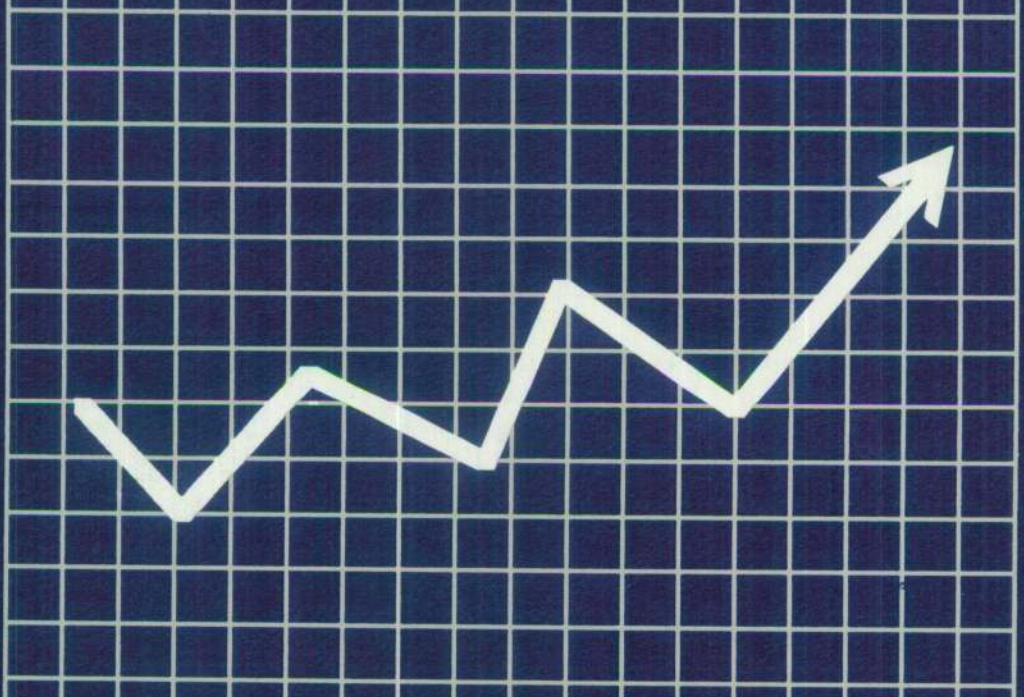
North Carolina Insight
$6 April 1986 Vol. 8, No. 3-4



North Carolina: An Economy in Transition

- Industrial Recruitment
- Small Business
- International Trade
- High Tech

N.C. Center for Public Policy Research

The North Carolina Center for Public Policy Research is an independent research and educational institution formed to study state government policies and practices without partisan bias or political intent. Its purpose is to enrich the dialogue between private citizens and public officials, and its constituency is the people of this state. The Center's broad institutional goal is the stimulation of greater interest in public affairs and a better understanding of the profound impact state government has each day on everyone in North Carolina.

A non-profit, non-partisan organization, the Center was formed in 1977 by a diverse group of private citizens "for the purpose of gathering, analyzing and disseminating information concerning North Carolina's institutions of government." It is guided by a self-electing Board of Directors and has individual and corporate members across the state.

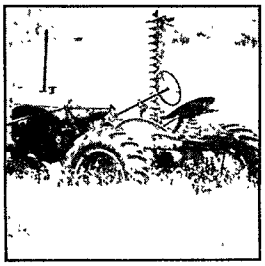
Center projects include the issuance of special reports on major policy questions; the publication of a quarterly magazine called *North Carolina Insight*; the production of a symposium or seminar each year; and the regular participation of members of the staff and the Board in public affairs programs around the state. An attempt is made in the various projects undertaken by the Center to synthesize the integrity of scholarly research with the readability of good journalism. Each Center publication represents an effort to amplify conflicting views on the subject under study and to reach conclusions based on a sound rationalization of these competing ideas. Whenever possible, Center publications advance recommendations for changes in governmental policies and practices that would seem, based on our research, to hold promise for the improvement of government service to the people of North Carolina.

NORTH CAROLINA INSIGHT is a quarterly magazine published by the North Carolina Center for Public Policy Research, Inc. (a non-profit, tax-exempt corporation), P.O. Box 430, Raleigh, N.C. 27602. Telephone (919) 832-2839. Annual membership rates: Individual, $24; Organizational, $30; Supporting, $50; Corporate, $100; Supporting Corporate, $250; Patron, $500. Third class postage paid at Raleigh, N.C. Printed by Theo. Davis Sons, Inc., Zebulon, N.C. The Center is supported in part by grants from the Mary Reynolds Babcock Foundation and the Z. Smith Reynolds Foundation, as well as by corporate contributions and 600 corporate and individual members across the state. The views expressed in this publication are those of the authors and are not necessarily those of the Center's Board of Directors or staff. Published April 1986.

