

# Triangulating the Recession

Knowledge jobs lend resistance, but not immunity to downturn

BY BETTY JOYCE NASH

Conventional wisdom has it that the Research Triangle area enters recessions late and exits them early, says Brenda Steen, of Apex, N.C. Steen directs the Chamber of Commerce in Apex, a bedroom community near Raleigh known as the “peak” of the Triangle. “My heart goes out to people in Florida and other places where things are worse; 2008 and 2009 were really scary and depressing.”

The Research Triangle is a prosperous region bounded by three major universities in north central North Carolina — North Carolina State in Raleigh, Duke University in Durham, and the University of North Carolina at Chapel Hill. The area is home to jobs that require extensive education, and it’s also got a healthy set of public employers at the state schools and the capital in Raleigh. By many measures, the region’s job mix helped buffer residents from the effects of the most recent recession but it couldn’t protect them entirely.

Steen can’t help having a keen awareness of the local business climate in her job at the Apex Chamber. It’s where people stop for information; she also gets resumes from job hunters. Membership declined by 25 percent over the recession — small businesses, when polled, said they couldn’t afford the dues. Area churches held resume-writing workshops in late 2008, as well as gatherings to get people out of the house and give them somewhere to go. Steen’s husband lost his job in a layoff. And in October 2008 Sony Ericsson relocated its headquarters to Atlanta and laid off between 800 and 900 people. And there were even more layoffs. By the end of 2009, the Durham area had shed 7,800 jobs since the recession started, and the larger Raleigh-Cary area, 27,500. The Triangle treaded water as the broader North Carolina economy “went kerplunk,” says Bo Carson of the Research Triangle Regional Partnership (RTRP), the region’s economic development organization.

Positive signs now loom: Over the first half of 2010, both the Raleigh and Durham metros added jobs: 1,200 and 4,800 respectively. In May, RTRP announced a record \$2 billion in 2009 investments for the region, expected to bring 11,000 jobs; in 2010, the group reported another \$1.27 billion for the year.

The Triangle may not be recession-proof, but it’s surely cushioned by its mix of high-skilled jobs in fields such as the life sciences, pharmaceuticals, and math-intensive professions.

## Degree Production

The Triangle region spreads across eight counties, with about 1.7 million residents in the combined statistical area. Duke anchors Durham, an old tobacco town, whose medical

center draws researchers and patients from around the world. Just outside the city limits sits the 7,000-acre Research Triangle Park. Spawnd by the state more than a half-century ago to leverage university research, it’s now studded with private and public enterprises. In Raleigh, North Carolina State University has its main campus and its own research park, Centennial Campus. The Triangle’s third point is the sprawling University of North Carolina in Chapel Hill and its health center.

The Triangle ranks 19th among the top 20 metro areas in the United States, as measured by the number of degrees its universities and colleges produce, nearly 19,000 in 2006, according to a staff report by economists Jaison R. Abel and Richard Deitz from the New York Fed. In North Carolina, roughly a quarter of people over age 25 have a bachelor’s degree, but the percentage jumps to between 40 percent and 42 percent in the Triangle. In the Raleigh-Cary and the Durham-Chapel Hill MSAs, about 19 percent and 14 percent respectively have postgraduate degrees compared to 8.5 percent statewide.

The region ranks even higher, sixth, in its academic research and development expenditures, about \$1.4 billion in 2006, according to Abel and Deitz. Duke and its medical center, for example, garnered grants worth \$2.6 billion between Dec. 1, 2007 and Oct. 31, 2010, according to Karl Bates, director of research communications.

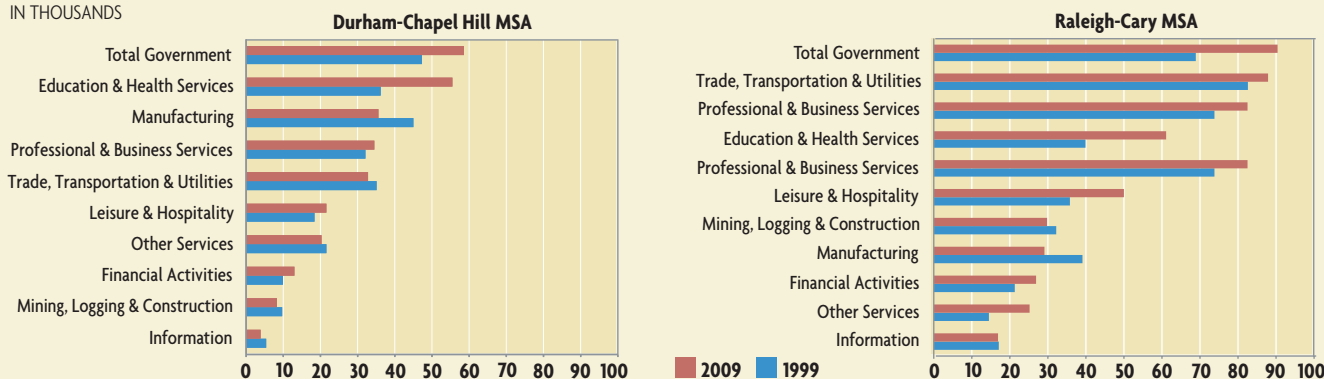
Abel and Deitz investigated the relationship between academic research and development and the amount and types of human capital in metro areas. Because college graduates are mobile, they may not enter the labor market where they attended college. The researchers found only a “small positive relationship between a metropolitan area’s production and stock of human capital.” The authors suggest that migration redistributes educated workers, defined in the paper as graduates with at least a bachelor’s degree. That’s because most metro areas in the United States, 62 percent, produce more graduates than they can employ. The remaining 38 percent employ more graduates than they produce. Even so, universities do influence demand for human capital through R&D spillovers that help create firms and shape job formation. Abel and Deitz note that research efforts ultimately “tilt the structure of local labor markets toward occupations requiring innovation and technical training.” All this human capital is associated with more growth as well as higher wages and income.

