### Economic Trends Across the Region

# Change in the Fifth District: What Can the 2010 Census Tell Us?

BY SONYA RAVINDRANATH WADDELL

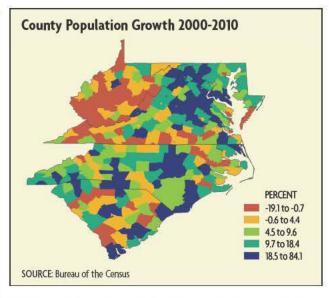
he release of new decennial census data offers a rare opportunity to document and better understand decade-long demographic and social changes among states and localities in our nation. For the Fifth Federal Reserve District, the release of the 2010 census data offers insight into population growth and demographic shifts that will continue to shape our region throughout this century. This article seeks to better understand the changes that the Fifth District has experienced and try to gain an understanding of where we might be moving in the future.

#### Population Change

The Fifth District — composed of the District of Columbia, Maryland, North Carolina, South Carolina, Virginia, and most of West Virginia — is primarily a Southern district, and its population trend is consistent with the general population movement from the Northeastern and Midwestern areas of the United States to the Western and Southern regions. From 2000 to 2010, the population of the Fifth District grew more than 13 percent, surpassing the 9.7 percent population growth of the nation as a whole. Although the District accounted for less than 10 percent of the U.S. population in 2000, the region accounted for 13.1 percent of the nation's population increase over the ensuing decade.

The Fifth District trend contrasts with those of some other areas of the country. Although only Michigan had an outright population loss from 2000 to 2010 (of less than 1 percent), a number of Northeastern states had growth of below 4 percent (Massachusetts, Vermont, Rhode Island, New York, and Pennsylvania), as did the Midwestern states of Illinois and Ohio. Of course, examining a state as a whole can mask considerable differences within the state. Even





Michigan had pockets of sizeable population growth from 2000 to 2010, despite its decline at the state level.

The Fifth District expansion was driven primarily by an increase in the adult population. About 87 percent of the population increase is accounted for by those over the age of 18. This is not a phenomenon unique to the Fifth District — about 83 percent of the national population increase was in the population over the age of 18. In 2000, both the nation and the Fifth District had about 75 percent of their population aged over 18. By 2010, almost 76 percent of the national population was over age 18 and almost 77 percent of the District was over age 18 — a small, but nonetheless steady, increase

Furthermore, the sharpest aging in the District was not in states that had an influx of older Americans in recent years such as North Carolina and South Carolina, as might have been expected. Maryland saw its population aged over 18 increase from 74.4 percent of the population in 2000 to 76.6 percent in 2010. In Washington, D.C., the share went from 80 percent to 83.2 percent. When the Census Bureau releases the more detailed population data, it will be possible to examine more extensively the change in population distribution by age in our Fifth District states.

Population growth in D.C. was the most noteworthy of the Fifth District jurisdictions, since the 5.2 percent population increase in D.C. from 2000 to 2010 was its first decennial population increase since the 1940s. Nonetheless, in total contribution to Fifth District population growth, North Carolina and South Carolina were the most important. North Carolina's 18.5 percent growth and South

#### **Population Growth Recap**

State	Population Ranking	Population 2010	Population Growth 00-10
North Carolina	10	9,535,483	18.5
Virginia	12	8,001,024	13.0
Maryland	19	5,773,552	9.0
South Carolina	24	4,625,364	15.3
West Virginia	38	1,852,994	2.5
District of Columbia	50	601,723	5.2

SOURCE: Bureau of the Census

Carolina's 15.3 percent growth put both states among the top-10 growth rates in the nation. (The fastest-growing state in the nation was Nevada with 35.1 percent growth.) In the northern part of the District, the population of Maryland expanded 9 percent over the decade while Virginia's population grew 13 percent.

The state numbers mask differences within areas of Virginia, however. The Washington, D.C., MSA and the surrounding area grew substantially over the period, while many counties in southern and southwest Virginia saw declines in population. West Virginia also struggled with population loss from 2000-2010, with more than 50 percent of counties in the state losing residents in the decade.

