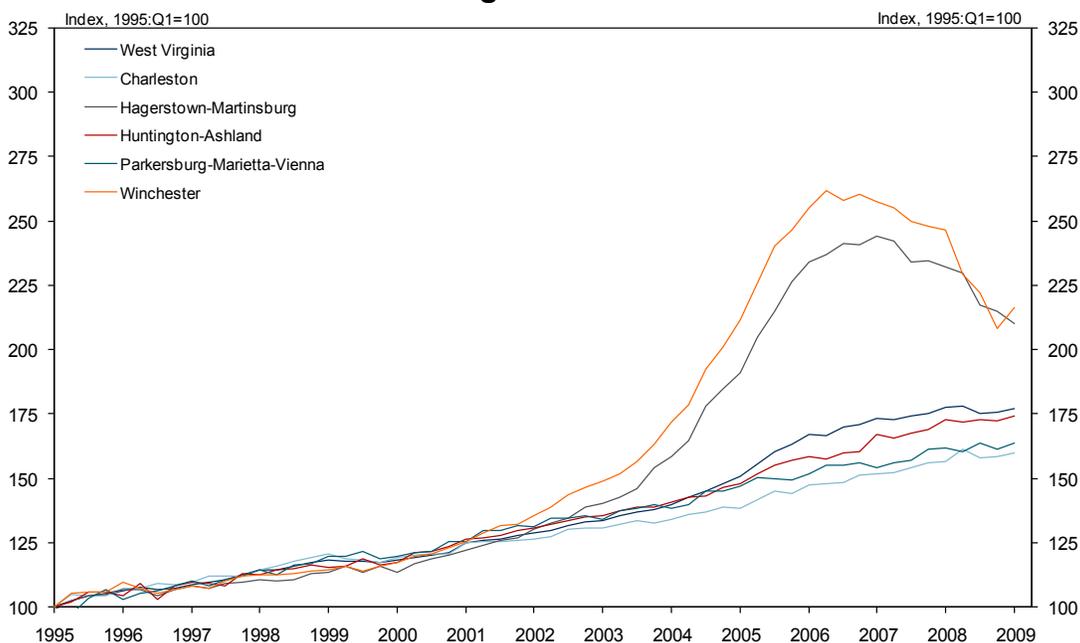
As indicated in Figure 2, house prices according to the Federal Housing Finance Agency (FHFA) in West Virginia did not appreciate as much as in other areas of the nation. Correspondingly, they have not fallen as steeply. In fact, house prices in West Virginia fell on a year-over-year basis in the first quarter of 2009 (0.2 percent) for the first time since the first quarter of 2000.

Although house prices in West Virginia did not appreciate as steeply as they did in other parts of the District and the nation, there has been considerable variation in house price movement within the state. Figure 3 shows the FHFA house price index for the state's metropolitan statistical areas (MSAs). The Winchester and Hagerstown-Martinsburg MSAs saw the steepest growth and, subsequently, the sharpest declines in house prices. Winchester MSA house prices grew 76.0 percent from the first quarter of 2003 to the peak in the second quarter of 2006, but have since depreciated 17.3 percent. Similarly, prices appreciated 74.0 percent in the

³ 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).

Hagerstown MSA from the first quarter of 2003 to the first quarter of 2007 but are now 13.9 percent below their peak. The Winchester MSA, however, is primarily in Northern Virginia and a large portion of the Hagerstown-Martinsburg MSA is in Maryland. Both MSAs are in close proximity to Washington, D.C., which is the area of the Fifth District that followed the nation most closely in the growth of and fall in house prices.