Cover art by Carol Majors.

North Carolina **Insight**

Vol. 8, No. 3 - 4 April 1986



Editor
Bill Finger

Associate Editor
Jack Betts

Production Director
Carol Majors

Production
Theo. Davis Sons, Inc.

DEPARTMENTS

A trinity in transition

Government, Business and the Economy

by Roy Parker Jr.

In a sense, it was a crowd of 900, all with their hands out.

Speakers at this event wanted:

- More money for research to benefit clients.
- "Crisis teams" to rush in when a client is in trouble.
- Tax breaks for clients who are trying new approaches.
- "Incubators" where new clients can have free space and help to get on their feet.
- Government-guaranteed monopolies for certain clients.
- More money for government programs in education, job training, and transportation.

Were they welfare recipients?

No, they were businessmen, industrialists, bankers, venture capitalists, community economic developers, representatives of trade associations, county commissioners, legislators, professors, and analysts and brokers.

This powerhouse of economic prestige was gathered for a day at N.C. State University for a massive think-tank exercise known officially as the "Emerging Issues Forum" with the theme: "Innovation and Competition—The Challenge to America."

The "want list" above came from a lineup of speakers that included John A. Young of Hewlett Packard, who is chairman of President Reagan's Commission on Industrial Competitiveness; Richard Cyert, president of Carnegie-Mellon University and a leading idea-man of modern U.S. capitalism; Charles Dunn, then of the North Carolina Textile Manufacturers Association; and Don Beilman of the Microelectronics Center of North Carolina. Former Governor James B. Hunt Jr. and NCSU Chancellor Bruce Poulton were chairman and chief host, respectively.

There was irony in the fact that even as the speakers made their points, the federal government was struggling with ways to comply with the new spending-limits law that if successful could well *reduce* the sorts of resources mentioned by the speakers.

Nonetheless, the message was remarkably unanimous that the American economy is heavily dependent on the government, especially in research, education, and policies that give a financial break to investment and the building of infrastructure for economic activity.

If anything, business will be calling on government more and more in the countdown years before the 21st century as the world economy grows more and more independent of Uncle Sam. The need to innovate and retrain and reinvent, to invest intensely and to muscle into new markets, will become increasingly vital.

All these things require more intense interplay between public and private plans and resources, what the speakers often euphemize as "cooperation" but what is basically nothing more than your good old-fashioned government help.

North Carolina could be a curiously unique testing ground of the emerging new economy because the new and old are working themselves out in close proximity in the state.

In one sense, the Old North State is one of those decaying "smokestack industry" places where grand old stalwarts like tobacco and textiles face an uncertain future.

On the other hand, North Carolina—at least some parts of it—is on the new Sun Belt frontier of high-tech, microchip-and-robot growth.

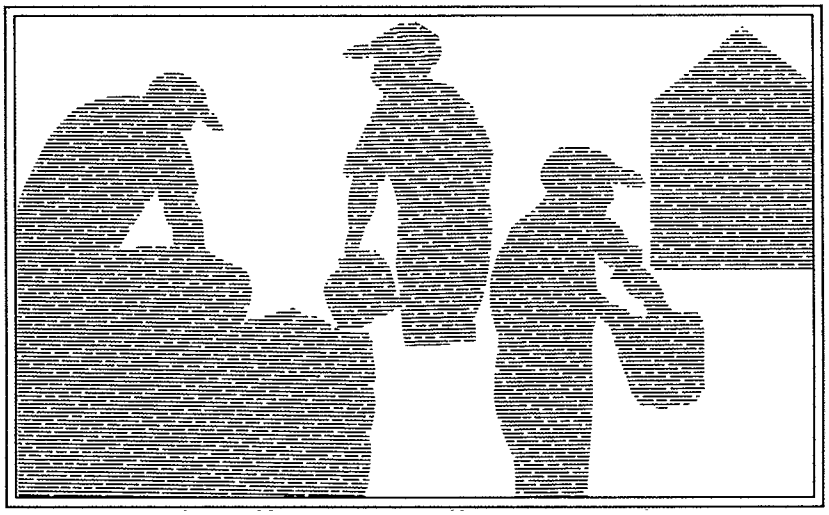
The trick will be to balance the state's economic future so that everybody can benefit from it—textiles and tobacco, turkeys and timber, and high-tech, too.