#### Hispanic Origin and Racial Shifts

Data on race have been collected since the first U.S. decennial census in 1790, but starting in 1997, the U.S. Office of Management and Budget (OMB) required federal agencies to use a minimum of five race categories: White; Black or African American; American Indian or Alaska Native; Asian; and Native Hawaiian or Other Pacific Islander. The Census Bureau also included a sixth category — other — for respondents unable to identify with any of these five race categories. For the first time in the 2000 census and again in the 2010 census, individuals were presented with the option to identify with more than one race. In the end, the 2010 census question on race included 15 separate response

categories and three areas where respondents could write in detailed information about their race, all of which can be combined to create the five minimum race categories plus "Some Other Race."

Federal standards issued by OMB mandate that race and ethnicity (which includes Hispanic origin) be separate and distinct concepts. For this reason, the census has one question to determine a citizen's race and another to determine whether they are of Hispanic (or Latino) origin. According to the Census Bureau, "Hispanic or Latino" refers to a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, and "origin" can be considered the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival into the United States.

People who identify their origin as Hispanic, Latino, or Spanish may be of any race.

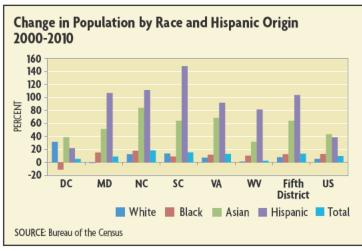
In the Fifth District, the number of people who identified with being more than one race rose from about 1.6 percent of the population in 2000 to about 2.4 percent of the population in 2010. This translates into about 300,000 more District residents who identified with being more than one race. In percentage terms, the rise was consistent with the national increase.

As a region, the Fifth District did not experience a considerable racial shift from 2000 to 2010 among those residents who consider themselves of one race.

There were small changes, however. The percent of the District population that identifies as being white fell from 71.6 percent in 2000 to 68.8 percent in 2010, offset by an increase in the share of the District that is Asian (2.4 percent to 3.6 percent) and an increase in the "other" category. Nonetheless, looking only at the District as a whole masks some notable changes within jurisdictions. For example, the white population in D.C. grew 31.4 percent while the number of residents who identified as black or African American dropped 11.1 percent.

This racial shift in D.C. — particularly the exodus of the black population — is not a new trend. According to a 2003 Urban Institute report entitled "Segregation Patterns in the District of Columbia 1980-2003," the black population in D.C. has been declining since the 1970s. In fact, from the 1970s until 2000, D.C.'s population decline was driven primarily by the contraction in the black population.

The reasons for this exodus are not entirely clear. There is some evidence — according to a *Washington Post* article in March 2011 — that the change is the result of gentrification that has transformed areas of downtown D.C., leading to rising rents across D.C. and soaring property taxes that have pushed out working-class families. According to a 2010 report by the D.C. Fiscal Policy Institute, D.C.'s low-cost rental stock has shrunk by more than one-third since 2000, and the number of D.C. homes valued at \$250,000 or less fell from 58,000 to 15,000 between 2000 and 2007.



Homes valued at this level represented more than half of the owner-occupied units in 2000, but just one-sixth of units in 2007. In addition, 40 percent of D.C. households spent more than 30 percent of their income on housing in 2007 — the federal threshold for what is considered affordable.

Some have argued, however, that it is the middle-income black population that is leaving D.C. A 2008 Urban Institute study entitled "State of Washington, D.C.'s Neighborhoods" reported that it is a decades-long perceived lack of progress in civil rights and economic equality that has encouraged the growing African-American middle-class population to leave the city. Unfortunately, the 2010 census does not provide data that could shed light on the validity of either explanation.

What is relatively new to the Fifth District is the growth in the Hispanic-origin population. In fact, more than half of the total population increase in the Fifth District was due to an increase in the number of Hispanic residents. The growth of the Hispanic population is a nationwide, not a regional, phenomenon. Although the Hispanic population more than doubled in the Fifth District, versus a 30 percent increase in the nation, the District accounted for a little less than 10 percent of the total Hispanic population growth in the United States. This is primarily because states like California, Florida, Texas, and Arizona had extremely sharp absolute changes in the number of Hispanic residents, but because their Hispanic populations are so large, the percentage changes remain lower than other states. Nonetheless, of the nine states that saw their Hispanic populations more than double from 2000 to 2010, three of them - Maryland, North Carolina, and South Carolina are in the Fifth District.