Figure 3
FHFA House Price Index
West Virginia Metro Areas



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

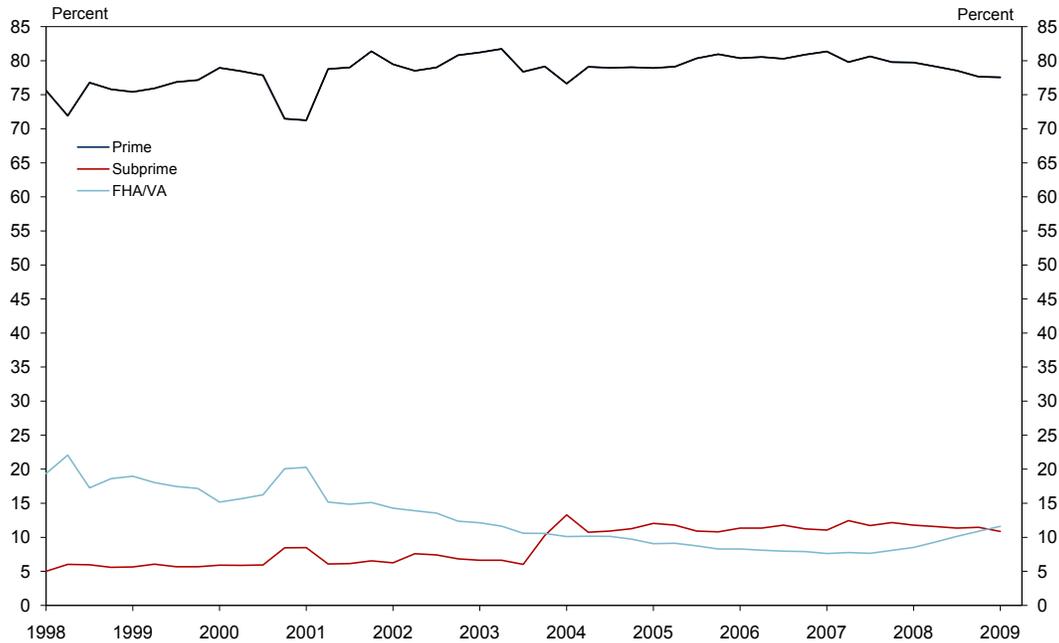
Section 2: Mortgage Composition

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 mortgages made to people with poor credit scores; often, a FICO score⁴ 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, 50.6 percent of the 549,401 owner-occupied housing units in West Virginia had an active mortgage in 2007 – much 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 about \$20 billion of mortgage debt in March 2009 in West Virginia that accounted for 0.2 percent of the outstanding mortgage debt in the nation.

⁴ FICO is a commonly used credit score created by Fair Isaac Corporation.

Figure 4
Percent of Mortgages by Type⁵
West Virginia



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,⁶ the volume of these mortgages appeared to increase slightly around 2002 and 2003.⁷ Figure 4 shows the fraction of subprime loans in West Virginia as measured by the MBA survey. They reached a peak of about 12.5 percent in the second quarter of 2007. However, even with the rise in subprime lending, Figure 5a illustrates that the majority of outstanding loans are prime. The overall distribution of mortgage types in West Virginia is similar to that in the United States, although subprime loans accounted for a smaller fraction of total loans in West Virginia (10.9 percent) compared with the nation (11.4 percent) in the first quarter of 2009.

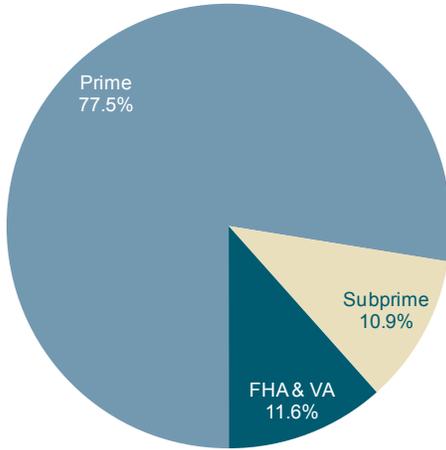
⁵ The MBA National Delinquency Survey and the LPS dataset do not have a separate category for Alt-A mortgages, so in both cases Alt-A loans can be either in the prime or subprime category.

⁶ Ben S. Bernanke, "[The Subprime Mortgage Market](#)," speech delivered at the Conference on Bank Structure and Competition, Chicago, Ill., May 17, 2007.

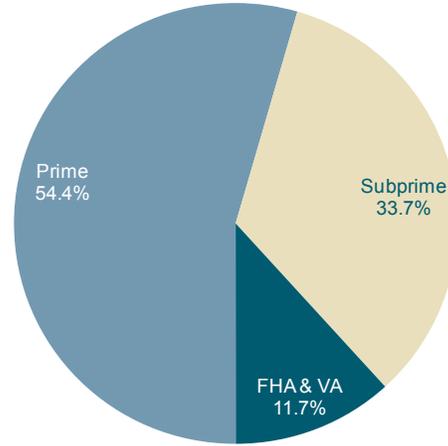
⁷ For a variety of reasons, defining the size of the subprime market is difficult. For the best estimates see Mayer, Chris and Karen Pence, "[Subprime Mortgages: What, Where, and to Whom](#)." Federal Reserve Board, FEDS Working Paper 2008-29. For convenience, we use the MBA numbers, which are discussed in more detail in footnote 8. The spike in subprime lending in mid-2003 in that graph is partially due to the addition of a large subprime servicer to their survey at that time.

Figure 5 West Virginia Mortgage Distribution

5a: Mortgages Outstanding



5b: Foreclosure Inventory



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

Section 3: Mortgage Performance⁸

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 worse. While subprime loans make up a relatively small fraction of outstanding mortgages, they account for a much larger share of the loans in foreclosure. Figure 5b shows that in West Virginia, subprime mortgages accounted for almost 34 percent of all foreclosures.

Table 1: Foreclosure Rates by Mortgage Type

Loan Type	West Virginia		United States
	Percent in Foreclosure	National Rank	Percent in Foreclosure
Prime Fixed-Rate	1.02	29	1.46
Prime Adjustable-Rate	4.93	28	7.55
Subprime Fixed-Rate	4.13	43	6.98
Subprime Adjustable-Rate	13.95	36	23.32

