# Recovery

Retraining programs throughout the Fifth District are preparing displaced manufacturing workers for new niches in the global economy



or the first 30 years of her life, Shirley Smith rarely left her home state of North Carolina. After high school, she settled into a factory job in the small town of Dunn, about 40 miles south of Raleigh, where she spent the next 13 years making components for electric motors.

Smith was no world traveler, but she started thinking more globally three years

ago when her employer — Morganite Inc. — began talking about building a plant in China. As the new factory came on line, the company began laying off employees at its plant in Dunn.

The company let Smith go in March 2003, and within a week she had enrolled in the North Carolina Truck Driver Training School at Johnston Community College in Smithfield. "It

was something I had been thinking about," Smith explains. "I went into truck driving because everything that's going overseas is being shipped back to the United States. ...Whether it's coming by train or by boat or by plane, it has to get on that truck to get to the stores."

Across the Fifth District, thousands of displaced workers like Smith need retraining to compete in an increasingly global job market. If they return to the work force with new skills that are in high demand, the economy surges ahead. If they fail to return to the work force at all, the economy suffers.

"One of the most significant things I have experienced in my professional career is the sheer number of people from traditional industries who have been displaced either due to outsourcing or automation," says Larry Keen, vice president for economic and work force development for the North Carolina Community College System.

The community colleges are trying to rise to the challenge, but their budgets are tight. Four-year universities and private vocational schools are meeting some of the new demand, but community colleges are the primary delivery mechanism for retraining in the Fifth District.

President George W. Bush highlighted that fact in April during a visit to Central Piedmont Community College in Charlotte, N.C. Bush praised the college for working closely with employers to ensure that its retraining programs are relevant, and he pledged to make retraining a higher priority nationwide.

"We're not training enough people to fill the jobs of the 21st century," Bush said. "There is a skills gap. And if we don't adjust quickly ... and if we don't properly use our community colleges ... we're going to have a shortage of skilled workers in the decades to come."

The president touted North Carolina's transition from tobacco and textiles to computer technology and biotechnology, but employment opportunities in these growth industries are dwarfed by job openings in restaurants and stores. Created and supported by heightened consumer spending, these jobs are characterized by low pay and high turnover. They are viewed as a last resort by many displaced factory workers, but they provide important entry-level opportunities for people who are willing to learn on the job and work their way up into better positions.

## Where The Jobs Are Now

The occupational divide between selling potato chips and fabricating microchips is filled by dozens of professions that are constantly seeking qualified employees. In the Fifth District, demand is particularly high for nurses, teachers, truck drivers, and construction workers.

It's not just nurses, it's all allied health occupations, says James Skidmore, chancellor of the West Virginia Council for Community and Technical College Education. West Virginia has many qualified people on waiting lists to enter health-care training programs, he says. "If we had money to put in the nursing programs and really expand them ... we could put a lot more people to work in high-paying jobs."

West Virginia has the opposite problem filling jobs in its chemical manufacturing industry, where there is strong demand for chemical technologists. The community colleges have a program that trains people to enter that high-paid, high-skilled occupation, but the program struggles to attract students who have the academic background to be successful, Skidmore says. "That's a little bit frustrating."

Sometimes the people who need retraining don't want retraining, observes Pat Sherlock, supervisor of the Dislocated Worker Unit for the South Carolina Employment Security Commission. "They want their next job," and they want it next week, she says. So it can be difficult to convince them "that if you don't get that GED, you're going to have a hard time getting your next job, even though you've worked the past 30 years without a GED. In today's climate, that's probably not going to happen again."

One exception to that rule is truck driving. Students don't need a GED to enter the North Carolina Truck Driver Training School, says Paul Jump, the program's acting director. What they need, he says, is a flexible, easy-going nature.

The school gets its share of displaced factory workers, Jump notes, "but we get students from almost every walk of life including lawyers, sales professionals, teachers, and airline pilots." They range in age from 18 to 72, and they receive 384 hours of instruction, most of it hands-on. Full-time students complete the course in eight weeks, learning everything from safety and

map reading to maneuvering the tractor-trailers in and out of tight spaces. Graduates who are willing to travel extensively generally have no trouble finding jobs that pay pretty well, Jump says.

Construction is another industry that offers career opportunities to people who are willing to retrain. "Anybody who wants to go into residential construction can get a job immediately," declares Steve Vermillion, executive director of the Associated General Contractors of Virginia.

Some construction trades are taught at vocational schools and community colleges, but "training is more on the job than anywhere else," Vermillion says. The average age of highly skilled construction workers keeps going up, he notes, so "filling those positions is going to get interesting in the coming years."