In that balancing act, the gathering was as one in the conclusion that nothing is more necessary than the continued enhancement of the already awesome research and technology resources of such great campuses as N.C. State, Duke, and the University of North Carolina, and the improvement of secondary schooling to produce a trained and intelligent workforce for an era in which brainpower will be the main resource on the production line, in the front office, and at the marketplace.

So it turned out that if North Carolina has a new secret weapon to win economic victory in the new century, it is a commitment to education for its people at every level.

It was an important rediscovery of an old verity.

Roy Parker Jr. is editor of The Fayetteville Times *and a member of the board of directors of the N.C. Center for Public Policy Research. This column is reprinted from* The Times' *Jan. 16, 1986 edition.*



Making the Transition to a Mixed Economy

by Bill Finger

In the 1970s, North Carolina lurched into a major economic transformation—from a rural culture dependent upon agriculture and predominantly low-wage industries to an urban economy relying increasingly upon the service and trade sector. Three transitions are sweeping through the economy at once: from labor-intensive to capital-intensive industries; from manufacturing jobs to trade, service, finance, transportation, and government jobs; and from small, tobacco-dependent family farms to large, often corporate-owned farms producing diverse products. These transitions are pushing North Carolina toward a dual economy, with booming urban centers and depressed rural areas. How can state economic development efforts address the needs now becoming clear? The mixed economy of the future demands different governmental strategies than in the past.

Two hundred and fifty years ago, North Carolina's economy was literally home-grown. At least 95 percent of the state's inhabitants depended on agriculture for their livelihood. "The abundance of land, the ease of acquiring it, and the relative scarcity of capital and labor were fundamental factors in determining the economy, social order, and political character of North Carolina," writes historian Hugh Talmage Lefler.[1] In subsequent years, poor whites and slaves—who couldn't acquire land with ease—helped build the agrarian culture that evolved.

As late as 15 years ago, North Carolina's economy still revolved around the land. The textile mills, which had grown up along the rivers and waterways of the state, spun record amounts of cotton into fabric. The rural counties depended upon the world's best tobacco crop. Fifty-five percent of the state's people lived in rural areas, often making ends meet by combining a shift in a mill with a little patch of tobacco. Textiles, apparel, and furniture plants dotted the rural landscape like familiar road signs.

By 1970, North Carolina had not gone through the dramatic transition from an agricultural to an industrial economy that the Northeast and parts of the urban South had. To be sure, the state had gone through a kind of intermediate transition. But when the textile and furniture mills sprung up in the late 19th and early 20th centuries, they did not transform the state's agrarian society. In perhaps the most distinct industrial "revolution" in the nation, this manufacturing base in essence integrated itself into an agricultural society.

Not until the mid-1970s did North Carolina lurch into a major economic transformation—from a rural culture dependent upon agriculture and predominantly low-wage industries to a more urban economy increasingly relying upon the service and trade sector for jobs. "The Tar Heel state has become a genuine national test case of the ability of a society to make a fundamental economic transition," says Ferrel Guillory, editorial page editor of *The News and Observer* in Raleigh.

In 1973, 36 percent of all manufacturing jobs in North Carolina were in textiles—290,000 jobs.[2] By October 1985, the figures had dipped to 25 percent and 206,000 jobs. More than one of every four textile jobs in North Carolina had vanished in just 12 years. This fundamental change in the state's leading industry came from two factors: mechanization of the heavily labor-intensive industry, and an increase in imports, which in effect was an export of textile jobs to Taiwan, Korea, and other lower wage countries. From 1980 to 1984 alone, the foreign share of the American apparel market climbed from 21 to 50 percent.

Tobacco, meanwhile, has held its own in some respects. From 1973 to 1985, tobacco manufacturing employment—always small relative to textiles—declined only 3 percent, from 28,100 to 27,200 jobs. Moreover, this year R. J. Reynolds is scheduled to open its state-of-the-art, $1 billion plant in Tobaccoville, just north of Winston-Salem, which will employ 2,000 people. But on the farms, tobacco has dwindled from the mainstay of the state's agriculture to a crop with an uncertain future, highly dependent upon the federal price support system. In 1950, 60 percent of total farm cash receipts in North Carolina came from tobacco. By 1984, tobacco accounted for only 24 percent of receipts. For the first time, poultry products (27 percent) passed tobacco as the leading agricultural commodity in the state.

From 1970 to 1984, the portion of the state's jobs outside of factories grew from 60 to 68 percent while manufacturing jobs dropped from 40 to 32 percent (see Table 1). But manufacturing remains an important component in the overall economy of the state. "You have to remember that manufacturing accounts for three of every 10 nonagricultural jobs and more than three of every 10 dollars spent in the economy," says Dr. John E. Connaughton, an economist working with First Union National Bank and the University of North Carolina at Charlotte (see Table 2).