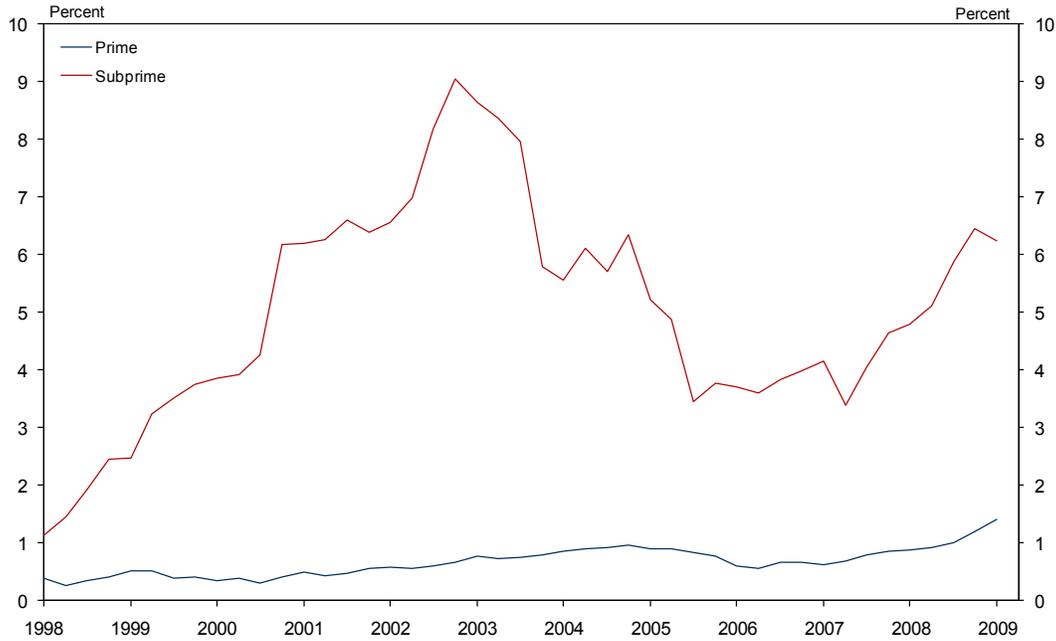
Source: Mortgage Bankers Association (2009:Q1)/Haver Analytics

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 the other categories, including subprime

⁸ 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.

fixed-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.⁹

Figure 6
Foreclosure Inventory Rate by Type
West Virginia



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 West Virginia and the United States, and perform better than subprime mortgages. West Virginia’s foreclosure rate for prime mortgages is below the national average according to both the LPS measure (1.4 percent)¹⁰ and the MBA measure (1.4 percent).

⁹ 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.

¹⁰ See Table 6.

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

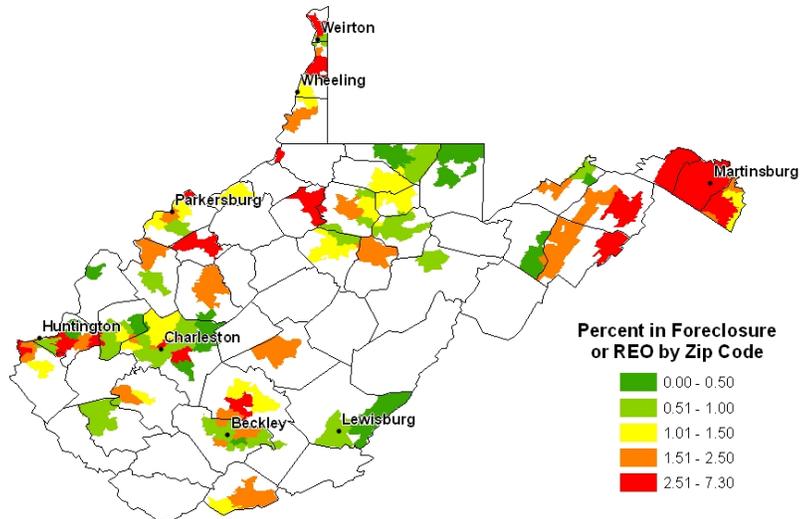
In the first quarter of 2009, West Virginia's foreclosure and 90+ day delinquency rates on prime loans were below the national averages (Table 2), although both measures posted their highest mark since recording began in 1998.

Figure 7 and Table 6 (Appendix A) illustrate foreclosure and REO¹¹ rates on prime loans throughout the state. As is clear from the figure, there are many zip codes in West Virginia that either have very few loans or for which no data is available. (This becomes even more evident when examining the subprime market in Figure 9.) The counties with the highest concentration of prime foreclosures are Berkeley County and Jefferson County, located in the Hagerstown-Martinsburg MSA and the Washington, D.C. MSA, respectively.¹² These areas are notable not only because of their high foreclosure rates, but also because they both have high total loan concentrations. For instance, although Tyler County has a higher foreclosure/REO rate than either Berkeley or Jefferson County, there are only 272 prime loans reported in the county, compared to 20,565 prime loans in Berkeley County and 14,413 prime loans in Jefferson County. In other words, Tyler County has a much smaller number of foreclosed homes. In fact, of the 52 zip codes with foreclosure/REO rates of above 1.5 percent (colored orange or red in Figure 7), only 18 had more than 1,000 prime loans and 21 had fewer than 500 prime loans.

¹¹ Real Estate Owned (REO) properties are in the possession of the lender because of foreclosure or forfeiture.

¹² See Appendix D for a map of West Virginia counties.

Figure 7
Percentage of Owner-Occupied Prime Loans in Foreclosure or REO¹³



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.

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

Subprime Loans

As illustrated in Figure 5a and shown in Table 3, 10.9 percent of mortgages in West Virginia are subprime. This is the highest share of subprime loans in the Fifth District and ranks West Virginia 18th among states in the prevalence of subprime lending.

Table 3
Subprime Share of All Loans

Geographic Area	Percent Subprime	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 using MBA data. According to this data, West Virginia has one of the lowest subprime foreclosure rates in the District (6.2 percent) and

¹³ Real Estate Owned (REO) properties are in the possession of the lender due to foreclosure or forfeiture.

is well below the national 14.3 percent rate. The percentage of subprime mortgages that are 90+ days past due in West Virginia (9.6 percent) is also below the national rate of 10.5 percent.