# Where The Jobs Will Be

Retraining programs struggle to hit moving targets. Even if they knew exactly how many truck drivers are needed right now, it's difficult to accurately predict how many will be needed two years down the road.

Providing specific training incentives to relocating or expanding businesses is one way to target resources, but even these programs sometimes miss the mark. (See "The Baiting Game" from the Spring 2004 issue of *Region Focus*.)

"There is very little information out there about job opportunities and what kinds of skills people will need in the future," says Aaron Fichtner, director of research and evaluation for the John J. Heldrich Center for Workforce Development at Rutgers University.

The 10-year occupational projections that states submit to the U.S. Bureau of Labor Statistics provide a good starting point, Fichtner says, "but we need qualitative information ... that can help form the foundation of education and training programs" that will meet specific industry needs. "Right now our feeling is that the education and training system isn't as efficient as it could be ... because there is very little information about the demand side," he says.

The Heldrich Center recently con-

vened business advisory groups that profiled the skills needed for key occupations in New Jersey's "cutting-edge industries" including biotechnology, security, e-learning, e-commerce, and food/agribusiness. "What we are trying to do is build a system where you have ongoing dialog between employers and educators and the work force development system," Fichtner says. "You are never going to get it right all the time, but it's worth trying. It's a big improvement."

This idea also appealed to North Car-

olina's Golden LEAF Foundation, an organization that uses half of the state's to-bacco settlement money to fund economic development projects. Last summer, after consulting with the state's biotechnology employers, the foundation earmarked \$60 million to establish and support a statewide Biotech Training Consortium. The commitment included \$33.5 million for a Biomanufacturing Training and Education Center at North Carolina State University, \$17.8 million for a Biomanufacturing Research

and Training Enterprise at North Carolina Central University, and \$8.7 million for "BioNetwork" training and education programs at several community colleges.

H. Martin Lancaster, president of the North Carolina Community College System, has called BioNetwork "the most important and most exciting economic development effort in the North Carolina Community College System right now ... and for the foreseeable future. It is our commitment to meeting the long-term skills

# **Hot Jobs**

Ranked by average annual job openings in the Fifth District

ranked by average annual	joo ope		Ten District				5th	
Occupation	NC	VA	MD	SC	WV	DC	District	<b>Salary</b> <sup>a</sup>
Cashiers	7,290	5,450	560	810	1,220	30	15,360	\$16,940
Retail Sales	6,880	5,600	770	700	1,030	10	14,990	22,260
Food Prep/Service (Including Fast Food)	5,540	5,660	630	1,020	1,100	100	14,050	15,260
Waiters/Waitresses	5,440	4,150	510	650	740	40	11,530	15,780
Laborers/Freight, Stock, and Material Movers	3,790	2,470	560	730	730	50	8,330	21,650
Registered Nurses	3,470	2,290	710	830	590	80	7,970	51,230
General Office Clerks	2,730	2,720	720	530	430	270	7,400	23,780
Customer Service Representatives	2,000	2,560	1,160	500	240	70	6,530	28,560
Postsecondary Teachers	2,790	1,960	630	320	310	90	6,100	NMF
Janitors/Cleaners	2,320	2,220	450	390	420	300	6,100	20,320
Computer Support Specialists	1,500	2,230	950	350	90	200	5,320	42,640
Stock Clerks and Order Fillers	2,720	1,960	170	120	300	NA	5,270	21,490
General/Operations Managers	2,720	NA	1,100	680	360	150	5,010	88,700
Elementary School Teachers <sup>b</sup>	2,180	1,660	240	660	210	NA	4,950	44,350
Nursing Aides, Orderlies and Attendants	2,200	1,510	570	350	260	40	4,930	21,050
Teacher Assistants	2,180	1,620	340	600	140	50	4,930	20,220
Truck Drivers (Heavy and Tractor-Trailer)	1,990	1,440	270	870	220	10	4,800	34,330
Maids and Housekeepers	1,870	1,530	400	370	270	170	4,610	17,520
Security Guards	1,370	1,780	410	610	220	110	4,500	21,520
First-Line Supervisors/ Managers of Retail Sales Worke	2,300 rs	1,030	510	240	260	NA	4,340	35,560
Landscaping/Groundskeeping	1,490	1,580	420	430	170	20	4,110	21,610
Computer Software Engineers (Applications)	810	2,270	560	220	70	60	3,990	75,750
Child Care Workers	2,100	1,060	320	230	200	30	3,940	17,400
Secondary School Teachers <sup>b</sup>	1,130	1,420	400	640	170	10	3,770	46,790
Executive Secretaries/ Administrative Assistants	1,570	1,260	490	150	120	70	3,660	35,810