With 421,157 more Hispanic residents in 2010 than in 2000 (111 percent growth), North Carolina had the largest absolute increase among Fifth District states. (In percentage terms, South Carolina's 148 percent increase was higher.) According to a report by John D. Kasarda and James H. Johnson of the University of North Carolina at Chapel Hill entitled "The Economic Impact of the Hispanic Population on the State of North Carolina," between 1995 and 2004, 38.2 percent of Hispanic residents in North Carolina came directly from abroad, 40.2 percent migrated from another jurisdiction, and 21.6 percent were born in North Carolina. The majority of those coming from abroad came from Mexico and most reside in North Carolina's metropolitan areas. The report argues that for the most part, the growth of the Hispanic population in North Carolina has been a form of labor migration, and in 2005 nearly 75 percent of all Hispanics in North Carolina were employed in four industries: construction (42.2 percent), wholesale and retail trade (11.5 percent), manufacturing (10.7 percent), and agriculture, forestry, fishing, and hunting (9.2 percent).

Once again, however, examining states as a whole obscures trends within states. Northern and central Virginia had particularly strong growth in the Hispanic population, as did the southeastern portion of South Carolina. In

Northern Virginia, there can be little doubt that the boom in residential construction in the first seven years of the decade was at least partly responsible for the strong growth in the number of Hispanic residents. According to a 2008 report by the Pew Hispanic Center, Hispanic workers account for about one-fourth of construction industry employment in the nation and were among the greatest beneficiaries of the housing boom. The suburbs of Washington, D.C., particularly Northern Virginia and the Maryland suburbs, were among the areas of the Fifth District that experienced the sharpest housing market boom (and decline).

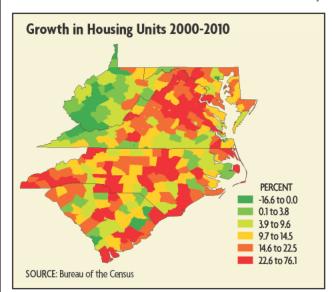
Scattered counties throughout the District also had sharp increases in their Hispanic populations. For example, when the number of Hispanic residents in Gilmer County in central West Virginia rose from 50 people in 2000 to 493 people in 2010, that translated to an almost 900 percent increase in the county's Hispanic population.

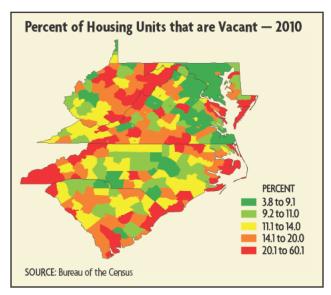
#### **Housing Units**

The release of the 2010 census also offers a glimpse into changes in the housing sector from 2000 to 2010. Given the upheaval in residential real estate in the past few years, however, looking just at the change over the decade masks shifts in total housing units and vacancy rates within the decade.

From 2000 to 2010, the total number of housing units in the Fifth District rose 17 percent. Although the census does not yet provide data on the change in the number of households over the same period, we do know that the total growth of Fifth District population older than 18 in the same period was 15.3 percent — 1.7 percentage points below the increase in housing units. This suggests that housing units in the Fifth District grew faster than the number of households over the decade. The growth in housing units in the Fifth District outpaced that of the nation, where the number of units grew 12.2 percent and the population over 18 expanded only 10.7 percent.

Data from the Census Bureau's American Community





Survey (ACS) can shed some light on housing markets between 2000 and 2010. The ACS collects and produces population and housing information every year based on a sample of about 3 million households nationwide. Because of the small sample size, it is often preferable to use the ACS three-year estimates that compile the data collected over three years. The ACS data suggest that much of the housing unit boom in the Fifth District was concentrated in the early part of the decade. The number of housing units grew 4.8 percent at an average annual rate from 2002 to 2006, but only 1.5 percent on average from 2006 to 2008. Using 2010 census data, annual average growth in Fifth District housing units fell further, to 1.2 percent, from 2008 to 2010.