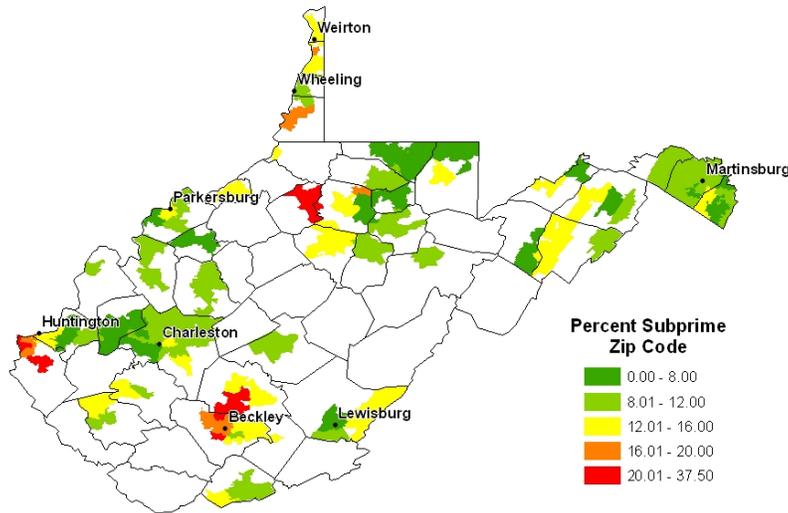
Table 4
Subprime Mortgage Delinquency Rates

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 West Virginia. However, of the 38 zip codes where more than 12 percent of the mortgages are subprime, only one has more than 500 subprime loans, and 30 have fewer than 200 subprime loans (including 16 with 70 or fewer subprime loans). At the county level, only four counties in West Virginia have more than 1,000 total subprime loans: Jefferson County (1,275 loans), Raleigh County (1,331 loans), Kanawha County (1,596 loans), and Berkeley County (2,285 loans).

Figure 8
Percentage of Owner-Occupied Mortgages with Subprime Loans

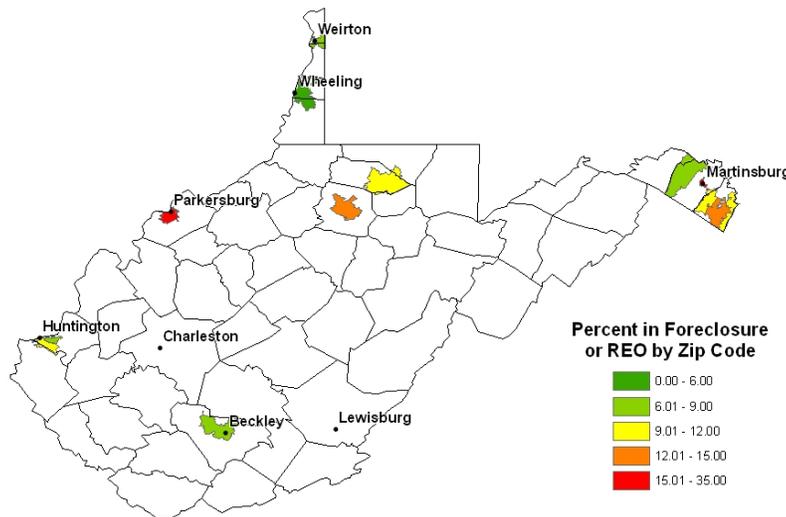


Notes: FHA and VA loans are included in the count of prime loans. Uncategorized zip codes have fewer than 100 loans or no data available.

Source: Federal Reserve Bank of Richmond estimates using data from Lender Processing Services (LPS) Applied Analytics (March, 2009) and Mortgage Bankers Association (2009:Q1)/Haver Analytics

The low absolute number of subprime loans is clear from Figure 9, which does not include any zip codes that contain fewer than 50 subprime loans. Figure 9 reports the performance of owner-occupied subprime loans in West Virginia according to the LPS data. Unlike in Table 4, here we report both homes that are in foreclosure and those in REO. According to the LPS data, the foreclosure rate for subprime loans in West Virginia increased from 4.4 percent to 7.6 percent between March 2008 and March 2009. The share of subprime mortgages with payments more than 90 days past due saw a much larger increase over the year, from 8.7 percent to 14.9 percent.

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

Understanding the Past and Moving Forward

Although West Virginia’s housing market has softened lately, it has followed a different trajectory than that of the nation. First, the subprime share of the market did not grow in as unprecedented a manner as it did in other parts of the country. Although the share of subprime loans in the mortgage market peaked at 12.5 percent in the second quarter of 2007, this was only slightly higher than its 12.0 percent share in the first quarter of 2005. Second, subprime foreclosure rates did not start to rise until the end of 2007 – far later than in the nation. Furthermore, subprime foreclosures in West Virginia still have not reached their peak (9.1 percent) that was recorded in the final quarter of 2002. In the first quarter of 2009, subprime made up a smaller share of the foreclosure inventory in West Virginia (33.7 percent) than it did in any other Fifth District jurisdiction.

This does not mean that housing markets in West Virginia have not weakened. The foreclosure rate for prime loans has been climbing steadily since the beginning of 2007 and is now a record

1.4 percent. Furthermore, the shares of both prime and subprime loans with payments more than 90 days past due are at unprecedented levels.

