

District Economic

BY ROBERT LACY

Growth in economic activity within the Federal Reserve's Fifth District was modest in recent months. Consumers continued to spend, but outside of automobiles and houses, their appetite for goods and services was light. Slow growth in personal income, diminished wealth due to stock market losses, and the threat of war with Iraq all played a role.

Did You Know . . .

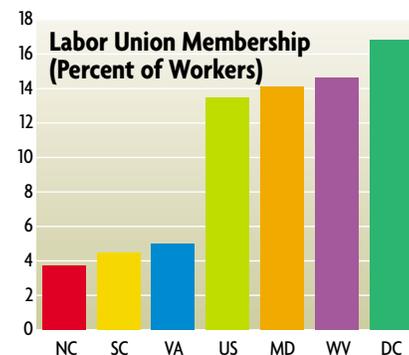
Labor union membership rates in North Carolina, South Carolina, and Virginia are the lowest in the country. Five percent or fewer of wage and salary workers in these three states belong to unions. Nationwide, 14 percent of workers in the United States were union members in 2001, down from 20 percent in 1983. Local government employees, which include teachers, police officers, and firefighters, had the highest unionization rate — 43 percent.

Economic growth in the Fifth District was modest in the summer and early fall of 2002. Manufacturing activity, which had rebounded nicely in the spring, turned down in August and September. The broad services sector expanded, but only hesitantly, as consumer appetite for goods and services waned in the midst of sharp stock market declines and talk of war with Iraq.

Economic Malaise

Participants in our monthly surveys of retailers and service businesses report that revenues were flat in the third quarter. Automobile sales were a bright spot, spurred higher by attractive incentives, such as zero percent financing. But outside of dealer showrooms, retail sales were generally light as consumer confidence in the economy and job prospects eroded. With sluggish product demand, retailers trimmed staff; employment in the sector remains below the level of September 2001.

In manufacturing, hopes of a sustained turnaround were quashed by late-summer declines in shipments and new orders. District manufacturers pointed to sagging consumer confidence and a drop in household wealth as primary factors for the downturn. As a North Carolina furniture manufacturer put it, "The [declining] stock market is scaring the hell out of investors, retirees, and purchasers of deferrable products, such as furniture." Jobs continued to be lost in the manufacturing sector in the third quarter, but the rate of decline in employment has eased since the beginning of the year.



Housing Construction Strong

The Fifth District's housing markets continue to impress. Just when analysts expected the housing sector to begin to slow, it gained additional momentum. Building permits issued in September 2002 were 11.5 percent higher than a year ago. Mortgage rates that eased below 6 percent in the third quarter played a large role in sustaining strength in the sector. Lower interest rates, however, have done little to boost construction in the commercial and industrial sectors, as businesses remain hesitant to invest. Total employment in the construction sector picked up in the third quarter but remains below year-ago levels.

Unemployment Rates Edge Lower

The unemployment rate in the Fifth District dropped to 5.1 percent in the third quarter of 2002. Unemployment rates of individual states ranged from around 4 percent in Maryland and Virginia to just over 6 percent in North Carolina and West Virginia.

The unemployment rate in the Washington, D.C., metropolitan area was 3.6 percent in the third quarter — the lowest in the country among the larger MSAs. In contrast, the unemployment rate in the Charlotte, N.C., metro area remained over 6 percent. Layoffs in manufacturing and a stagnant retail and wholesale trade sector account for much of the rise in Charlotte's unemployment over the last two years.

Modest Personal Income Growth

Personal income in Fifth District states in the second quarter of 2002 was 2.9 percent higher than a year earlier. This pace marks the third straight quarter of growth in the anemic 2 to 3 percent range. With the exception of Maryland and Virginia, manufacturing earnings fell across Fifth District states. Earnings in government sectors involved with military preparedness, on the other hand, rose at a brisk pace across the region.

Developments

Nonfarm Employment Third Quarter 2002

	Employment (Thousands)	% Change (Year Ago)
DC	651	-0.6
MD	2,444	-1.1
NC	3,893	-0.1
SC	1,830	-0.2
VA	3,494	-0.9
WV	727	-0.9
5th District	13,040	-0.6
US	130,847	-0.8

Unemployment Rate Percent

	3rd Qtr. 2002	3rd Qtr. 2001
DC	6.0	6.7
MD	4.2	4.1
NC	6.4	5.7
SC	5.3	5.7
VA	4.0	3.7
WV	6.1	4.8
5th District	5.1	4.8
US	5.7	4.8