The decade-long rise in housing units was geographically widespread. From 2000 to 2010, the number of housing units increased in all states and almost all counties in the Fifth District, albeit not uniformly. North Carolina and South Carolina saw the biggest booms in housing, with the number of units rising more than 20 percent in each. Drilling down to the county level, however, reveals that counties in Northern Virginia, Maryland, and along the coast of North and South Carolina saw the sharpest residential building boom, although areas in the center of the Fifth District also experienced notable rises in the number of units. Only West Virginia — at least the areas not connected to the Washington, D.C., MSA — escaped the boom in housing construction.

Vacancy rates also rose over the decade. In 2000, 9.7 percent of Fifth District housing units (and 9 percent of housing units in the United States) were vacant. By the 2010 census, 11.9 percent of Fifth District housing units and 11.3 percent of housing units in the nation were vacant. At least some of this increase in vacancy must be due to the

housing downturn in the few years before the 2010 census. The ACS provides some evidence for this: In 2002, the Fifth District residential vacancy rate was 11.3 percent; in 2005-2007, the vacancy rate moved up to 12.4 percent; and by 2007-2009, the rate had moved up to 13.2 percent. This means that from 2002-2006, the Fifth District vacancy rate moved up about 0.2 percentage point every year, while from 2006-2008, the rate moved up about 0.4 percentage point each year. This indicates that vacancy rates increased at a faster rate toward the end of the decade. Unfortunately, we do not have more precise, or frequent, data on housing vacancy at the regional level. Data from the Census Bureau on the entire United States indicates some increase in the vacancy rate from 2000, but a steeper rise from the end of 2005 through the beginning of 2009.

Among Fifth District states, residential vacancy rates have traditionally been the highest in South Carolina, which also saw the sharpest increase since 2000. Over the decade, the vacancy rate rose 3.2 percentage points in the state to 15.7 percent by 2010. Virginia continued to report the lowest vacancy rate - 9.2 percent in 2010 - although even the Virginia rate rose 2.2 percentage points since 2000. Drilling down to the county level, it is clear that the recent housing market downturn explains only part of the housing story, since southern and southwest Virginia, as well as some central parts of North Carolina, saw notable increases in vacancy rates. The population declines discussed above and illustrated in the population map provide some insight into the rise in vacancy. The Danville metropolitan statistical area in southern Virginia, for example, is the only MSA in the state to see its population decline steadily over the decade.

#### Conclusion

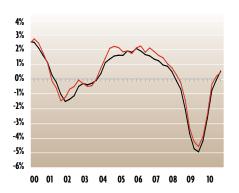
The 2010 census data reveal a number of important changes in the economic and demographic characteristics of the Fifth District. Overall, the District is proving to be an attractive place to live. As the population continues to increase, District states, counties, and localities will have to grapple with increased population density and diversity in the makeup of residents. The increased diversity of District residents is evident in the expansion of the Hispanic population. Further, the census brings to light the challenges in residential real estate that will continue to confront both the District and the nation. As the Census Bureau continues to release more detailed information, it will be important to follow these trends and use the new data to understand better the reasons behind demographic and economic developments throughout the Fifth District and the implications of those changes. RF