Some of the weakening of West Virginia's housing markets is likely a direct result of conditions in the District of Columbia and its suburbs. For example, house price declines and high foreclosure and delinquency rates are a particular issue in the Winchester and Hagerstown-Martinsburg MSAs. In these areas, there is concern going forward that with house price declines and general recessionary conditions, foreclosures will grow 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 dropped, 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 West Virginia's MSAs. As shown in the table, interest-only loans do not make up a large share of mortgages in West Virginia, accounting for only 3.1 percent of all loans in March 2009. The Hagerstown-Martinsburg MSA and the Winchester MSA have the highest share of interest-only loans: 6.9 percent and 3.7 percent, respectively.

At the county level, interest-only mortgages are concentrated within Jefferson County, which is part of the Washington, D.C. MSA, and Berkeley County, which is in the Hagerstown-Martinsburg MSA. Foreclosures on these interest-only loans are rising. In Berkeley County, 7.4 percent of interest-only loans were in foreclosure in March 2009, compared to 2.9 percent in March 2008. In Jefferson County, the number of interest-only loans in foreclosure increased from 3.8 percent in March 2008 to 7.1 percent in March 2009.

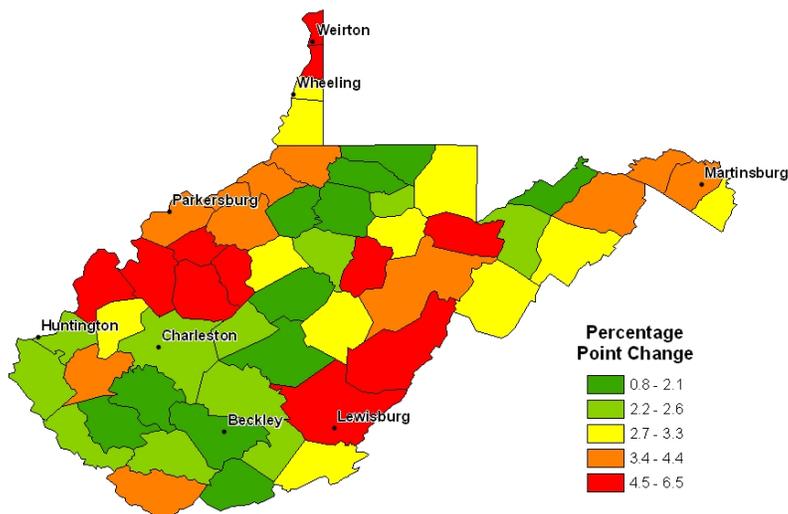
Recessionary conditions – including softening labor markets – have also contributed to weakening housing markets across West Virginia. Many people with negative equity in their house still pay their mortgage, although this is much more difficult to do if the borrower faces a negative shock to his income, such as losing a job or incurring an unexpectedly large expense.¹⁵ The unemployment rate is a good proxy for negative income shocks that borrowers potentially face.

The unemployment rate in West Virginia climbed 2.9 percentage points from March 2008 to March 2009, ending the period with 7.6 percent joblessness. Figure 10 shows the change in the unemployment rate in each of West Virginia's counties from March 2008 to March 2009. Labor market conditions will continue to be a concern for West Virginia's housing markets.

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 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

Regarding West Virginia mortgage conditions, it is possible that the LPS and MBA datasets do not capture overall conditions in West Virginia as accurately as they do in other housing markets. For one thing, both the MBA and LPS data cover far less of the mortgage market in West Virginia than in other Fifth District states. In 2007, for example, the Census Bureau reported 278,234 mortgages in West Virginia; the MBA data covered 133,388 mortgages in the same year and LPS coverage was no better than MBA. In comparison, for Virginia, the Census Bureau reported 1,490,034 mortgages and MBA covered 1,425,934 mortgages in 2007. LPS coverage was also much better in Virginia than in West Virginia.

In addition, housing market conditions might not be reflected in any mortgage data. The state has a high share of manufactured housing, increasing the likelihood that many housing loans in the state are not recorded as mortgages at all. This topic is discussed further in Section 4.

Finally, softening housing markets might not affect West Virginia in the same way such conditions affect other states because West Virginia has a higher share of homes without mortgages. As mentioned earlier, only 50.6 percent of owner-occupied housing units in West Virginia had an active mortgage in 2007; in comparison, 68.4 percent of U.S. owner-occupied housing units had an active mortgage in the same year.

Section 4: The Role of Manufactured Housing

Manufactured homes are houses built in factories and then transported to the home site. Manufactured housing is generally more affordable than conventional housing and therefore targeted to low-to-middle-income households, although the financing can be more expensive than that for more typical homes. Traditionally, manufactured homes are classified – and titled – as personal property, such as a car or a boat. For this reason, most qualify only for personal property financing that typically has higher interest rates and shorter terms. If manufactured housing units are placed on permanent foundations on owner-occupied land, they can be classified as real estate, and then can (and often do) qualify for conventional mortgages.

According to the Census Bureau, 63.3 percent of the 79,000 manufactured homes placed in the United States in 2008 were titled as personal property while 27.9 percent were titled as real estate, and the remaining were not titled. In the same year, 66.0 percent of the 53,000 manufactured homes placed in the South¹⁶ were titled as personal property, while about 26 percent were titled as real estate and the remaining were not titled. Although the share of manufactured homes that are titled as real estate has grown in the past 15 years, most are personal property and therefore cannot be financed through a traditional mortgage.

