

The Federal Presence in the Fifth District

BY R. ANDREW BAUER AND JAKE BLACKWOOD

The Fifth District has a very diverse economy with strong manufacturing, trade, and service sectors. The District economy also benefits from the presence of the federal government from the capital in Washington, D.C., to the numerous civilian and military facilities located throughout the District. Government employment and spending is an important source of demand, attracting businesses to the region to provide goods and services to various government agencies. In many cases, these goods and services are technical in nature and require highly skilled or educated workers and sometimes also include capital-intensive production processes. These additional resources add to the District's productive capacity and higher rates of economic growth. In addition, government employment and spending has traditionally brought a source of stability to the District economy, acting as a buffer during economic downturns.

Yet with the recent focus on the budget deficit — both the short-term deficit as well as long-run fiscal imbalances — the benefit of having the federal government's presence and influence in the economy may become a potential source of uncertainty. The impact of budget cuts would vary across the Fifth District as the influence of the federal government varies in each jurisdiction, both in terms of employment and contract spending.

Civilian Employment

A primary conduit through which the government influences the economy is the civilian job market. By hiring and laying off federal employees, the government can tangibly boost or dampen a location's economy. This is particularly true in the Fifth District. In March 2011, more than 500,000 people in the Fifth District were employed directly by the federal government, many of them concentrated in the

Washington, D.C., metro area. As the District's largest employer, the federal government could greatly affect the regional job market through future budget cuts.

The influence of government employment can be further quantified by some other measures. One approach is to describe its presence in terms of the government share of total civilian employment. Four percent of Fifth District citizens were employed by the federal government (excluding the postal service and military) in March 2011, while federal employees made up only 1.6 percent of workers in the United States as a whole. At the state level, federal government shares of employment were as high as 23.7 percent in D.C., while Maryland and Virginia also posted high shares of 5.2 percent and 4.0 percent, respectively (see chart). Government shares of employment were notably lower in West Virginia and the Carolinas, although West Virginia's share (2.2 percent) was still higher than the national average.

Perhaps the geographic concentration of federal government jobs in the Fifth District helps explain the strength of the relationship between this region and the federal government. In March 2011, one-quarter of all federal government workers were employed in the Fifth District. D.C. alone accounted for 8 percent of federal employment, with Virginia (6.9 percent) and Maryland (6.2 percent) also contributing a notable amount of workers.

Fifth District citizens not only make up a disproportionate amount of federal government payrolls, they also take home larger paychecks. In the United States as a whole, 27.8 percent of federal government workers received a salary of less than \$50,000 in March 2011, whereas only 16.3 percent of all District federal employees earned less than \$50,000. District employment was also more heavily concentrated in higher-paying jobs, with 46.8 percent of federal employees making more than \$90,000 per year, while in the United States as a whole, only 30.2 percent of federal employees took home \$90,000 or more in salary (see chart on page 48).

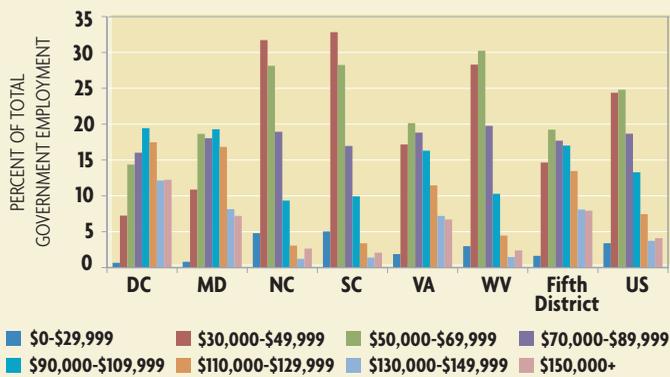
As one would expect, not all states in the Fifth District reap the same benefits from the presence of the federal government. Indeed, government influence differs greatly in the farthest states from the government seat. For example, the Carolinas have smaller shares of federal workers than both the Fifth District and the nation as a whole. Moreover, the salary distribution of federal government employees suggests that federal workers in West Virginia and the Carolinas earn less than those in D.C., Maryland, Virginia, and the nation as a whole, although some of this difference may be offset by cost of living adjustments. More than 36 percent of federal workers in the Carolinas are paid less than \$50,000 per annum, and less than 17 percent make more

Federal Employment



SOURCE: U.S. Office of Personnel Management

Federal Government Salary Distribution by State



SOURCE: U.S. Office of Personnel Management

than \$90,000 a year. According to these data, federal employment in these states underperforms both in terms of quantity and quality in comparison with the rest of the Fifth District.