<sup>&</sup>lt;sup>a</sup>Mean annual salary from the "May 2003 National Occupational Employment and Wage Estimates" from the U.S. Bureau of Labor Statistics

<sup>&</sup>lt;sup>b</sup>Does not include special education or vocational education teachers

NA - Not Available

NMF — No Meaningful Figure (Salaries vary widely by specialty)

SOURCE: 2000-2010 occupational projections submitted by each state to the U.S. Bureau of Labor Statistics

needs of North Carolina's biotechnology and biomanufacturing cluster."

In a presentation to the State Board of Community Colleges last year, Lancaster said that "over the next three years, 6,000 new workers with less than baccalaureate degrees will be needed in biotechnology and biomanufacturing. ... That's a huge opportunity and challenge for community colleges." The payoff, he concluded, "will be a secure economic future founded on good jobs that pay well."

Biotechnology has replaced computer technology as the darling of work force development efforts in several states, but some economists maintain that the demand for computer skills is bouncing back faster than expected.

"Many people who lost information technology (IT) and telecom jobs in 2001 and 2002 started their own companies, and we're starting to see the benefits of that," says William F. Mezger, an economist with the Virginia Employment Commission. "The big thing in Virginia was the loss of WorldCom," he says, "But we seem to be getting a pretty strong rebound, particularly in Northern Virginia." And the same is true for Maryland and Washington, D.C., Mezger says.

The demand for computer skills has been down somewhat in West Virginia during the past two or three years, says Skidmore. But "those are still highwage, high-skill jobs ... and certainly I think that's one of the areas that will rebound quickly." IT jobs are more broad-based than they originally were, he notes. "Hospitals, banks and different organizations need IT workers."

Despite several high-profile IT layoffs in the Fifth District in recent years, Mezger says the Virginia Employment Commission is not reducing its hefty projections for IT jobs in its 2002-2012 occupational forecast.

## **Lifelong Learning**

Four-year universities in the Fifth District report that some displaced workers are going back to school to earn bachelor's degrees and master's degrees, but work force development experts are not predicting shortages of college graduates with liberal arts degrees.

# **Changing Lanes**

After Michael Fermaglich lost his information technology (IT) job at Bank of America, he got retrained at Catawba Valley Community College. Then he commuted two hours each way to a job that paid about half what he was earning at the bank. And he loved it!

Fermaglich, 30, used to manage computer networks for Bank of America's asset management group in Charlotte, N.C. It was one of those rock-solid, high-tech, high-finance jobs that was supposed to be the staple of the "new economy." But when the bank laid him off in November 2002, Fermaglich decided to abandon the IT field to pursue his dream of building race cars.

"While I was working at the bank, I had been helping out some of the smaller teams in the ... Automobile Racing Club of America," Fermaglich recalls. But to turn his hobby into a career, he knew he would need more intensive training. So he enrolled in the Bobby Isaac Motorsports Program at the community college, where he learned how to build race cars from scratch.

Fermaglich completed the community college program in four months by taking two or three courses at a time to accelerate his retraining. His timing was good. The Bank of America severance pay was running out when Andy Petree Racing Inc. called the school looking for students who were ready to start working in a real race shop. At that time, the Petree team was competing in NASCAR's Busch Series with Paul Menard as its driver.

Fermaglich joined the team in May 2003, and he commuted two hours each day to the team's shop in Asheville, N.C., where he helped assemble the cars.

The community college program was good preparation, but "when I got a job with Andy Petree Racing, I found out that I didn't know as much as I thought I did," Fermaglich admits.



Building race cars from scratch is what the motorsports program at Catawba Valley Community College is all about. Here students measure a frame for a Nextel Cup race car.

"There is so much to learn in this business with the cars and how to set them up and put them together to gain an advantage."

Fermaglich enjoyed working for Petree very much. "I love working on the cars, so it's not a big deal to work late hours or long hours."

Fermaglich isn't married, and he has no children, so the long hours are easier for him to manage, but he says that the cut in pay made him hesitant to leave IT. "I was making about twice as much money in the IT area," he says. "But as you gain experience, and if you stay in racing long enough, the pay dramatically increases."

In mid-June Fermaglich was testing that theory by looking for a new job. Petree laid off the majority of its employees after losing its corporate sponsor. "That goes with the business," Fermaglich says. "You just have to deal with it."