## State Data, Q4:10

	DC	MD	NC	sc	VA	WV
Nonfarm Employment (000s)	714.5	2,516.4	3,858.0	1,808.4	3,631.8	747.7
Q/Q Percent Change	0.7	-0.1	0.0	0.0	0.0	0.0
Y/Y Percent Change	1.6	0.4	0.0	1.0	0.4	1.0
Manufacturing Employment (000s)	1.2	113.6	431.0	209.1	229.4	49.2
Q/Q Percent Change	0.0	-0.6	-0.1	0.7	-0.2	0.0
Y/Y Percent Change	-7.7	-2.3	-0.5	0.8	-1.7	0.5
Professional/Business Services Employment	t (000s) 150.1	388.6	489.5	222.7	656.7	61.2
Q/Q Percent Change	0.5	0.7	1.0	2.3	1.0	0.3
Y/Y Percent Change	2.0	1.8	4.6	9.5	2.7	2.0
Government Employment (000s)	247.6	497.8	693.1	334.4	698.8	150.9
Q/Q Percent Change	1.8	-0.9	-0.7	-3.4	0.0	-1.1
Y/Y Percent Change	2.2	0.2	-1.6	-3.3	-0.4	0.2
Civilian Labor Force (000s)	331.1	2,979.2	4,464.2	2,162.6	4,181.1	778.9
Q/Q Percent Change	-0.3	0.0	-0.5	0.1	0.1	0.0
Y/Y Percent Change	-0.4	0.0	-1.4	-0.1	0.2	-1.4
Unemployment Rate (%)	9.7	7.4	9.8	10.9	6.6	9.6
Q3:10	9.8	7.4	10.1	11.0	6.8	9.2
Q4:09	10.3	7.6	11.2	11.8	7.1	8.6
Real Personal Income (\$Mil)	38,858.0	257,039.9	307,826.8	139,344.7	325,616.2	55,119.3
Q/Q Percent Change	0.7	0.4	0.3	0.5	0.5	0.3
Y/Y Percent Change	3.1	2.5	3.1	2.9	2.9	3.7
Building Permits	139	1,969	6,621	2,870	3,598	276
Q/Q Percent Change	-40.9	-37.0	-22.0	-14.9	-40.8	-34.8
Y/Y Percent Change	-67.0	-33.8	-11.9	-24.6	-23.8	-24.8
House Price Index (1980=100)	569.3	432.1	318.6	324.0	412.4	227.0
Q/Q Percent Change	-0.5	-1.1	-0.8	-0.7	-0.6	0.4
Y/Y Percent Change	0.7	-1.4	-2.3	-2.4	-1.4	1.1
Sales of Existing Housing Units (000s)	7.6	68.0	125.2	67.6	96.4	26.4
Q/Q Percent Change	-5.0	6.3	14.7	15.8	-5.9	6.5
Y/Y Percent Change	-26.9	-22.4	-23.1	-17.2	-19.9	-19.5

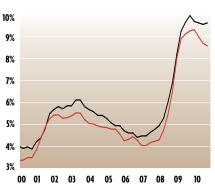
#### **Nonfarm Employment**

Change From Prior Year First Quarter 2000 - Fourth Quarter 2010



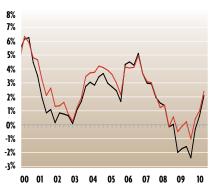
#### **Unemployment Rate**

First Quarter 2000 - Fourth Quarter 2010



#### **Real Personal Income**

Change From Prior Year First Quarter 2000 - Fourth Quarter 2010

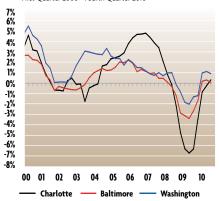


#### **Fifth District**

#### **United States**

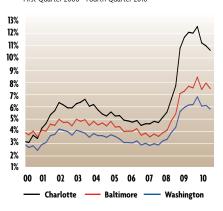
#### **Nonfarm Employment** Metropolitan Areas

Change From Prior Year First Quarter 2000 - Fourth Quarter 2010



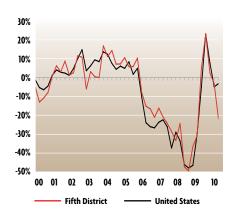
#### **Unemployment Rate Metropolitan Areas**

Change From Prior Year First Quarter 2000 - Fourth Quarter 2010



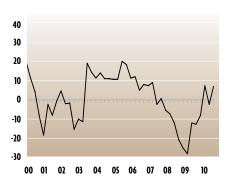
### **Building Permits**

Change From Prior Year First Quarter 2000 - Fourth Quarter 2010



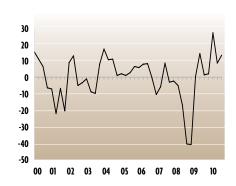
#### FRB-Richmond **Services Revenues Index**

First Quarter 2000 - Fourth Quarter 2010



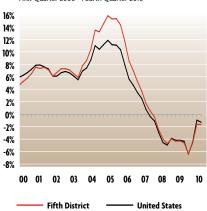
#### FRB—Richmond **Manufacturing Composite Index**

First Quarter 2000 - Fourth Quarter 2010



#### **House Prices**

Change From Prior Year First Quarter 2000 - Fourth Quarter 2010



1) FRB-Richmond survey indexes are diffusion indexes representing the percentage of responding firms reporting increase minus the percentage reporting decrease.