Defense Employment

Although budget reductions typically carry implications for most departments and agencies, a common thread among the various proposed federal budgets this year is revision to defense spending. Most proposals address the rate of growth in total military spending, calling for tighter caps on spending rather than broad cuts. Nonetheless, many plans require absolute cuts to certain defense programs, which could have a more immediate effect on employment and the economy. This carries a good deal of weight in the Fifth District, where the Departments of the Army, the Navy, and Defense employ more than 30 percent of civilian federal government employees.

Furthermore, the employment statistics above understate the effect of defense budget cuts on Fifth District employment because they do not cover military personnel. For many citizens, the numerous military bases located in the Fifth District are the most visible representations of the federal government's influence on employment. From Fayetteville, N.C., home of Fort Bragg, to the Beltway area around Washington to the U.S. Navy installations of Hampton Roads, the military's presence is especially constant and vital to the economy. For these places, the military is an important engine of local employment. (See also "The Benefits and Burdens of Expanded Military Bases," *Region Focus*, First Quarter 2011.)

According to 2009 data, more than 250,000 military personnel were stationed in the Fifth District, making it home to 23.5 percent of the nation's military. While having a low share of civilian government employment, North Carolina accounted for 10.3 percent of all military personnel in the nation — the highest share in the Fifth District and the third highest in the nation. Virginia had the next highest share (5.8 percent), followed by South Carolina (3.0 percent), Maryland (2.8 percent), D.C. (1.2 percent), and West Virginia

(0.1 percent). Such high concentrations of military personnel in the District would make military cuts particularly significant to the region.

Budget cuts may also vary in their effect on different branches of the military, making the composition of the military in the District a notable factor. Within the Fifth District, a large majority of active military were Army personnel (41.3 percent), followed by the Marine Corps (30.0 percent), and the Air Force (16.2 percent). Notably, 30.1 percent of all Marine Corps personnel in the United States are located in North Carolina, home of Camp Lejeune, the largest Marine Corps base on the East Coast. Also, the Navy has stationed 36.4 percent of its personnel in the Fifth District, although naval personnel account for only 7.4 percent of the military in the region.

These figures and percentages are bound to shift not only in response to budgetary actions, but also in response to the shifting structure of the military. The Base Realignment and Closure plan from 2005, or BRAC, details the shifting of personnel across various institutions and, in some cases, the closure and expansion of installations. By the time of the scheduled completion date in mid-September, the Fifth District will have ultimately gained military jobs through the BRAC plan, adding 1,368 net jobs in the process, despite the closure of 11 installations in the District. These gains will not be shared equally, however, as four of the six jurisdictions will lose military personnel due to the plan. Though Virginia will gain 5,101 military jobs, and South Carolina is set to gain 1,464 jobs, D.C. will lose almost 3,000 military personnel and Maryland will lose more than 1,500 defense jobs. North Carolina and West Virginia will both lose less than 1,000 military jobs due to the realignments and closures.

Overall, both military and civilian employees in the Fifth District are likely to be affected by federal budget cuts. Even if budget cuts do not lead to outright eliminations of military or civilian positions, they could yield further pay freezes or reductions. Pay cuts would almost certainly affect the Fifth District more than some other areas, as more highly paid government workers generally shoulder a disproportionate amount of the burden when pay is cut. Whether through job loss or salary reduction, the potential impact of budget cuts causes uncertainty in the Fifth District economy via the labor market.

Federal Contract Spending

In addition to employing workers, the federal government influences the economy through fiscal expenditures. There are many forms of government expenditures: contracts, grants, loans and guarantees, direct payments, and insurance, among others. The government most directly interacts with the economy by purchasing goods and services through contracts with private sector businesses. Since the nation's capital is located within the Fifth District, a sizeable number of those contracts are with businesses located in the District. Indeed, looking at federal contract spending for fiscal year 2010, three of the Fifth District's jurisdictions

ranked in the top 10 recipients among all states.