Just one week after losing his job, Fermaglich was interviewing with other racing teams. He was weighing one opportunity, and he was anticipating a second job offer. Now that he has some experience in the industry, he says he can "pretty much pick and choose who I want to work for. ... I don't have any plans to go back to corporate America."

-KARL RHODES

In a recent speech at the University of Richmond, Virginia Gov. Mark Warner said: "We've created this notion that the only way to meaningful success is to get a college degree and then an advanced degree of some kind. We should put more value on technical education. A community college degree produces more earning power than going to UVA for three years and dropping out."

That may be true, but the value of a four-year college degree is going up fast, counters Robert Silberman, chairman and CEO of Arlington, Vabased Strayer Education Inc., the parent company of Strayer University. "Independent of anything that is going on in the economic cycle ... the most compelling reason why people go back to school and finish their bachelor's

# **Digital Dominion**

Virginia predicts the most computer-related job openings per year

Occupation	VA	NC	MD	SC	DC	WV	5th District	Salary*
Computer Support Specialists	2,230	1,500	950	350	200	90	5,320	\$42,640
Computer Software Engineers (Applications)	2,270	810	560	220	60	70	3,990	75,750
Computer Systems Analysts	1,350	740	660	130	310	60	3,250	66,180
Computer Software Engineers (Systems)	1,610	650	600	190	160	20	3,230	78,400
Network/Computer Systems Administrators	900	660	400	120	90	40	2,210	59,140
Computer/Information Systems Managers	790	540	370	110	120	60	1,990	95,230
Computer Programmers	1,180	390	80	40	10	30	1,730	64,510
Network Systems/ Data Communications Analysts	470	310	260	110	60	30	1,240	62,060
Data Entry Keyers	430	140	20	10	40	40	680	23,590
Database Administrators	320	170	90	20	60	20	680	61,440
Computer Hardware Engineers	110	40	60	10	NA	NA	220	79,350
Computer Operators	110	70	NA	NA	NA	10	190	31,870
Computer/Information Scientists (Research)	70	NA	80	NA	20	NA	170	84,530
Total Computer-Related Job Openings	11,840	6,020	4,130	1,310	1,130	470	24,900	

\*Mean annual salary from the "May 2003 National Occupational Employment and Wage Estimates" from the U.S. Bureau of Labor Statistics NA - Not Available

SOURCE: 2000-2010 occupational projections submitted by each state to the U.S. Bureau of Labor Statistics

degrees is that the earnings power of someone in the work force with a college degree is twice what it is with a high school degree," Silberman says.

As the Fifth District moves from a manufacturing-based economy to a knowledge-based economy, the value of a college degree, as a factor of production, is going up, and the value of a high school degree is going down, Silberman contends. "In a manufacturing-based economy, a college degree just wasn't that important. There were a number of well-paying, professionally satisfying jobs that did not require a college degree, but the kind of skill sets that are necessary to prosper in a knowledge-based economy really do require a college degree."

Whether it's pursuing a Ph.D. or a GED, lifelong learning is becoming the watchword among retrainers throughout the nation. "How do you create a system that encourages lifelong learning and supports lifelong learning for people who are employed, as well as

people who are unemployed? That's a key issue," says Fichtner at Rutgers University. "People are going to have to be constantly improving their skills, even when they think they are in a stable job. ... That starts, obviously, with basic education and literacy and then moves up to professional and technical skills. ... People don't tend to think about these issues until it's almost too late."

# On The Road

Truck driver Shirley Smith admits that she had grown complacent in her manufacturing job. "After you've stayed with a company so long ... you don't think there's anything else out there," Smith explains. Luckily for her, though, she was able to quickly land a long-haul truck-driving job with Colonial Freight Systems Inc. — thanks in no small part to graduating fourth in her class at the North Carolina Truck Driver Training School.

Smith's first training run was to California, and it "seemed like everything

that could go wrong did go wrong with that load," she recalls. She and her trainer blew a tire in Arkansas, and Smith got terribly homesick after the first three days.

"If you really love your family and you want to be with your family, over-the-road truck driving is going to be a hard job for you and for your family too," she says. Smith wants to do more for her father, who is in poor health, but she is often gone for two or three weeks at a time.

Ironically, Smith's father was the one who insisted that she pursue long-haul trucking because it pays better than local trucking and provides a more secure future. Smith brings home about \$700 a week — \$1,000 if she works the weekend too. At the Morganite plant, her take-home pay was less than \$350 per week.