These figures suggest not one but three transitions that are currently underway in the state's economy:

- a shift within the *manufacturing sector* from labor-intensive to capital-intensive industries—from millhands to machine operators;
- a shift within the *nonagricultural sector* from manufacturing to trade, service, and government jobs—from blue collar to white collar jobs; and
- a shift in the *agricultural* sector from small farms relying extensively on tobacco income to larger farms diversifying into many crops, often run by corporations or under contract.

These three transitions, working together, are forcing businesses, banks, analysts, planners, and policymakers to anticipate what kind of mixed economy might lie ahead. What kinds of jobs can North Carolinians depend on? What kind of new economy will replace the old? Because these three transitions are proceeding at the same time, the evolution to a mixed economy is causing both prosperity and suffering.

"We're seeing a full-fledged evolution of a dual economy," says Greg Sampson, director of

---

Bill Finger is editor of North Carolina Insight. *Artwork by Carol Majors.*

research at the N.C. Employment Security Commission, part of the N.C. Department of Commerce. "The metropolitan areas are the seedbeds of the service-based economy, especially personal and information services. The non-metropolitan areas are weaker due in part to a lack of attractiveness to new industry of all kinds."

Most of the metropolitan areas are booming—in construction, jobs, and population. "This boom is driven by population growth and personal income growth—which is high in metro areas and low in non-metro areas," says Sampson. In 1984, the four most urban counties had among the state's lowest average unemployment rates: Wake County (3.3 percent), Mecklenburg (4.6 percent), Guilford (5.4 percent), and Forsyth (5.5 percent). The overall state average was 6.8 percent.

"Most of the employment problems are in the non-metro areas," says Sampson. In 1984, 22 counties had an average unemployment level of more than 10 percent. Most of the 22 were rural, but the group included counties with medium-sized towns as well, such as Wilson (Wilson County, 11.1 percent unemployment) and Roanoke Rapids (Halifax County, 11.4 percent).

To anyone who travels the state off the interstate highway system, such figures come as no surprise. What is not apparent, however, is how such a dual economy—the boomtowns and the depressed towns—can move through a transition at the same time. How can any state economic development strategy address the needs of such contrasting situations?

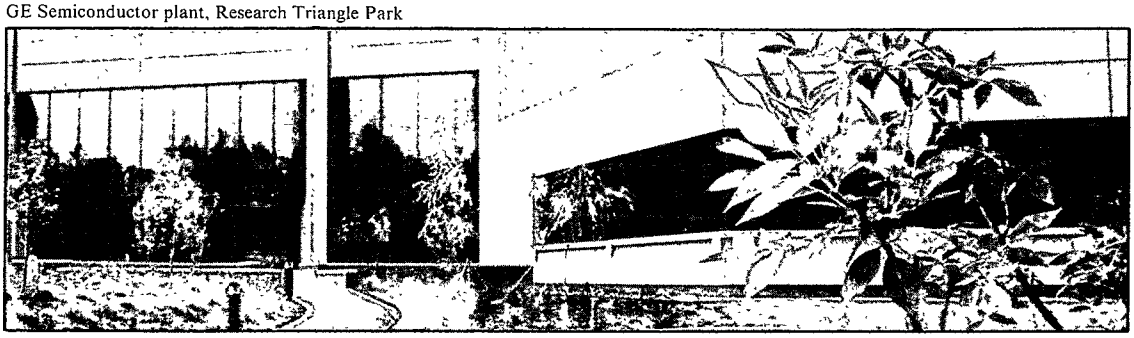
North Carolina is part of a national transition, moving gradually from an economy based on agriculture and manufacturing to an economy increasingly dependent upon services and information. The roles that textiles and tobacco have played in the state's history have resulted, however, in some important distinctions between the transitions here and those in other parts of the country. North Carolina, for example, has a higher percentage of its work force in manufacturing jobs than any other state, 32.4 percent in 1984. At the same time, the 1980 Census found that 52 percent still lived in rural areas (includes towns under 2,500 population). A high percentage of women worked in this state long before the recent wave of women moved into the work force. And a dispersed population meant that no dominant urban center arose, such as Atlanta, Memphis and Nashville, New Orleans, Birmingham, Houston and Dallas, and Little Rock.

The evolution of North Carolina into the leading textile, apparel, tobacco, and furniture-producing state accounts for these unique demographics. Since these industries were scattered and paid relatively low wages, husbands and wives had to work and often chose to live on a farm, which was cheaper than in a city. From the 1930s, the federal tobacco price support system, which assigned allotments to specific plots of land, served as an inducement for people to stay on their farms. Often a tobacco farmer held down a third-shift job in a mill. Or if a millworker wasn't lucky enough to own a small allotment, he could at least raise a few hogs and a little corn. In recent years, many people who work in a city have continued to live in rural areas, near their roots, often commuting long distances.