Personal Income Second Quarter 2002

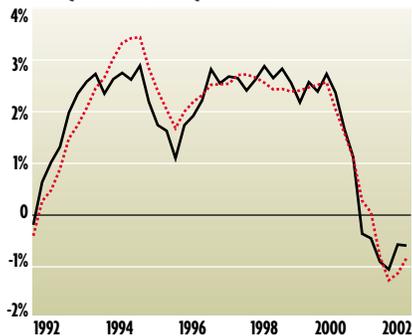
	Income (\$ billions)	% Change (Year Ago)
DC	23.6	2.5
MD	196.6	4.1
NC	231.6	2.7
SC	104.2	3.4
VA	238.5	1.8
WV	42.7	3.8
5th District	837.3	2.9
US	8,905.0	2.7

— Fifth District

- - - - - United States

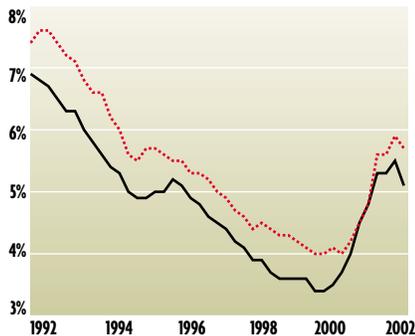
Nonfarm Employment Change From Prior Year

First Quarter 1992 - Third Quarter 2002



Unemployment Rate

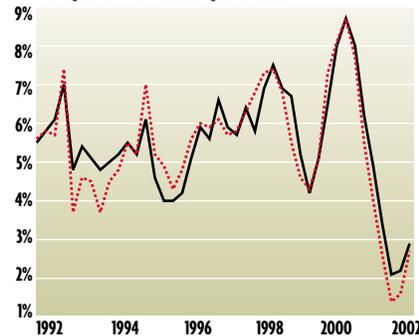
First Quarter 1992 - Third Quarter 2002



Personal Income

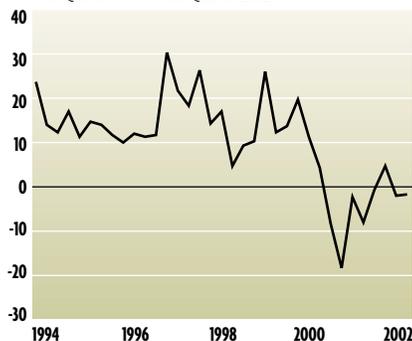
Change From Prior Year

First Quarter 1992 - Second Quarter 2002



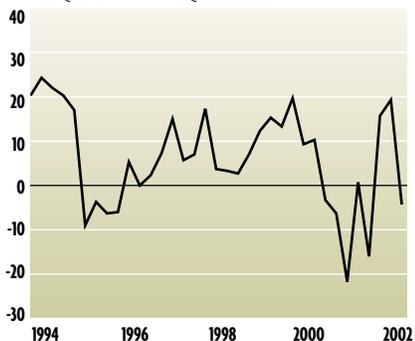
FRB—Richmond Services Revenues Index

First Quarter 1994 - Third Quarter 2002



FRB—Richmond Manufacturing Shipments Index

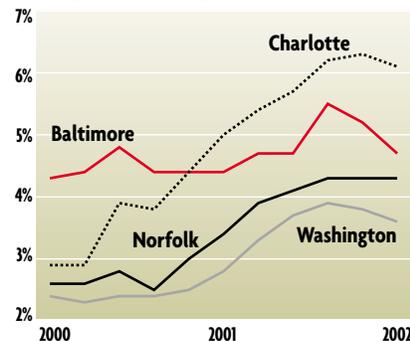
First Quarter 1994 - Third Quarter 2002



Unemployment Rate

Major Metropolitan Areas

First Quarter 2000 - Third Quarter 2002



NOTES:

- 1) All data series are seasonally adjusted.
- 2) FRB-Richmond survey indexes are diffusion indexes. Positive numbers represent expansion, negative numbers contraction.
- 3) State nonfarm employment estimates are based on surveys of establishments. These employment figures differ from those used to calculate state unemployment rates.

SOURCES:

- Income: Bureau of Economic Analysis, U.S. Department of Commerce, <http://www.bea.doc.gov>
 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>

For more information, contact Robert Lacy at 804-697-8703 or e-mail Robert.Lacy@rich.frb.org.



DISTRICT OF COLUMBIA

BY ANDREA HOLLAND

The District of Columbia's high-tech sector grew rapidly throughout much of the 1990s but contracted sharply at the end of the decade. Firms classified as "high-tech" by the National Science Foundation employed only 2.7 percent of the area's work force in 2001, a little less than half the Fifth District's average. And though data on venture capital lending hint that a modest turnaround may be in sight for some Fifth District states' high-tech sectors, those figures remain weak for the nation's capital. In the third quarter of 2002, venture capital investment was only \$164,000, significantly below the \$23 million recorded in the third quarter of 2001.