Truck driving isn't for everyone, warns Paul Jump, who was Smith's instructor at the school. Long-distance drivers can be on the road 30 days at a

time, he says. They sleep in their trucks. And their schedules for sleeping, eating and personal hygiene are erratic. One reason there are so many jobs available to truck drivers is because the annual turnover rate for long-haul truckers is nearly 100 percent, Jump notes.

Smith says she still has second thoughts during those long stints away from home, but she prefers the open road to a closed factory. "They don't put windows in factories." she explains. "Whenever you go to work, you want to be happy. You don't want to be upset or stressed out. The only stress that I have found in [trucking] is in traffic, whenever cars are trying to take your bumper off, and you know that if you hit them, it's automatically going to be your fault."

# Getting The Most Bang For The Buck

In his speech at Central Piedmont Community College, President Bush praised workers like Smith who are getting retrained and meeting critical needs in the work force. He also proposed more funding — coupled with greater accountability — for retraining programs at community colleges.

"We've got money coming your way," he pledged. "Tell us how many people have actually found a job, how much they earn on their jobs, and how long they stay on those jobs. That's what ought to be measured and nothing else."

Under the Workforce Investment Act, one-stop employment centers already compare displaced workers who get retraining to those who don't. The results seem to show that retraining gives workers an advantage but not necessarily a huge one. In South Carolina, for example, 92 percent of retrained workers found jobs in the 2002-03 fiscal year, but 86 percent of workers with no retraining also found jobs. The retrained workers replaced 99 percent of their earnings, while the workers with no retraining replaced 92 percent of their earnings.

Such results are pretty bright — perhaps surprisingly so. In a widely cited study published in the *American Economic* 



Instructor Paul Jump (far left) with graduating students at the North Carolina Truck Driver Training School.

Review, economists Louis Jacobson, Robert LaLonde, and Daniel Sullivan tracked more than a decade's worth of wage data for a group of Pennsylvania workers. They found that people displaced from manufacturing jobs experienced a roughly 20 percent decrease in long-term earnings if they took a job within the same industry, and an 18 percent drop if they moved to a new one. The figures for non-manufacturing workers were similarly dismal.

"Our results indicate that there is something intrinsic to the employment relationship itself that is lost when workers are displaced," Jacobson, LaLonde, and Sullivan conclude. For instance, many job skills may be firm-specific and not particularly valuable to a new company, even if that company is part of the same industry.

Moreover, evaluating individual work force programs is extremely difficult, says Fichtner at Rutgers University. You really need perfect experiments where people are randomly assigned to get training or not to get training, and "you don't want experiments that are going to impact people's lives in that way," he says.

Even when researchers compare displaced workers who have similar "observable characteristics," as they did in a recent Rutgers study, there are too many "unobservable characteristics," Fichtner explains. "It may be that people who don't get training ... know that their uncle has a job for them, or they know that they have a good

resume, and they are going to get a job, and they are confident. So they may self-select out of getting training. ... Or it may be that people who get training are those people who are really committed to improving their education level and their skill level, and maybe those people are more likely to get employment without training also. ... There's no way to know."

But there is general agreement that the value of retraining is increasing rapidly as all jobs become more intellectually challenging and globally portable. In a recent speech, Federal Reserve Chairman Alan Greenspan hailed "the increased flexibility of our labor market" as an important contributor "to economic resilience and growth." He was referring primarily to companies' ability to hire and fire workers on short notice, but he tipped his hat to community colleges for providing "new job skills that meet the evolving opportunities created by our economies."

Greenspan also noted that "workers, of necessity, migrate with the capital." Historically, those migrations have been from one region to another — leaving behind neglected towns and other wasted resources. Those geographic migrations are likely to continue, but for more and more people, retraining can create intellectual migrations from dying industries to thriving industries, from lower skills to higher skills, and from working class to middle class.

### READINGS

"Evaluation of the Workforce Development Partnership Program in 1994, 1995 and 1996." John J. Heldrich Center for Workforce Development, Rutgers University, January 2000. Greenspan, Alan. "Economic Flexibility." Speech

Greenspan, Alan. "Economic Flexibility." Speech to the HM Treasury Enterprise Conference, London, January 2004.

Heisler, Eric. "After the Shutdown." A series of articles appearing in the *Greensboro News & Record*, April, July, and October 2001.

Kuhn, Peter J. Losing Work, Moving On: International Perspectives on Worker Displacement. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 2002.

Occupational Outlook Handbook, 2004-2005 Edition. Washington, D.C.: Bureau of Labor Statistics, U.S. Department of Labor, 2004.

Visit www.rich.frb.org/pubs/regionfocus for links to relevant Web sites.