The federal government's demand for goods and services within the District impacts the economy in a number of ways. The types of goods and services that the government purchases will affect the region's industry and the location decisions of businesses. In many cases, businesses will move to be closer to federal departments and installations, and as a consequence, there is often a clustering of contractors around these facilities and installations. In addition, the types of goods and services demanded by government are sometimes highly technical in nature and involve a longer production cycle. Defense spending, which is the second-largest expenditure in the federal budget after health care, is a good example. Many defense goods and services are highly technical and can require years of research, development, and production. The firms that enter this market, defense contractors, employ a large number of highly skilled and educated workers and have longer time horizons as their contracts often stretch over several years. For a local economy, this provides the benefit of attracting high-paying workers to an area as well as providing stability given the longer-term nature of the projects.

At the same time, reliance on government contracts brings risks of its own. For some of these goods and services, especially defense and basic research, the government is the only market. Should the contract be canceled due to shifting priorities or budget cuts, it is unlikely that these businesses would be able to find a purchaser in the private sector for their good or service.

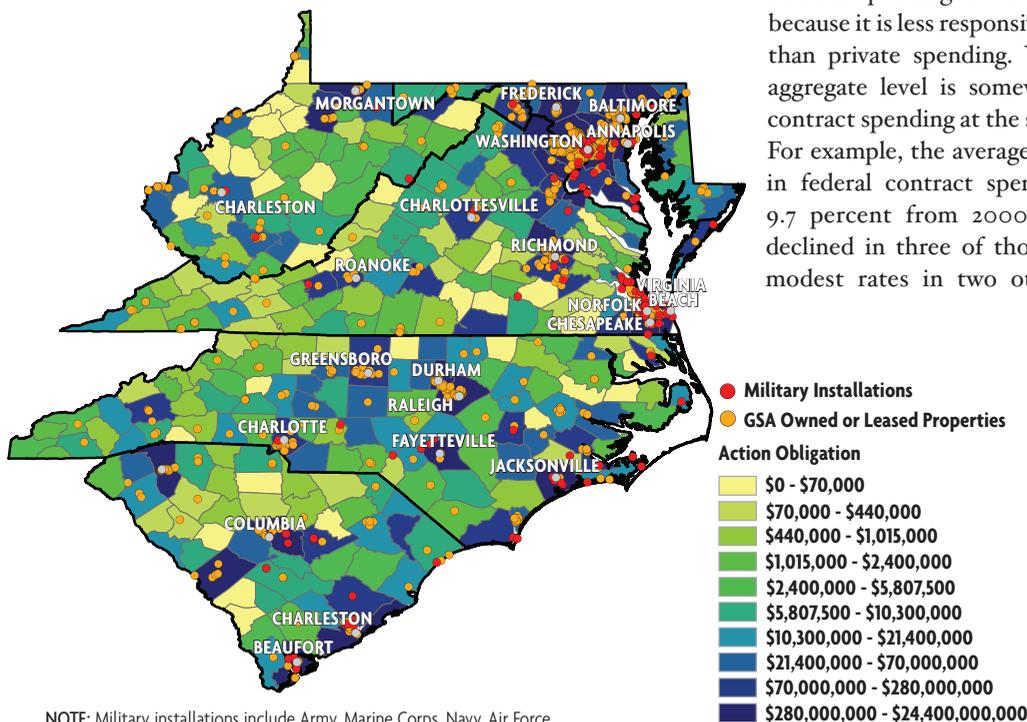
Federal Agency Spending Within the District

While the Fifth District receives a large amount of federal contracting each year, the location, source, and type of spending vary considerably across the District. Not surprisingly, Virginia, Maryland, and D.C. are the jurisdictions that receive the most federal contract dollars each year (see map). In fiscal year 2010, Virginia received nearly \$58 billion in federal contracts, second only to California, while Maryland received nearly \$26 billion, fifth highest among all states. D.C., received roughly \$21 billion, seventh among all states. South Carolina, North Carolina, and West Virginia, on the other hand, received much less (roughly \$8 billion, \$5 billion, and \$2 billion, respectively).