The South accounts for the majority of manufactured homes placed in the nation. The South's share of placed homes fell below 60 percent in the early part of this decade (although it climbed again to 63.1 percent in 2007 and 67.1 percent in 2008), but the share has remained above 50 percent for each of the last 15 years. The Census Bureau's American Community Survey (ACS) reported that of the ten states with the highest share of the nation's manufactured housing stock, seven (Florida, Texas, North Carolina, Georgia, South Carolina, Alabama, and Tennessee) were in the South.

Although West Virginia only accounts for 1.5 percent of the nation's manufactured housing stock (compared with Florida's 10.0 percent), the state ranks 4th in the share of its own housing stock that is manufactured homes. According to the ACS, in 2007, manufactured homes (132,426 units) comprised 15.1 percent of the state's housing stock. Furthermore, 1,900 additional manufactured units were placed in 2008, compared with 2,560 single-family building permits; this indicates that in 2008, 42.6 percent¹⁷ of new single family housing units in West Virginia were manufactured housing compared to 12.1 percent in the nation. In fact, using this measure, West Virginia had the highest share of manufactured housing placed in 2008 of all states – only Mississippi (36.1 percent), Louisiana (35.7 percent), Kentucky (31.7 percent), and Arkansas (30.6 percent) approached the Mountain State.

Of course, West Virginia does not have the most manufactured homes either in stock (as seen in the ACS numbers) or in flow. West Virginia ranks 16 in the nation for the total number of manufactured homes placed in 2008, surpassed by three Fifth District states (North Carolina, South Carolina, and Virginia). Nonetheless, as a share of the West Virginia housing market, manufactured homes cannot be discounted. The MBA and LPS data are, therefore, likely missing a large piece of the housing story in West Virginia.

Section 5: Summary

Housing market conditions in West Virginia have progressed somewhat differently than those in other parts of the Fifth District and the nation. There are communities in the Mountain State whose housing markets are strongly connected to markets in the District of Columbia, Maryland, and Northern Virginia; in those areas, house prices have fallen and subprime foreclosures have risen on par with prices and foreclosures. On the whole, however, housing and labor market conditions in West Virginia have remained stronger than those in the rest of the nation. Nonetheless, there is concern that with the limited data coverage and the prevalence of manufactured housing, we still do not fully understand housing conditions in West Virginia. Certainly, in the future, West Virginia will not be immune to the softening labor market conditions that could provide a challenge for the state's residential real estate markets.

¹⁶ The South includes: Alabama, Arkansas, District of Columbia, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

¹⁷ This figure was calculated using annual single-family building permits from the Bureau of the Census/Haver Analytics and the number of new manufactured homes placed from the Bureau of the Census. The figure was calculated by dividing the number of new manufactured homes placed in 2008 by the sum of the number of new manufactured homes placed and the number of single-family building permits.

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.

Appendix A: Metropolitan Area Data

Table 5 General Housing Statistics

Geographic Area	Housing Units					Percent of Owner-Occupied Mortgages With:			
	Total	Vacant	Occupied	Owner-Occupied		Prime Loan	Subprime Loan	Adjustable Rate	Interest Only
				Total	With a Mortgage				
Beckley	36,907	6,392	30,515	23,786	12,239	80.37	19.63	8.76	0.86
Bluefield									
Entire MSA	51,073	8,656	42,417	31,390	13,443				
WV Portion						86.44	13.56	5.08	0.53
Charleston	144,926	18,930	125,996	93,740	50,461	91.44	8.56	5.34	1.11
Clarksburg	43,852	5,989	37,863	28,331	14,612	87.55	12.45	7.00	1.31
Cumberland									
Entire MSA	46,230	6,003	40,227	28,034	14,563				
WV Portion						91.23	8.77	5.06	0.84
Hagerstown-Martinsburg									
Entire MSA	113,041	13,041	100,000	70,564	46,779				
WV Portion						89.85	10.15	12.86	6.92
Huntington-Ashland									
Entire MSA	132,366	18,079	114,287	82,463	45,809				
WV Portion						87.01	12.99	6.93	1.22
Morgantown	51,068	9,521	41,547	28,827	14,885	93.76	6.24	6.64	1.47
Parkersburg									
Entire MSA	75,263	7,912	67,351	48,645	27,942				
WV Portion						89.27	10.73	6.12	1.08
Wheeling									
Entire MSA	69,503	7,419	62,084	44,655	24,032				
WV Portion						88.36	11.64	5.37	1.02
Winchester									
Entire MSA	52,319	8,035	44,284	32,470	22,420				
WV Portion						90.10	9.90	7.33	3.72
West Virginia	882,631	148,782	733,849	549,401	278,234	88.53	11.47	8.22	3.06
Fifth District	12,904,601	1,661,582	11,243,019	7,766,133	5,395,627	90.17	9.83	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, 2009) 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		March, 2009		
	Percent 90+ Days Past Due	Percent in Foreclosure	Percent 90+ Days Past Due	Percent in Foreclosure	Percent in REO
Beckley	1.02	0.62	1.26	0.96	0.17
Bluefield*	0.94	0.51	1.73	1.51	0.00
Charleston	0.93	0.57	1.82	0.88	0.29
Clarksburg	1.22	0.76	2.14	1.00	0.40
Cumberland*	0.77	0.44	1.44	1.00	0.11
Hagerstown-Martinsburg*	1.41	1.07	3.27	2.35	1.30
Huntington-Ashland*	1.45	0.53	1.98	1.33	0.35
Morgantown	0.52	0.21	0.86	0.52	0.07
Parkersburg*	1.19	0.79	2.11	1.15	0.53
Wheeling*	0.58	0.89	1.56	1.03	0.58
Winchester*	1.29	0.86	1.96	2.18	0.54
West Virginia Fifth District	1.14	0.74	2.22	1.40	0.55
	1.00	0.56	2.24	1.16	0.43

*Only the West Virginia portion of these MSAs 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) and Mortgage Bankers Association (2009:Q1)/Haver Analytics.