These historical and more recent patterns have intertwined the state's urban and rural areas. "Once an area has a manufacturing base, it can generate additional money and support an expanding service economy," explains Sheron Morgan, senior policy analyst at the Department of Administration. Hence, the "dual economy" label can be misleading, contends Morgan, because many rural areas currently have expanding service and trade sectors. But the money being spent on these rural services might depend on the economic base of cities—where most of the jobs are.

"North Carolina is in better shape than states that have one or two dominant urban centers," says the ESC's Sampson. "We're seeing the acceleration of the transition now—from an economy dominated by a few industries to a mixed economy, with service activity the leading edge and metropolitan areas benefiting the most. In the short and medium run, the gap between metro and non-metro counties in terms of employment and growth will probably grow."

GE Semiconductor plant, Research Triangle Park



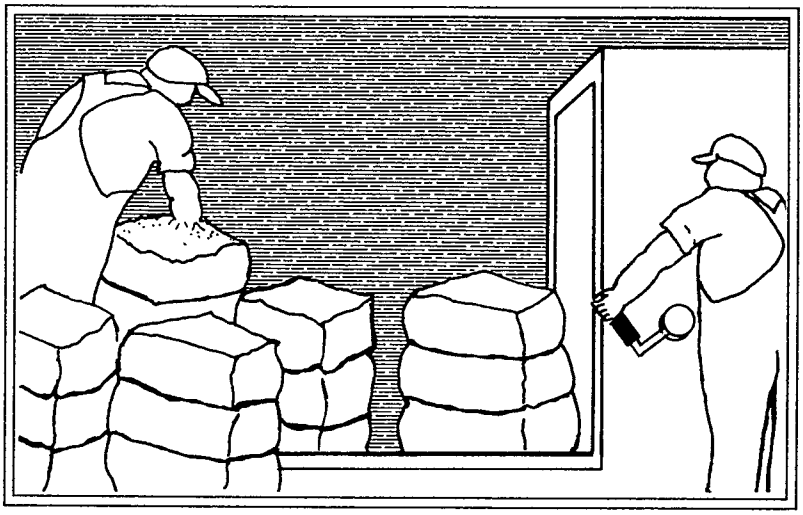
Courtesy N.C. Department of Commerce

Table 1. Nonagricultural Employment in North Carolina, 1960-1984

Category of Employment (Ranked by Size, 1984)	1984 Employment in (1000s)	1984 Percent of Total Non-agric.	1980 Employment in (1000s)	1980 Percent of Total Non-agric.	1970 Employment in (1000s)	1970 Percent of Total Non-agric.	1960 Employment in (1000s)	1960 Percent of Total Non-agric.
A. Manufacturing	830.6	**32.4%**	820.0	**34.5%**	718.4	**40.2%**	509.3	**42.6%**
1. Textiles	220.2	8.6	245.8	10.3	280.7	15.7	228.8	19.1
2. Apparel	92.3	3.6	88.0	3.7	75.1	4.2	35.3	3.0
3. Furniture	84.6	3.3	81.5	3.4	66.2	3.7	44.6	3.7
4. Electrical Machinery	62.4	2.4	55.3	2.3	40.9	2.3	25.4	2.1
5. Non-electrical Machinery	54.8	2.1	49.5	2.1	29.3	1.6	12.5	1.0
6. Food & Kindred Products	44.0	1.7	44.0	1.8	41.4	2.3	33.5	2.8
7. All Other Sectors	272.3	10.6	255.9	10.8	184.8	10.3	129.2	10.8
B. Nonmanufacturing	1,731.2	**67.6**	1,560.0	**65.5**	1,068.2	**59.8**	686.2	**57.4**
"Big Three" 1. Retail & Wholesale Trade	549.3	21.4	472.9	20.0	324.5	18.1	219.8	18.4
2. Government	413.7	16.1	409.9	17.2	264.2	14.8	164.2	13.7
3. Services	398.2	15.5	341.3	14.3	217.5	12.2	127.1	10.6
"Little Three" 4. Construction	133.0	5.2	118.7	5.0	96.5	5.4	65.2	5.5
5. Transportation, Communication & Utilities	127.5	5.0	116.5	4.9	92.1	5.2	64.5	5.4
6. Finance, Insurance & Real Estate	104.9	4.1	95.5	4.0	69.5	3.9	42.1	3.5
7. Other (Mining)	4.6	.2	5.2	.2	3.9	.2	3.3	.3
Total Nonagricultural Employment	**2,561.8**	**100.0**	**2,380.0**	**100.0**	**1,786.6**	**100.0**	**1,195.5**	**100.0**

Source: Labor Market Information Division, N.C. Employment Security Commission, "North Carolina Labor Force Estimate" (for 1984, 1980, and 1970) and unpublished data. (1960).