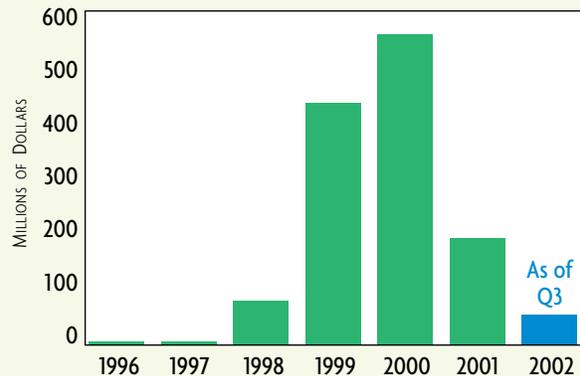
Still, there are bright spots. Universities in the District of Columbia received the largest per capita share of academic research and development funding among Fifth District jurisdictions in 2000, much of it from the Department of Defense. The District of Columbia's proximity to the nation's military and political core probably was a factor in garnering this money.

A significant share of new high-tech firms in the District of Columbia have received Small Business Innovation Research awards, which provide federal funding to upstart companies. Financial support of these D.C. firms may be paying off. In the last five years, new invention patents issued in the District of Columbia grew 10.9 percent annually — exceeding patent growth nationally and throughout the Fifth District.

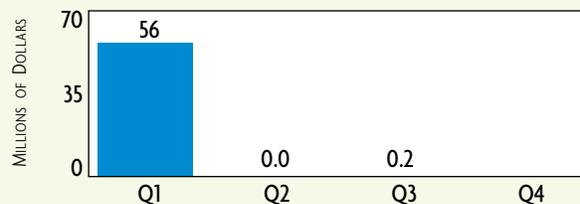
Taking a broader perspective of economic activity, weakness persisted on the jobs front in the third quarter. Most unexpected was the large decline in the number of services sector jobs — 2,900 jobs were shaved. Losses within that sector outweighed gains in the construction, trade, government, and finance, insurance, and real estate sectors.

The unemployment rate dropped 0.4 percentage points to 6 percent, however, marking the second consecutive quarterly decline. Personal income grew at a 2.5 percent annual rate in the second quarter of 2002, but was slightly below the growth rate nationally.

DC Venture Capital Investment Annual Data 1996 to 2002



Quarterly Data 2002



SOURCES:

Academic Research and Development Expenditures, National Science Foundation
Household Computer-Ownership and Internet Access, National Telecommunications and Information Administration
Patent Counts, U.S. Patent and Trademark Office
Venture Capital Investment, PricewaterhouseCoopers/Thomson Venture Economics/National Venture Capital Association MoneyTree™ Survey
Employees at High-Tech Establishments, National Science Foundation
Small Business Innovation Research Awards, U.S. Small Business Administration

	Percent Change at Annual Rate From		
	3rd Qtr 2002	2nd Qtr 2002	3rd Qtr 2001
Nonfarm Employment	650.8	-0.6	-0.6
Manufacturing	11.0	-1.2	-3.2
Services	306.0	-3.7	0.3
Construction	9.9	5.6	-10.5
Civilian Labor Force	271.0	-5.2	-2.6
Home Sales	12.8	6.5	0.8
	3rd Qtr 2002	2nd Qtr 2002	3rd Qtr 2001
Unemployment Rate	6.0	6.4	6.7
Housing Permits	1,045	98	144

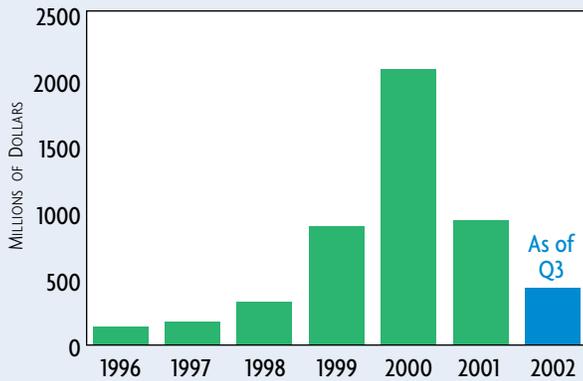
NOTES:

Nonfarm Employment, thousands of jobs, seasonally adjusted (SA); Bureau of Labor Statistics (BLS)
Manufacturing, thousands of jobs, SA; BLS
Services, thousands of jobs, SA; BLS
Construction, thousands of jobs, SA; BLS
Civilian Labor Force, thousands of persons, SA; BLS
Home Sales, thousands of units, SA; National Association of Realtors®
Unemployment Rate, percent, SA; BLS
Housing Permits, number of permits, not seasonally adjusted; U.S. Census Bureau