To gauge the impact of contract spending on a state, it is useful to scale the spending to get an idea of the size of the expenditures in proportion to regional economy. As such, contract spending as a percentage of gross state product is greatest for D.C. (2.0 percent), with Virginia (1.4 percent) second and Maryland (0.9 percent) third. Across the entire Fifth District, federal contract spending represents 0.8 percent of the District's economy. Overall federal contract spending for fiscal year 2010 was \$537 billion, representing 3.7 percent of gross domestic product for the United States in 2010. The percentage has increased for all of the jurisdictions within the Fifth District over the past 10 years with the greatest increases in D.C., Virginia, and Maryland. The increase is related to the expansion in government over the past decade — a significant amount resulting from the creation of the Department of Homeland Security as well as an increase in defense-related spending due to ongoing military operations.

Federal spending is viewed as an economic stabilizer because it is less responsive to downturns in the economy than private spending. While federal spending on an aggregate level is somewhat stable over time, federal contract spending at the state level can vary considerably. For example, the average nominal year-over-year growth in federal contract spending for North Carolina was 9.7 percent from 2000 through 2010, but spending declined in three of those years and increased at very modest rates in two other years. Similarly, in D.C., contract spending fell in 2003, increased at very modest rates in 2004 and 2007, and had much stronger growth in other years; it averaged 10.9 percent over the 11-year period. For the entire Fifth District, however, federal contract spending averaged 10.3 percent, increasing every year in nominal terms except for 2010 when spending was unchanged from 2009.

Federal Contract Spending in Fiscal Year 2010

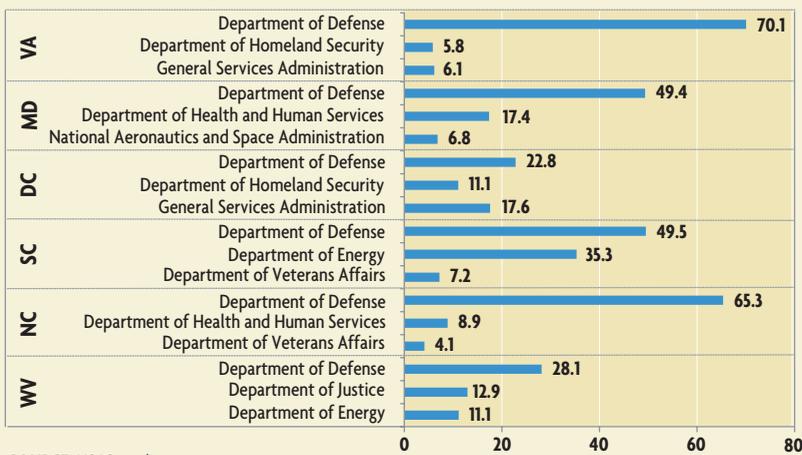


NOTE: Military installations include Army, Marine Corps, Navy, Air Force, Coast Guard, and Defense Logistics Agency.

SOURCES: Federal Procurement Data System (FPDS); Department of Defense; U.S. General Services Administration

Federal Contract Spending by Agency

Percent of total spending, 2000-2010



SOURCE: USASpending.gov

Federal Spending by Type

The type of federal spending also influences the local economy through the type of industry and businesses that it attracts. The chart above shows federal contract spending in each District jurisdiction by the top three funding agencies from 2000 to 2010. Some interesting patterns emerge when looking at spending through this lens. Not surprisingly, the Department of Defense is the primary source of contracting dollars in each of the jurisdictions in the District. Research and development on defense-related technology is a strong component of all contract spending within the District, as is spending on defense-related goods such as aircraft carriers, drones, camouflage, ammunition, and combat vehicles. The Defense Department also contracts for technical support services for its data systems and logistical support for its many programs.

As the chart indicates, there are notable differences in the proportion of defense spending relative to total spending. In Virginia and North Carolina, Department of Defense contracts accounted for 70 percent and 65 percent, respectively, of all contract dollars from 2000 to 2010. A number of factors account for the high percentage of defense spending in both states — notably, the Pentagon, the Norfolk shipyard, and the various military bases in Virginia and North Carolina. In Maryland and South Carolina, defense contracts accounted for nearly half of all contract dollars over the past 11 years; in D.C. and West Virginia, it was considerably less, closer to one-quarter of all spending. Overall, it is clear that the Fifth District has benefited from federal spending on defense.

Civilian contract spending by agency varies considerably across the District. Not surprisingly, Homeland Security spending is strong in Virginia and D.C.

Health and Human Services (HHS) contract spending is strong in Maryland, in part due to institutions such as the National Institutes of Health, the Centers for Medicare and Medicaid Services, and the Food and Drug Administration there; HHS spending is also strong in North Carolina. In South Carolina and West Virginia, the Department of Energy (DOE) is one of the largest contracting agencies, also partly as a result of having significant installations in those states.