Table 7
Owner-Occupied Subprime Loan Statistics

Geographic Area	March, 2008		March, 2009		
	Percent 90+ Days Past Due	Percent in Foreclosure	Percent 90+ Days Past Due	Percent in Foreclosure	Percent in REO
Beckley	6.17	1.85	8.43	6.13	1.92
Bluefield*	9.68	3.23	12.62	6.80	1.94
Charleston	7.66	4.99	18.14	6.70	1.30
Clarksburg	6.51	3.55	11.28	11.28	0.00
Cumberland*	10.17	3.39	N./A.	N./A.	N./A.
Hagerstown-Martinsburg*	8.44	5.31	20.11	10.33	4.06
Huntington-Ashland*	13.78	4.11	16.05	9.36	2.68
Morgantown	6.67	3.81	14.44	3.33	1.11
Parkersburg*	10.53	6.07	12.26	11.32	2.83
Wheeling*	8.79	3.85	10.27	6.85	1.37
Winchester*	8.33	3.33	14.00	6.00	2.00
West Virginia	8.67	4.41	14.92	7.63	2.16
Fifth District	9.82	4.53	17.95	7.55	2.97

*Only the West Virginia portion of these MSAs is included here. REO numbers for 2008 are not included due to changes in coverage.

Notes: Metro areas with less than 50 raw subprime loans receive an N/A for subprime performance.

Source: Federal Reserve Bank of Richmond estimates using data from Lender Processing Services (LPS) Applied Analytics (March 2009) and Mortgage Bankers Association (2009:Q1)/Haver Analytics.

Table 8
Unemployment Rates

Geographic Area	Unemployment Rate	Percentage Point
		Increase from March 2008
Beckley	6.3	1.9
Bluefield	7.0	2.7
Charleston	6.4	2.4
Clarksburg	6.6	2.0
Cumberland	8.7	3.0
Hagerstown-Martinsburg	9.8	4.9
Huntington-Ashland	7.6	2.7
Morgantown	4.7	1.3
Parkersburg	9.0	3.7
Wheeling	8.5	2.9
Winchester	8.6	4.6
West Virginia	7.6	2.9
5th District	8.8	4.0

Source: Bureau of Labor Statistics (March 2009)

Appendix B: County Level Data

Table 9
Owner-Occupied Prime Loan Statistics
Charleston MSA

Geographic Area	March, 2008		March, 2009		
	Percent 90+ Days Past Due	Percent in Foreclosure	Percent 90+ Days Past Due	Percent in Foreclosure	Percent in REO
Berkeley County	1.40	1.05	3.30	2.31	1.38
Morgan County	1.53	1.27	3.01	2.88	0.39

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 10
Owner-Occupied Prime Loan Statistics
Hagerstown-Martinsburg MSA

Geographic Area	March, 2008		March, 2009		
	Percent 90+ Days Past Due	Percent in Foreclosure	Percent 90+ Days Past Due	Percent in Foreclosure	Percent in REO
Boone County	1.22	0.70	2.29	1.14	0.49
Clay County	N./A.	N./A.	N./A.	N./A.	N./A.
Kanawha County	0.94	0.60	2.07	0.98	0.33
Lincoln County	0.38	0.76	1.07	1.42	0.36
Putnam County	1.05	0.52	1.35	0.62	0.16

Notes: FHA and VA loans as well as interest-only loans are included in the count of prime loans. Counties with less than 100 raw loans receive an N/A. 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 11
Owner-Occupied Subprime Loan Statistics
Charleston MSA

Geographic Area	March, 2008		March, 2009		
	Percent 90+ Days Past Due	Percent in Foreclosure	Percent 90+ Days Past Due	Percent in Foreclosure	Percent in REO
Berkeley County	8.10	4.83	20.98	10.18	3.67
Morgan County	11.67	10.00	11.76	11.76	7.84

Source: Federal Reserve Bank of Richmond estimates using data from Lender Processing Services (LPS) Applied Analytics (March, 2009). REO numbers for 2008 are not included due to changes in coverage.

Table 12
Owner-Occupied Subprime Loan Statistics
Hagerstown-Martinsburg MSA

Geographic Area	March, 2008		March, 2009		
	Percent 90+ Days Past Due	Percent in Foreclosure	Percent 90+ Days Past Due	Percent in Foreclosure	Percent in REO
Boone County	8.20	3.28	N./A.	N./A.	N./A.
Clay County	N./A.	N./A.	N./A.	N./A.	N./A.
Kanawha County	7.18	4.95	16.62	7.87	1.17
Lincoln County	N./A.	N./A.	N./A.	N./A.	N./A.
Putnam County	9.73	2.65	16.28	3.49	2.33

Notes: Counties with less than 100 raw loans receive an N/A and counties with less than 50 raw subprime loans receive an N./A. for subprime performance. REO numbers for 2008 are not included due to changes in coverage.