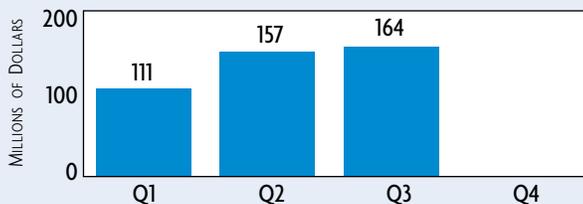


BY ANDREA HOLLAND

MD Venture Capital Investment Annual Data 1996 to 2002



Quarterly Data 2002



SOURCES:
Academic Research and Development Expenditures, National Science Foundation
Household Computer-Ownership and Internet Access, National Telecommunications and Information Administration
Patent Counts, U.S. Patent and Trademark Office
Venture Capital Investment, PricewaterhouseCoopers/Thomson Venture Economics/National Venture Capital Association MoneyTree™ Survey
Employees at High-Tech Establishments, National Science Foundation
Small Business Innovation Research Awards, U.S. Small Business Administration

	Percent Change at Annual Rate From		
	3rd Qtr 2002	2nd Qtr 2002	3rd Qtr 2001
Nonfarm Employment	2,444.1	-1.6	-1.1
Manufacturing	171.3	-1.8	-3.6
Services	857.8	-0.6	-1.1
Construction	159.4	11.6	-2.0
Civilian Labor Force	2,905.8	-1.2	2.1
Home Sales	116.9	4.6	1.7
	3rd Qtr 2002	2nd Qtr 2002	3rd Qtr 2001
Unemployment Rate	4.2	4.8	4.1
Housing Permits	7,289	7,427	7,083

NOTES:
Nonfarm Employment, thousands of jobs, seasonally adjusted (SA); Bureau of Labor Statistics (BLS)
Manufacturing, thousands of jobs, SA; BLS
Services, thousands of jobs, SA; BLS
Construction, thousands of jobs, SA; BLS
Civilian Labor Force, thousands of persons, SA; BLS
Home Sales, thousands of units, SA; National Association of Realtors®
Unemployment Rate, percent, SA; BLS
Housing Permits, number of permits, not seasonally adjusted; U.S. Census Bureau

Because it is home to the National Institutes of Health (NIH), Maryland has always had an advantage over other Fifth District states in the high-tech arena. But NIH isn't the only reason why Maryland's high-tech sector is booming.

Research and development expenditures at Maryland's colleges and universities totaled more than \$1.5 billion in 2000 — or, on a per capita basis, almost three times the national average. Life sciences departments received the greatest share, largely because of the vigor of the state's biotechnology industry.

The large number of well-funded laboratory facilities has drawn many research-oriented firms to the state, pulling in significant numbers of highly skilled workers. According to the National Science Foundation, the percentage of Maryland workers employed at technology-based firms in 2001 was 4.8 percent, well above the national average of 4.2 percent.

Private firms have received Small Business Innovation Research awards to aid their development. In 2001, companies in Maryland received the largest per capita allotment of SBIR awards of Fifth District states.

Another important source of funding for new firms that aren't yet commercially viable is venture capital. After peaking in mid-2000, venture capital investment in Maryland dropped sharply. But recent data suggest a turnaround. Investment rose by \$7 million in the third quarter of 2002, marking the second consecutive quarter of expansion.

Despite the re-emergence of funding by awards and venture capital, most recent data suggest Maryland businesses have yet to start adding new jobs. Like its neighbors, Virginia and Washington, D.C., Maryland experienced weakness in the services sector — shedding 1,300 jobs over the quarter. Likewise, payrolls weakened across most other industry sectors in the third quarter. Employment gains were recorded only in the construction sector.

Still, the unemployment rate fell 0.6 percentage points to 4.2 percent in the third quarter. In keeping with the drop in the jobless rate, personal income grew at a 4.1 percent annual rate in the second quarter of 2002 — exceeding the growth rates of the nation and Fifth District jurisdictions.



NORTH CAROLINA

BY ANDREA HOLLAND

North Carolina's Research Triangle Park (RTP) is nationally recognized as a leader in the world of high technology. It may come as a surprise, then, that the state lags the nation in technology use. Only 50.1 percent of North Carolina households owned computers in 2001 — ranking fourth among Fifth District states.