The manufacturing composite index is a weighted average of the shipments, new orders, and employment

2) Building permits and house prices are not seasonally adjusted; all other series are seasonally adjusted.

#### SOURCES:

Real Personal Income: Bureau of Economic Analysis/Haver Analytics.

Unemployment rate: LAUS Program, Bureau of Labor Statistics, Ú.S. Department of Labor,

http://stats.bls.gov. Employment: CES Survey, Bureau of Labor Statistics, U.S. Department of Labor, http://stats.bls.gov. Building permits: U.S. Census Bureau, http://www.census.gov.

House prices: Federal Housing Finance Agency, http://www.fhfa.gov.

## Metropolitan Area Data, Q4:10 ——

	Washington, DC	Baltimore, MD	Hagerstown-Martinsburg, MD-WV
Nonfarm Employment (000s)	2,424.8	1,280.1	97.5
Q/Q Percent Change	0.3	0.3	0.1
Y/Y Percent Change	0.9	0.1	-0.6
Unemployment Rate (%)	5.9	7.6	9.7
Q3:10	6.1	7.9	9.7
Q4:09	6.2	7.7	9.3
Building Permits	1,896	997	107
Q/Q Percent Change	-43.7	-23.7	-27.7
Y/Y Percent Change	-34.0	-24.8	-26.2
	Asheville, NC	Charlotte, NC	Durham, NC
Nonfarm Employment ( 000s)	168.7	807.1	281.5
Q/Q Percent Change	1.0	1.3	0.7
Y/Y Percent Change	0.5	0.3	-0.1
Unemployment Rate (%)	7.7	10.7	7.0
Q3:10	7.9	11.3	7.5
Q4:09	8.7	12.0	7.9
Building Permits	206	937	351
Q/Q Percent Change	-62.7	-24.1	-44.1
Y/Y Percent Change	-19.2	-34.7	-30.9
	Greensboro-High Point, NC	Raleigh, NC	Wilmington, NC
Nonfarm Employment (000s)	340.2	502.2	136.9
Q/Q Percent Change	0.4	0.8	-0.7
Y/Y Percent Change	-0.4	1.0	-0.1
Unemployment Rate (%)	10.1	7.8	9.6
Q3:10	10.6	8.3	9.5
Q4:09	11.4	8.9	10.5
Building Permits	444	837	361
Q/Q Percent Change	-17.2	-35.9	-11.3
Y/Y Percent Change	3.7	-31.8	-10.2

	Winston-Salem, NC	Charleston, SC	Columbia, SC
Nonfarm Employment (000s)	204.6	285.3	343.5
Q/Q Percent Change	1.1	0.3	0.7
Y/Y Percent Change	-7.5	1.5	-0.5
Unemployment Rate (%)	9.3	9.1	9.2
Q3:10	9.7	9.4	9.5
Q4:09	10.1	9.8	9.5
Building Permits	229	568	559
Q/Q Percent Change	-25.9	-14.1	-28.5
Y/Y Percent Change	61.3	-18.2	-41.7
	Greenville, SC	Richmond, VA	Roanoke, VA
Nonfarm Employment (000s)	297.7	602.6	154.6
Q/Q Percent Change	1.0	0.0	0.8
Y/Y Percent Change	1.0	-0.1	-0.7
Unemployment Rate (%)	9.3	7.3	6.9
Q3:10	9.7	7.7	7.3
Q4:09	10.4	7.9	7.5
<b>Building Permits</b>	368	601	56
Q/Q Percent Change	15.7	-41.8	-50.4
Y/Y Percent Change	4.5	-26.3	-45.6
	Virginia Beach-Norfolk, VA	Charleston, WV	Huntington, WV
Nonfarm Employment (000s)	734.3	148.3	114.7
Q/Q Percent Change	-0.5	-0.3	1.2
Y/Y Percent Change	-0.5	-0.2	-1.2
Unemployment Rate (%)	7.1	8.3	8.7
Q3:10	7.3	7.9	8.9
Q4:09	7.2	7.0	7.7
<b>Building Permits</b>	951	28	9
Q/Q Percent Change	-11.0	-31.7	0.0
Y/Y Percent Change	-24.2	-40.4	12.5

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