## Triangle Employment

During the recession, the Triangle’s unemployment rate stayed below two digits, but barely. The rate peaked at 9.6

## Employment by Sector

IN THOUSANDS



SOURCE: N.C. Employment Security Commission

percent in the Raleigh-Cary MSA compared to 11.8 percent statewide; the Durham MSA's peaked at 8.6 percent. The unemployment rate at the end of September 2010 was 6.7 percent in the Durham MSA, down from 7.9 percent a year earlier, and 7.7 percent in Raleigh-Cary, down from 8.8 percent a year earlier.

Given the recession's depth and breadth, even in the Triangle, it may take a while for firms to swell payrolls enough to make a dent in unemployment numbers. As in the recoveries of 1990 and 2001, hiring may lag as firms invest in equipment, not people, to increase productivity.

Public employers in the Triangle have provided relative stability, but that might not last, given the state's \$3 billion projected deficit, says Jason Jolley, senior research director of the Center for Competitive Economies at the University of North Carolina.

Jolley believes recovery will be slow in the Triangle. Government and universities may be stabilizing influences in the Triangle, he says, but they are likely to face cuts. "We've had furloughs, we haven't had raises in two or three years, and so there's not the spending associated with these institutions as there has been in the past."

In both the Durham-Chapel Hill and Raleigh-Cary MSAs, the government sector has grown in the past decade, from 18 percent of employment to 21 percent in Durham and 16 percent to 18 percent in Raleigh. The share of jobs in education and health services also has grown: from 14 percent to 19 percent in the Durham-Chapel Hill MSA and 9 percent to 12 percent in Raleigh-Cary over the same period.

The information technology job sector has shrunk over the past decade, from about 2 percent of employment to 1 percent in the Durham-Chapel Hill MSA (that is, from 5,400 people in 1999 to 3,900 in 2009); the sector went from 4 percent to 3 percent in Raleigh-Cary (from 17,100 in 1999 to 16,900 in 2009). The Triangle has shed jobs at companies such as Sony Ericsson. Electronics company Aviat Networks laid off 200 in the Triangle, consolidating its business in Silicon Valley.

Many remaining tech employers are cautious, a vestige of the 2001 recession. "I think tech companies remember very well the pullback and are constantly worrying about overexpanding," says economist Mike Walden of North Carolina

State. "So they are using more 'just-in-time' and part-time labor to avoid heavy commitments to labor costs."

Corporate downsizing is also emptying office spaces. For instance, Blue Cross and Blue Shield of North Carolina and GlaxoSmithKline plan to shrink footprints in the region, with consequences unclear for the labor market.

Add to that the increased demands on counties for social services, with less tax revenue, and the picture further dims. Unemployment has declined, but that's because of labor force dropouts, Jolley says. And then there are the underemployed. "Like the college students who have graduated and have to keep working at the bar on Franklin Street."

Economic conditions remain soft, though upbeat stories are threaded through the statistics. In Apex, you may need to wait in line at a restaurant on a Friday night, Steen says, adding that congested traffic at Target is a good sign. These reports, though, exist amid still-vacant commercial buildings and halted housing developments.

More people are moving to Triangle area. While state-to-state migration stagnated for the United States as a whole, the number of people moving into Raleigh-Cary went up by 3.2 percent from July 1, 2008 through July 1, 2009 as the recession ebbed; the Durham-Chapel Hill population grew by 2.1 percent over the same period.

Demand for labor will rise when demand for firms' products and services does. Carson cites examples such as IBM's new cloud computing center, for which they are hiring 600 people. And the region's life sciences cluster attracts more and more contract pharmaceutical research. He says that promised jobs are in the pipeline — those knowledge-based jobs that made the Triangle famous. They seem to have at least provided resistance to the region during the recession.

Some people have created their own jobs — a coffee service, a brewery, a ladies' boutique, coaching, painting, house- and window-cleaning businesses. "I'm not sure where the funding is coming from," Steen says. Some may have borrowed from their retirement accounts, she speculates, while others may have been able to convince banks to loan. And after a six-month stint commuting to a Washington, D.C.-based think tank, she reports that her husband found work at Pfizer.

RF