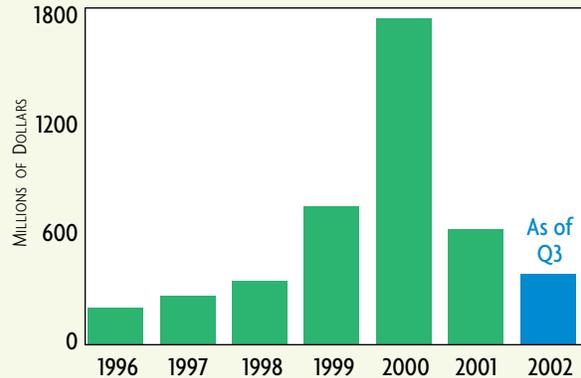
But computer usage doesn't necessarily drive job creation. Indeed, RTP has experienced high levels of human capital inflows in recent years. In particular, the clustering of top research universities in the RTP area has been a key factor in attracting many knowledge-based workers to the area.

Among Fifth District jurisdictions, North Carolina was second only to Maryland in academic research and development spending in 2000. But the spending was not evenly distributed across the state. The three major research institutions near RTP (Duke University, the University of North Carolina at Chapel Hill, and North Carolina State University) accounted for more than 86 percent of statewide expenditures. After peaking in mid-2000, venture capital investment in North Carolina steadily declined. But recent data suggest a turnaround. Investment has risen steadily throughout 2002 in North Carolina, reaching \$190 million in the third quarter of the year.

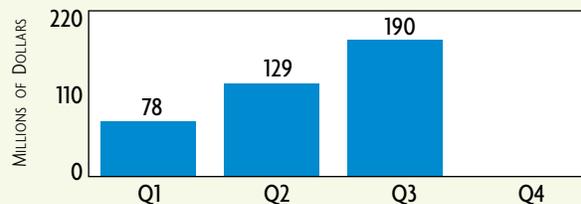
While there are pockets of high-tech employment in North Carolina, the majority of jobs in the state continue to be found in more traditional sectors. In 2001, for example, the manufacturing sector employed more than 18 percent of the state's work force. In contrast, according to the National Science Foundation, employees working at high-tech establishments accounted for only 3.6 percent of total employment statewide.

The latest figures available show that jobs in North Carolina expanded 2 percent in the third quarter of 2002, the first quarterly gain recorded since this period a year ago. By sector, payrolls expanded in the services, manufacturing, trade, and government sectors but contracted in the construction sector and the transportation and public utilities sector. The state's unemployment rate stood at 6.4 percent at the end of the third quarter, down 0.4 percentage points from the prior period, but still above rates recorded a year earlier. Personal income in North Carolina grew at a 2.7 percent annual rate during the second quarter of 2002, matching the national growth rate.

NC Venture Capital Investment Annual Data 1996 to 2002



Quarterly Data 2002



SOURCES:
Academic Research and Development Expenditures, National Science Foundation
Household Computer-Ownership and Internet Access, National Telecommunications and Information Administration
Patent Counts, U.S. Patent and Trademark Office
Venture Capital Investment, PricewaterhouseCoopers/Thomson Venture Economics/National Venture Capital Association MoneyTree™ Survey
Employees at High-Tech Establishments, National Science Foundation
Small Business Innovation Research Awards, U.S. Small Business Administration

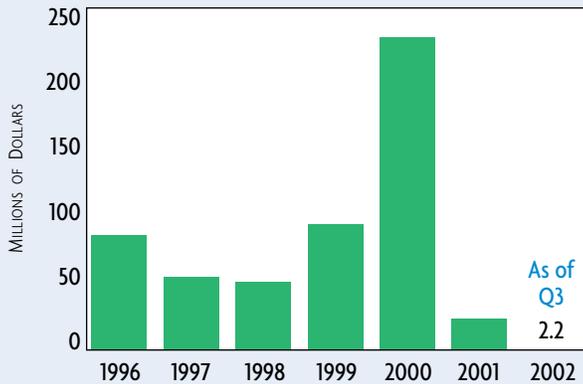
	Percent Change at Annual Rate From		
	3rd Qtr 2002	2nd Qtr 2002	3rd Qtr 2001
Nonfarm Employment	3,893.0	2.0	-0.1
Manufacturing	702.1	1.3	-3.0
Services	1,065.3	2.6	1.3
Construction	221.8	-3.9	-2.4
Civilian Labor Force	3,971.6	-2.2	-0.3
Home Sales	239.0	36.5	6.3
	3rd Qtr 2002	2nd Qtr 2002	3rd Qtr 2001
Unemployment Rate	6.4	6.8	5.7
Housing Permits	20,092	22,023	19,238

NOTES:
Nonfarm Employment, thousands of jobs, seasonally adjusted (SA); Bureau of Labor Statistics (BLS)
Manufacturing, thousands of jobs, SA; BLS
Services, thousands of jobs, SA; BLS
Construction, thousands of jobs, SA; BLS
Civilian Labor Force, thousands of persons, SA; BLS
Home Sales, thousands of units, SA; National Association of Realtors®
Unemployment Rate, percent, SA; BLS
Housing Permits, number of permits, not seasonally adjusted; U.S. Census Bureau