As one would expect, the goods and services being provided to these agencies vary considerably across the District. The chart below shows the top three services that have been contracted from 2000 to 2011. There are some commonalities, however. In most jurisdictions, agencies contract with private businesses for professional, administrative, and management support service.

These services provide agencies with program management, logistical support, technical assistance, and systems engineering.

Agencies also frequently contract with businesses for information technology services such as data storage, systems development, telecommunications network management, and systems analysis. Along with these services are purchases of data processing equipment, software, supplies, and support equipment — the category of goods most purchased by the government in the Fifth District over the past 11 years, representing nearly one-quarter of all goods purchases. Purchases of communication, detection, and coherent radiation equipment were the second-highest over that period — roughly 10 percent of all goods contract spending.

Spending on research and development is also strong within the Fifth District and the type of research conducted is very broad, ranging from research in defense-related systems and applications to energy research to biomedical research. In Maryland, research and development includes defense services; defense electronics and communication

Federal Contract Spending by Type of Service

Percent of total spending, 2000-2010



SOURCE: USASpending.gov

equipment; space science, applications and operations; biomedical; and defense missile and space systems. In Virginia, contract spending on research and development focuses on the defense industry, with “other defense” and defense services receiving the greatest amount of research and development contracts. In addition, R&D spending in Virginia includes defense electronics and communication equipment, defense missile and space systems, and tank and automotive systems, among other research types. In North Carolina, the other Fifth District jurisdiction with a relatively high percentage of research and government contracting, contracts for research are focused on biomedical; basic research, including basic research in biomedical, AIDS, and defense services; defense missile and space systems; and other defense and health-related work.

Agencies also contract private businesses for building construction. This is true across the District, but as a percentage of total contracts, construction spending is considerably more substantial in the Carolinas and West Virginia.

Conclusion

In conclusion, the federal government has a strong influence on the Fifth District through its hiring and its purchasing of

goods and services from the private sector. The District has a much higher percentage of federal workers than other areas of the United States, and those workers, on average, receive higher salaries than federal workers in other parts of the country.

The District benefits from the presence of numerous military installations. Federal contract spending attracts businesses to the region to provide services and goods to the various government agencies at these installations. In addition, government contracting attracts workers, often with specific skills or advanced degrees, to the region. As a consequence, the District labor market is stronger both in the underlying demand for workers as well as the quality of the supply of workers.

With the possibility of budget cuts in response to the federal deficit and longer-term fiscal imbalances, there is concern about the impact of those cuts on the Fifth District economy. Reducing the deficit and putting the federal government on a fiscal sustainable path is a long-term positive for the United States and the District economy. Yet it also creates uncertainty for workers and businesses within the District who have, in the past, benefited from the federal government’s influence on the regional economy. **RF**