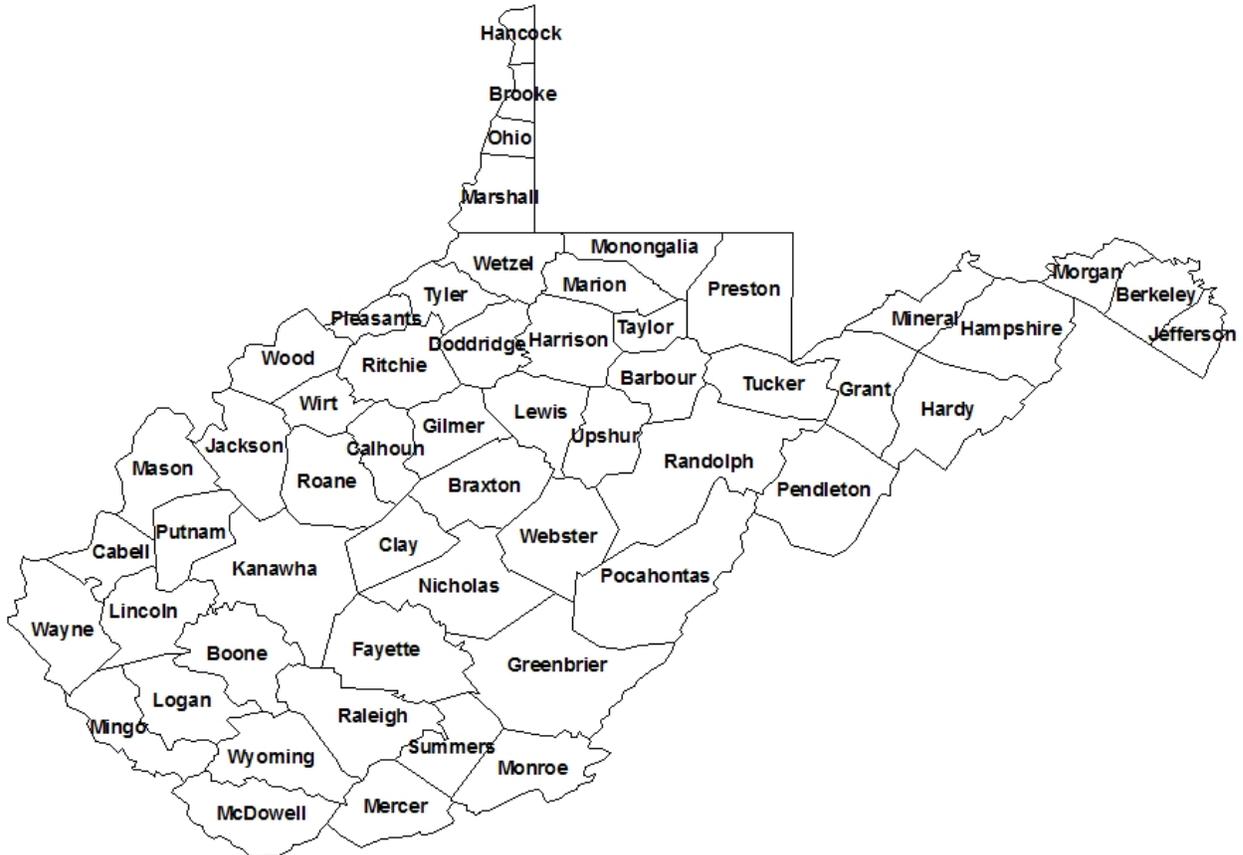
Source: Federal Reserve Bank of Richmond estimates using data from Lender Processing Services (LPS) Applied Analytics (March, 2009)

Appendix C: MSA Definitions

1. **Beckley***, **WV**– Raleigh County, WV
2. **Bluefield***, **WV-VA**– Mercer County, WV; Tazewell, VA
3. **Charleston, WV MSA**– Boone County, WV; Clay County, WV; Kanawha County, WV; Lincoln County, WV; Putnam County, WV
4. **Clarksburg***, **WV**– Doddridge County, WV; Harrison County, WV; Taylor County, WV
5. **Cumberland, MD-WV MSA**– Allegany County, MD; Mineral County, WV
6. **Hagerstown-Martinsburg, MD-WV MSA**– Berkeley County, WV; Morgan County, WV; Washington County, MD
7. **Huntington-Ashland, WV-KY-OH MSA**– Boyd County, KY; Greenup County, KY; Lawrence County, OH; Cabell County, WV; Wayne County, WV
8. **Morgantown, WV MSA**– Monongalia County, WV; Preston County, WV
9. **Parkersburg, WV-OH MSA**– Pleasants County, WV; Washington County, OH; Wirt County, WV; Wood County, WV
10. **Wheeling, WV-OH MSA**– Belmont County, OH; Marshall County, WV; Ohio County, WV
11. **Winchester, VA-WV MSA**– Frederick County, VA; Winchester city, VA; Hampshire County, WV

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

Appendix D: West Virginia Counties



Appendix D

Loan Processing Services, Inc. Applied Analytics Mortgage Data (LPS Data) does not have as complete coverage of subprime loans as it does 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 West Virginia. It has no impact on the subprime performance numbers.

The LPS data in this document is subject to revision.