Table prepared by Marianne Kersey.



From Labor to Capital— Factories Take the Leap

"Linthead." For sociologists of the 1930s, no single word better summed up the history of factories in this state. For textile industry officials in the 1980s, no word sounds more inflammatory. A linthead, literally, was a textile worker with fluffs of cotton clinging to his clothes at the end of a shift. In a broader sense, a linthead was any person who knew the rhythm of the shift whistles that kept time in a milltown.

But the textile industry has changed. The cotton dust standards under the federal Occupational Safety and Health Act and the same technology that brought us video cassette recorders and microwaves have made the linthead largely obsolete. Today, robots carry giant rolls of cloth, and water-propelled machines noiselessly weave lint-free cloth. Modern textile workers sit behind a computer screen as well as fix looms. Computer operators now can tell machines where to cut bolts of cloth by viewing the fabric as a graphic on a terminal.

Yet the new has not eradicated the old. In 1984, 90,000 people—mostly women—worked in the state's apparel industry, the second largest manufacturing sector behind textiles (and barely ahead of furniture). Many of these women still sew bolts of cloth in small cut-and-sew operations. The apparel industry has just begun to embark on the kind of massive capital-investment campaign that the textile industry launched in the 1970s. Wages in the apparel sector remain significantly below those for textile workers (see Table 3).

Alamance County, unlike the more metropolitan and rural counties, is neither booming nor suffering. But it is in transition, from a labor-intensive, textile-based economy to a more diversified mix of manufacturing jobs. This mix includes a more capital-intensive textile industry, more types of industry, and an increase in service jobs, especially at discount malls. Since J. Spencer Love launched Burlington Industries in Alamance County in 1923, the fate of textiles has generally determined the prosperity of the area. Unemployment levels have risen and fallen with the cycles of the textile industry.

In recent years, Alamance County has been able to ride piggyback on the shift to computer-related jobs in the Research Triangle to the east and the Triad to the west. Sandwiched between two high-growth areas, yet still dependent on the

"They're closing down the textile mill, across the railroad tracks,
Foreman says these jobs are going boys, and they ain't coming back,
To your hometown, your hometown."

—"My Hometown" by Bruce Springsteen

state's traditional industry, Alamance County reflects the two most important shifts in the state's labor-to-capital odyssey: the changes in the textile industry and the coming of a diversified, computer-dependent industrial base.

Textiles. Manufacturing jobs, including the textile sector, peaked in Alamance County during the 1960s. The unemployment rate never rose over 6 percent and was often as low as 2 percent.[3] Never again would Alamance County have as many people working in factories as it did in 1969 when 25,630 people punched a time card. One of every three of those people clocked in at a textile mill. Textile jobs remained stable, with only small dips and rises, until the recession of 1974-75, which was to alter forever the industrial landscape of Spencer Love's old stamping grounds.

In 1975, unemployment averaged 9.5 percent in the county (with a high of 12.7 percent in February). There were 20 percent fewer textile jobs than just six years earlier (15,360 compared to 19,240). Even though the textile industry's sales and profits improved after the recession ended in 1976, the industry never regained the lost jobs. Textile employment in the county continued to fall, to 12,900 in 1983. And other manufacturing jobs did not pick up the slack. In 1983, Alamance averaged an 11.5 percent unemployment rate, the highest for the county since the Employment Security Commission began keeping such records in 1962.

The jobs never returned because the textile leaders had begun to reshape the industry. Spencer Love built Burlington Industries into the world's largest textile company, employing 81,000 people in 1974; it was also the largest employer in the state and in Alamance County. In 1974-75, Burlington Industries began a major restructuring program, closing or selling 32 plants (18 of them in North Carolina, from Rhodiss to Reidsville). The company then launched a massive $1.8 billion capital expenditure program, from 1976 to 1984. About 85 percent of these expenditures went for modernization, "to increase labor productivity, improve quality, and enhance flexibility," as the 1977 annual report put it, in order "to replace outmoded shuttle looms with faster, more flexible shuttleless machines and to upgrade cotton yarn opening and carding equipment."[4]

The modernization campaign turned Burlington Industries into a far more capital-intensive company, and much of the rest of the industry followed. "The textile industry has spent about $1.5 billion a year for the past 10 years for modernization," says Jim Leonard, manager of economic analysis for Burlington Industries. What resulted from the capital investment and the divestitures, however, besides improved productivity, less cotton dust, and "enhanced flexibility," was a 35 percent drop in Burlington Industries' employment in 10 years, from 81,000 in 1974 to 53,000 in 1984.