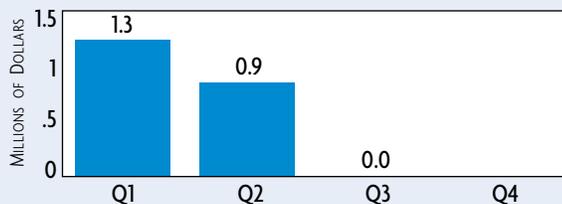
SOUTH CAROLINA

BY ANDREA HOLLAND

SC Venture Capital Investment Annual Data 1996 to 2002



Quarterly Data 2002



SOURCES:
Academic Research and Development Expenditures, National Science Foundation
Household Computer-Ownership and Internet Access, National Telecommunications and Information Administration
Patent Counts, U.S. Patent and Trademark Office
Venture Capital Investment, PricewaterhouseCoopers/Thomson Venture Economics/National Venture Capital Association MoneyTree™ Survey
Employees at High-Tech Establishments, National Science Foundation
Small Business Innovation Research Awards, U.S. Small Business Administration

	Percent Change at Annual Rate From		
	3rd Qtr 2002	2nd Qtr 2002	3rd Qtr 2001
Nonfarm Employment	1,830.3	0.8	-0.2
Manufacturing	314.8	-1.0	-4.6
Services	468.9	1.3	1.9
Construction	111.6	5.2	-0.4
Civilian Labor Force	2,007.8	2.2	3.3
Home Sales	114.4	-2.1	4.4
	3rd Qtr 2002	2nd Qtr 2002	3rd Qtr 2001
Unemployment Rate	5.3	5.6	5.7
Housing Permits	7,930	9,133	7,986

NOTES:
Nonfarm Employment, thousands of jobs, seasonally adjusted (SA); Bureau of Labor Statistics (BLS)
Manufacturing, thousands of jobs, SA; BLS
Services, thousands of jobs, SA; BLS
Construction, thousands of jobs, SA; BLS
Civilian Labor Force, thousands of persons, SA; BLS
Home Sales, thousands of units, SA; National Association of Realtors®
Unemployment Rate, percent, SA; BLS
Housing Permits, number of permits, not seasonally adjusted; U.S. Census Bureau

South Carolina has a strong base of traditional industries that have supported the state's economy. The high-tech sector has been making headway, too, but is less significant in South Carolina than in many other Fifth District states.

One measure of a state's high-tech activity is the issuance of invention patents. In 2001, 565 invention patents were issued in South Carolina, far below the numbers recorded in Maryland, North Carolina, and Virginia. And over the last five years, South Carolina had the lowest growth rate of invention patents among Fifth District jurisdictions.

Lower entrepreneurial activity in South Carolina can be explained in part by relatively low research and development spending at the state's colleges and universities. Without university laboratories to draw on, it has been difficult for South Carolina to attract a large number of technology-based firms. In fact, according to the National Science Foundation, only 2.2 percent of South Carolina's work force were employed at high-tech companies in 2001, the second-lowest share among Fifth District states.

South Carolina may not be able to boost academic funding in the short term, but financial resources remain crucial to nurturing the success of the high-tech industry. On this score, firms have started utilizing Small Business Innovation Research awards — federal grants that aid small firms during the early stages of development. In fact, South Carolina had the highest growth rate over the last four years in SBIR funding in the Fifth District.

Unfortunately, however, South Carolina firms have received relatively little venture capital investment, even prior to the recent industry decline. After peaking at \$240 million in 2000, investment activity in South Carolina dropped off rapidly. In the third quarter of 2002, for instance, no investment was recorded.

Overall employment rose 0.8 percent in South Carolina during the third quarter, marking the first quarter of positive job growth since mid-2001. Weakness persisted in manufacturing — but the services sector generated large gains, adding 1,600 jobs over the quarter. The unemployment rate dropped to 5.3 percent in the third quarter. Also positive for the state's economy, personal income grew at a 3.4 percent annual rate in the second quarter of 2002, outpacing growth rates in most other Fifth District states and the nation.



VIRGINIA

BY ANDREA HOLLAND

There is a large concentration of high-tech activity in Virginia's northern counties, just as there is in central North Carolina. But Virginia's technological base is not confined predominantly to that area — and the use of technology is more widespread than in North Carolina. In 2001, 58.8 percent of Virginia household's owned computers, ranking second among Fifth District states.