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State Data, Q1:11

	DC	MD	NC	SC	VA	WV
Nonfarm Employment (000s)	714.6	2,511.3	3,877.6	1,814.8	3,647.2	748.6
Q/Q Percent Change	0.0	-0.2	0.5	0.4	0.4	0.1
Y/Y Percent Change	1.3	0.7	0.6	1.1	1.1	1.0
Manufacturing Employment (000s)	1.2	112.1	435.0	210.1	231.1	49.3
Q/Q Percent Change	0.0	-1.3	0.9	0.5	0.7	0.2
Y/Y Percent Change	-7.7	-2.6	1.0	2.0	-0.2	1.1
Professional/Business Services Employment (000s)	149.3	389.4	494.5	221.6	660.0	62.4
Q/Q Percent Change	-0.5	0.2	1.0	-0.5	0.5	2.1
Y/Y Percent Change	1.4	2.0	4.6	9.8	3.1	3.9
Government Employment (000s)	249.5	499.6	695.2	334.1	703.0	149.9
Q/Q Percent Change	0.8	0.4	0.3	-0.1	0.6	-0.7
Y/Y Percent Change	2.1	0.6	-1.3	-3.8	0.2	-1.3
Civilian Labor Force (000s)	333.7	2,977.5	4,469.8	2,155.4	4,188.1	781.8
Q/Q Percent Change	0.8	-0.1	0.1	-0.3	0.2	0.4
Y/Y Percent Change	-0.6	-0.2	-1.9	-0.6	-0.1	-0.7
Unemployment Rate (%)	9.5	7.1	9.8	10.2	6.4	9.4
Q4:10	9.7	7.4	9.8	10.9	6.6	9.6
Q1:10	10.2	7.6	11.4	11.6	7.2	8.8
Real Personal Income (\$Mil)	38,995.3	260,434.4	305,876.0	137,940.7	325,741.7	54,028.0
Q/Q Percent Change	0.9	0.9	1.0	0.9	0.8	0.3
Y/Y Percent Change	4.5	3.4	2.7	3.5	3.6	2.7
Building Permits	714	2,414	8,471	3,569	5,837	364
Q/Q Percent Change	413.7	22.6	27.9	24.4	62.2	31.9
Y/Y Percent Change	138.8	-19.1	-7.3	-19.1	12.4	-13.3
House Price Index (1980=100)	560.2	417.1	311.9	317.3	401.6	219.8
Q/Q Percent Change	-1.5	-3.3	-2.0	-1.9	-2.3	-1.5
Y/Y Percent Change	0.3	-3.8	-2.6	-2.9	-2.2	-0.0
Sales of Existing Housing Units (000s)	10.0	82.4	140.8	68.4	112.4	28.4
Q/Q Percent Change	31.6	21.2	12.5	1.2	16.6	7.6
Y/Y Percent Change	13.6	9.0	-0.8	-1.7	2.2	7.6

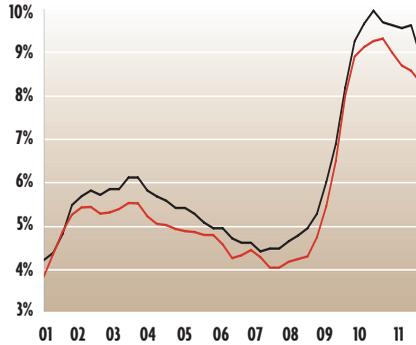
Nonfarm Employment

Change From Prior Year
First Quarter 2001 - First Quarter 2011



Unemployment Rate

First Quarter 2001 - First Quarter 2011



Real Personal Income

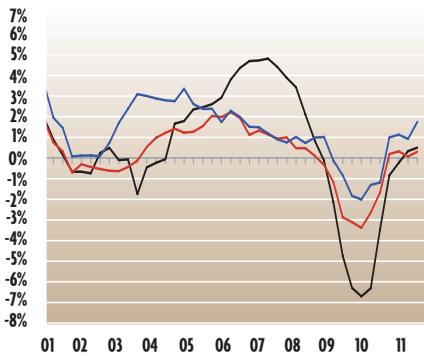
Change From Prior Year
First Quarter 2001 - First Quarter 2011



— Fifth District — United States

Nonfarm Employment Metropolitan Areas

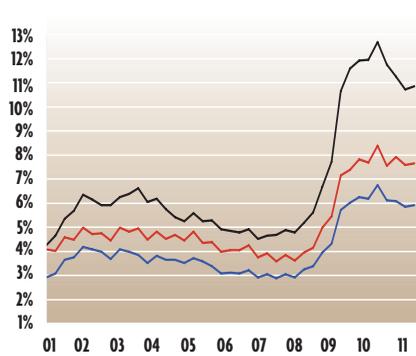
Change From Prior Year
First Quarter 2001 - First Quarter 2011



— Charlotte — Baltimore — Washington

Unemployment Rate Metropolitan Areas

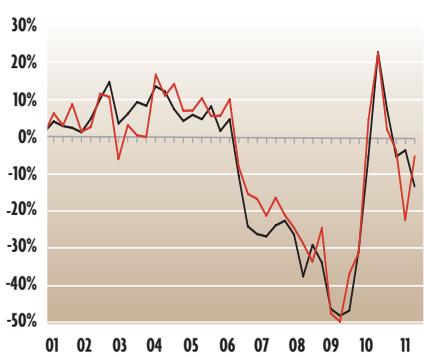
Change From Prior Year
First Quarter 2001 - First Quarter 2011