According to industry officials, however, the declines in jobs have just begun—unless federal trade restrictions on imports are tightened. After an intense and well-orchestrated lobbying campaign by the textile and apparel industry, including the unions, to raise import quotas, Congress passed the Textile & Apparel Trade Enforcement Act of 1985. President Reagan vetoed the bill, however, and votes to override

Table 2. Percentage of Gross State Product by Sector, 1985

Sector of Economy		Percent of Gross State Product*
Manufacturing		33.7%
Nonmanufacturing		62.4%
Retail and Wholesale Trade	17.3%	
Government	11.6%	
Finance, Insurance & Real Estate	10.8%	
Services	10.2%	
Transportation, Communications, & Utilities	8.7%	
Construction	3.6%	
Mining	.2%	
Farm and Agricultural Services		3.9%

Source: The UNCC/First Union North Carolina Economic Forecast, November 1985.

*These are percentages of total "real" Gross State Product. Real GSP refers to calculations based on 1972 dollars.

the veto appeared short of the necessary two-thirds majority. The complex bill would slow the growth of imports of textiles, apparel, and man-made fibers to a level more consistent with the industry's own growth. The trade act concentrated on the traditional "big four" Asian competitors (Taiwan, Hong Kong, Korea, and Japan) and the recent threat, the People's Republic of China.

In a recent industry survey, says Leonard, "We counted 1.3 million garments on retail racks and shelves. Our survey showed that imports make up 60 to 70 percent of the garments available to the consumer." This is significantly higher than the 50 percent figure given in government data. But either figure means fewer jobs.[5]

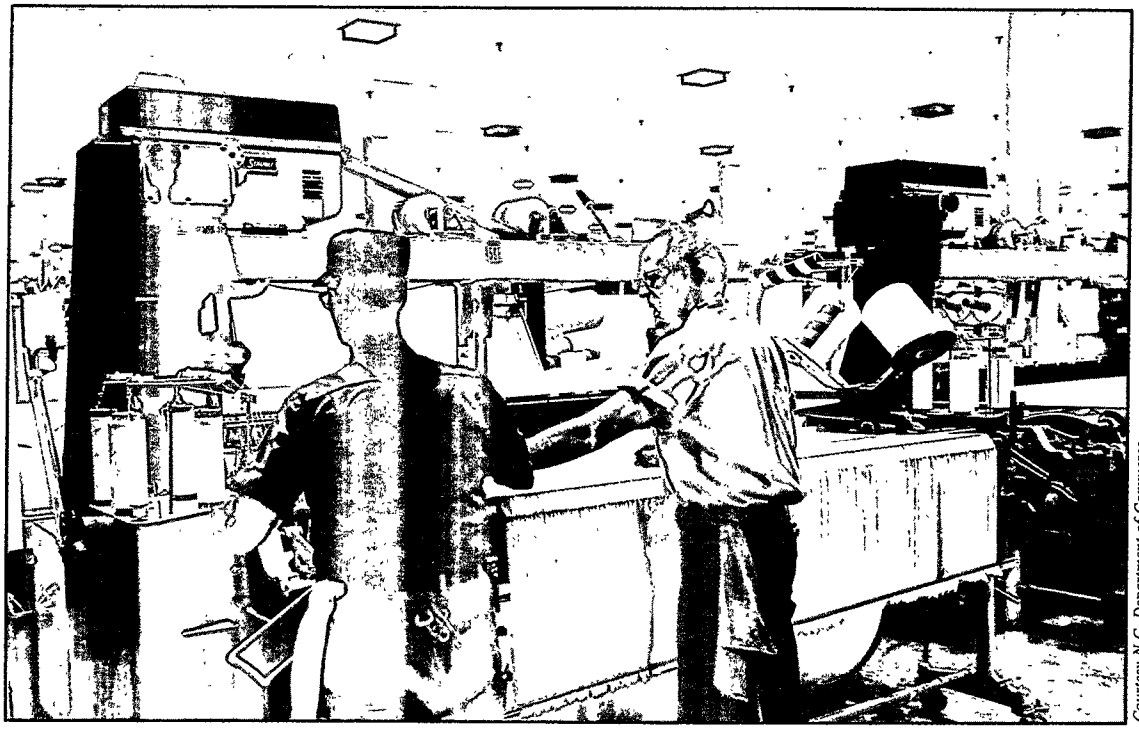
The textile industry has been forced to operate more efficiently and to shift to less vulnerable product lines such as designer sheets and towels. In some cases, that has meant mergers or sales of entire product lines. In December, for example, California financier David Murdock announced the sale of most of Cannon Mills to Fieldcrest Mills. Murdock had bought Cannon Mills from the Cannon family in 1982. Meanwhile, J. P. Stevens Co. has put its apparel fabrics divisions up for sale. The recent mergers and capital investments reflect the complexity of the textile industry, which makes everything from automobile seat covers to bolts