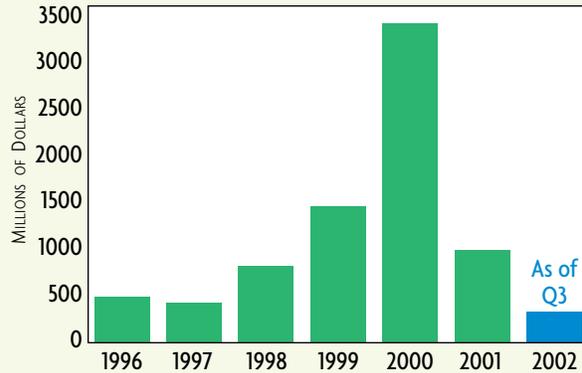
One reason Virginia's high-tech presence is less concentrated is because its top research universities are not clustered in one area. Academic research and development spending is spread across the state, from Northern Virginia to Charlottesville, Williamsburg, Blacksburg, and the Norfolk-Hampton Roads area. Still, total academic research and development expenditures in Virginia are relatively low compared to other Fifth District states, especially Maryland and North Carolina.

Private funding, in the form of venture capital investment, has filled the gap. At its peak in 2000, venture capital going to Virginia businesses totaled \$3.4 billion, or more than 42 percent of the Fifth District total. Following a sharp drop-off in investment during the recent recession, data suggest that venture capital may begin to return to Virginia. Quarterly investment funding continued to hover around the \$100 million mark in the third quarter of 2002.

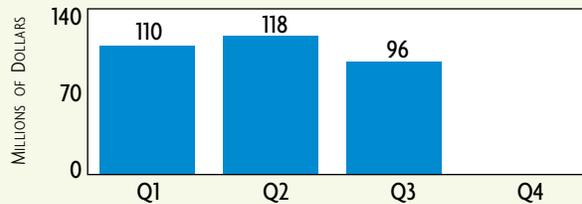
According to the National Science Foundation, 6.5 percent of Virginia's work force was employed at technology-based firms in 2001, easily surpassing the national and Fifth District rates. The large number of high-tech jobs helped boost personal income in the state. But recently, personal income in Virginia has expanded less rapidly and, in the second quarter of 2002, did not match the national or Fifth District growth rates.

Recent employment data also were weak. Job numbers in Virginia fell 0.8 percent in the third quarter of 2002. By sector, manufacturers continued to downsize, thinning payrolls by 3 percent. But the construction industry rebounded, adding 1,700 jobs in the third quarter. The services sector contracted in the third quarter, after three successive quarters of moderate growth. The state's jobless rate fell 0.2 percentage points to 4.0 percent in the third quarter of the year, putting it below the national average.

VA Venture Capital Investment Annual Data 1996 to 2002



Quarterly Data 2002



SOURCES:
Academic Research and Development Expenditures, National Science Foundation
Household Computer-Ownership and Internet Access, National Telecommunications and Information Administration
Patent Counts, U.S. Patent and Trademark Office
Venture Capital Investment, PricewaterhouseCoopers/Thomson Venture Economics/National Venture Capital Association MoneyTree™ Survey
Employees at High-Tech Establishments, National Science Foundation
Small Business Innovation Research Awards, U.S. Small Business Administration

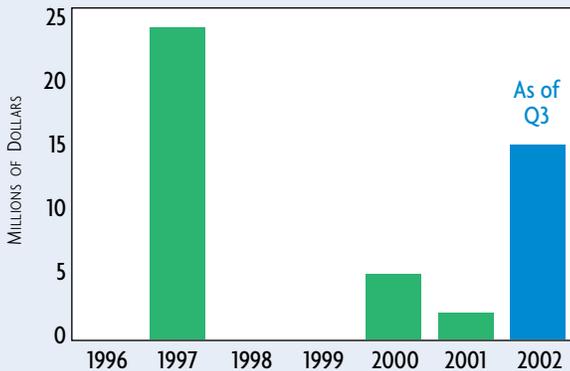
	Percent Change at Annual Rate From		
	3rd Qtr 2002	2nd Qtr 2002	3rd Qtr 2001
Nonfarm Employment	3,494.0	-0.8	-0.9
Manufacturing	357.1	-3.0	-2.8
Services	1,155.8	-0.5	0.3
Construction	206.7	3.3	-4.1
Civilian Labor Force	3,777.8	0.5	2.6
Home Sales	145.3	-30.6	3.0
	3rd Qtr 2002	2nd Qtr 2002	3rd Qtr 2001
Unemployment Rate	4.0	4.2	3.7
Housing Permits	15,038	15,172	11,540