— Charlotte — Baltimore — Washington

Building Permits

Change From Prior Year
First Quarter 2001 - First Quarter 2011



— Fifth District — United States

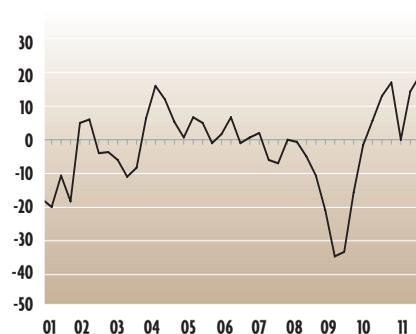
FRB—Richmond Services Revenues Index

First Quarter 2001 - First Quarter 2011



FRB—Richmond Manufacturing Composite Index

First Quarter 2001 - First Quarter 2011



House Prices

Change From Prior Year
First Quarter 2001 - First Quarter 2011



— Fifth District — United States

NOTES:

- 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 indexes.
- 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, U.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, Q1:11

	Washington, DC	Baltimore, MD	Hagerstown-Martinsburg, MD-WV
Nonfarm Employment (000s)	2,394.4	1,249.4	95.5
Q/Q Percent Change	-1.3	-2.4	-2.1
Y/Y Percent Change	1.7	0.3	0.2
Unemployment Rate (%)	5.9	7.7	10.3
Q4:10	5.9	7.6	9.7
Q1:10	6.8	8.4	10.9
Building Permits	4,156	1,079	125
Q/Q Percent Change	119.2	8.2	16.8
Y/Y Percent Change	22.2	-26.7	-26.5
	Asheville, NC	Charlotte, NC	Durham, NC
Nonfarm Employment (000s)	164.7	797.8	279.0
Q/Q Percent Change	-2.4	-1.1	-0.9
Y/Y Percent Change	0.7	0.5	0.7
Unemployment Rate (%)	8.6	10.9	7.4
Q4:10	7.7	10.7	7.0
Q1:10	10.0	12.7	8.5
Building Permits	287	1,429	456
Q/Q Percent Change	39.3	52.5	29.9
Y/Y Percent Change	-7.7	-18.2	2.2
	Greensboro-High Point, NC	Raleigh, NC	Wilmington, NC
Nonfarm Employment (000s)	335.6	499.7	134.1
Q/Q Percent Change	-1.4	-0.5	-2.0
Y/Y Percent Change	0.0	2.6	0.4
Unemployment Rate (%)	10.6	8.1	10.2
Q4:10	10.1	7.8	9.6
Q1:10	12.4	9.7	11.7
Building Permits	649	1,093	389
Q/Q Percent Change	46.2	30.6	7.8
Y/Y Percent Change	20.9	-26.9	-37.3

	Winston-Salem, NC	Charleston, SC	Columbia, SC
Nonfarm Employment (000s)	202.0	283.0	341.3
Q/Q Percent Change	-1.3	-0.8	-0.6
Y/Y Percent Change	-0.6	2.0	-0.1
Unemployment Rate (%)	9.7	8.2	8.3
Q4:10	9.3	9.1	9.2
Q1:10	11.2	9.9	9.6
Building Permits	201	719	786
Q/Q Percent Change	-12.2	26.6	40.6
Y/Y Percent Change	-21.5	-28.3	-15.2
	Greenville, SC	Richmond, VA	Roanoke, VA
Nonfarm Employment (000s)	295.0	594.6	151.9
Q/Q Percent Change	-0.9	-1.3	-1.7
Y/Y Percent Change	1.5	0.4	-0.5
Unemployment Rate (%)	8.3	7.3	7.1
Q4:10	9.3	7.3	6.9
Q1:10	10.5	8.4	8.2
Building Permits	431	610	107
Q/Q Percent Change	17.1	1.5	91.1
Y/Y Percent Change	-19.4	-30.9	0.0
	Virginia Beach-Norfolk, VA	Charleston, WV	Huntington, WV
Nonfarm Employment (000s)	719.1	146.1	112.6
Q/Q Percent Change	-2.1	-1.5	-1.8
Y/Y Percent Change	-0.2	0.6	-0.1
Unemployment Rate (%)	7.3	9.1	9.5
Q4:10	7.1	8.3	8.7
Q1:10	7.9	8.5	9.2
Building Permits	1,158	24	4
Q/Q Percent Change	21.8	-14.3	-55.6
Y/Y Percent Change	2.9	-48.9	-66.7

For more information, contact Sonya Ravindranath Waddell at (804) 697-2694 or e-mail Sonya.Waddell@rich.frb.org