NOTES:
Nonfarm Employment, thousands of jobs, seasonally adjusted (SA); Bureau of Labor Statistics (BLS)
Manufacturing, thousands of jobs, SA; BLS
Services, thousands of jobs, SA; BLS
Construction, thousands of jobs, SA; BLS
Civilian Labor Force, thousands of persons, SA; BLS
Home Sales, thousands of units, SA; National Association of Realtors®
Unemployment Rate, percent, SA; BLS
Housing Permits, number of permits, not seasonally adjusted; U.S. Census Bureau

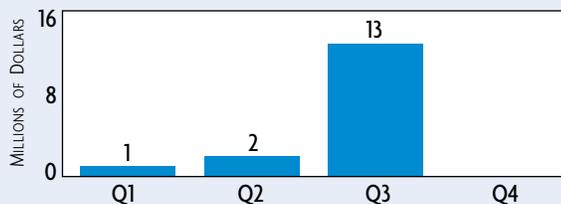


BY ANDREA HOLLAND

WV Venture Capital Investment Annual Data 1996 to 2002



Quarterly Data 2002



SOURCES:
Academic Research and Development Expenditures, National Science Foundation
Household Computer-Ownership and Internet Access, National Telecommunications and Information Administration
Patent Counts, U.S. Patent and Trademark Office
Venture Capital Investment, PricewaterhouseCoopers/Thomson Venture Economics/National Venture Capital Association MoneyTree™ Survey
Employees at High-Tech Establishments, National Science Foundation
Small Business Innovation Research Awards, U.S. Small Business Administration

	Percent Change at Annual Rate From		
	3rd Qtr 2002	2nd Qtr 2002	3rd Qtr 2001
Nonfarm Employment	727.2	-2.0	-0.9
Manufacturing	73.5	-0.7	-3.8
Services	235.7	1.8	0.9
Construction	32.4	-16.9	-3.9
Civilian Labor Force	809.2	-2.0	-3.0
Home Sales	28.2	126.0	2.5
	3rd Qtr 2002	2nd Qtr 2002	3rd Qtr 2001
Unemployment Rate	6.1	6.2	4.8
Housing Permits	1,132	1,156	1,083

NOTES:
Nonfarm Employment, thousands of jobs, seasonally adjusted (SA); Bureau of Labor Statistics (BLS)
Manufacturing, thousands of jobs, SA; BLS
Services, thousands of jobs, SA; BLS
Construction, thousands of jobs, SA; BLS
Civilian Labor Force, thousands of persons, SA; BLS
Home Sales, thousands of units, SA; National Association of Realtors®
Unemployment Rate, percent, SA; BLS
Housing Permits, number of permits, not seasonally adjusted; U.S. Census Bureau

For more information regarding state summaries, call 804-697-8273 or e-mail Andrea.Holland@rich.frb.org.

A variety of factors impeded growth in West Virginia's high-tech industry during the 1990s. Unlike Maryland, North Carolina, and Virginia, the state did not have a substantial high-tech base on which to build. In addition, West Virginia trailed most other states in terms of computer usage. By 2001, only 40.7 percent of West Virginia households had access to the Internet.

Low levels of public funding also have hampered high-tech growth in the state. Among Fifth District jurisdictions, West Virginia's colleges and universities received the smallest per capita share of research and development funding in 2000. But many firms in the state have received Small Business Innovation Research awards, which provide federal funding to new companies. In fact, from 1997 to 2001, SBIR funding grew more rapidly in West Virginia than in any other Fifth District jurisdiction except South Carolina.

West Virginia has fallen short of other Fifth District states when it comes to attracting venture capital. In 2000, for example, venture capital spending in West Virginia accounted for less than 1 percent of the Fifth District total. But investment has been on the rise. In the third quarter of 2002, venture investment expanded for the third consecutive quarter. It is important to note, however, that a large share (\$10 million) of the third-quarter hike is going toward an existing deal, rather than a new one. The Mountain State ranked last among Fifth District states in the number of patents issued per capita in 2001.

West Virginia remains a goods production-based economy — with nearly one-fifth of all workers employed in traditional sectors such as manufacturing, construction, mining, or agriculture. In contrast, firms classified as “high-tech” by the National Science Foundation employed only 1.4 percent of the work force in 2001, far less than other Fifth District states.

In the third quarter of 2002, overall payroll figures in West Virginia fell by 2 percent. By sector, manufacturing jobs dropped off 0.7 percent — significantly less than the drop recorded during the prior period. Employment numbers in the services sector continued to creep up, adding 1,000 jobs in the third quarter of 2002 and remaining above year-ago levels. The unemployment rate in West Virginia ticked down 0.1 percentage points to 6.1 percent in the third quarter, but remained somewhat above the national rate. Personal income growth in West Virginia exceeded most other Fifth District states.