Table 3. Average Hourly Earnings of Production Workers in Selected Industries in North Carolina, October 1985

Industry	Average Hourly Earnings
Tobacco Manufacturers	$11.91
Paper and Allied Products	11.27
Chemicals and Allied Products	9.79
Electrical Machinery	8.37
Non-electrical Machinery	8.28
Statewide Manufacturing Average	**7.32**
Furniture and Fixtures	**6.70**
Textile Mill Products	**6.50**
Food and Kindred Products	6.46
Lumber and Wood Products	6.33
Wholesale and Retail Trade	6.07
Apparel & Other Textile Products	**5.16**
Hotels & Other Lodging Places	4.55

Source: "State Labor Summary, October 1985," Employment Security Commission.

Installing new warp on water-jet loom at Burlington Industries, Richmond Plant.



Courtesy N.C. Department of Commerce

of raw fabric. Categorizing the changes in the industry can be overly simplistic except for one stark fact—people are losing their jobs.

According to the U.S. Department of Labor, from January 1979 to January 1984, 80,000 textile workers and 136,000 apparel workers nationwide lost jobs because of plant closings or cutbacks. The study estimated that 81,000 North Carolinians—in all jobs—had been displaced. Only persons who had held a job for three years were included in the study.[6] The Department of Labor survey found that in 1984, 60 percent of the textile workers were employed, 26 percent were unemployed, and 14 percent were not in the labor force. These figures were very close to the nationwide percentages for all types of workers. Another important figure that does not show up in such a study "is the large number of people who can't get jobs in textile plants in the first place," says Charles Dunn, formerly the executive vice-president of the N.C. Textile Manufacturers Association.

"There are few ways in which a man can be more innocently employed than in getting money."

—Samuel Johnson, in Boswell's "Life"

Diversified, Computer-Dependent Industries. If a tightening of the textile industry's belt brought 11.5 percent unemployment to Alamance County in 1983, a more diversified manufacturing base helped bring the rate back down to 4.7 percent by October 1985. Capital-intensive industries coming to Alamance County have hired some laid-off textile workers, who were retrained at the Technical College of Alamance, the local community college (see article on page 84 for more on such training programs). For example, GKN company employs 600 people making front-wheel drive parts. Sandvik, a Swedish company, has 60 people making carbide cutting tools. And the Honda company has a 120-worker plant making high-priced lawnmowers.

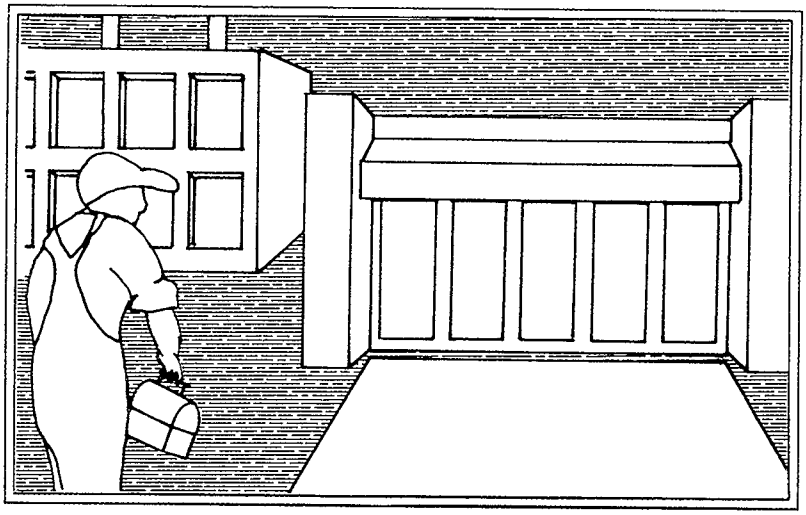
Other companies that are either expanding or developing a new facility in the county include: Carolina Biological Supply, with a new $1.75 million facility that will have 40 employees; D.F.M.&T., a computer software company, moving from a small Burlington office to an 8,000 sq. ft. facility for 20 employees; and Zeller Corporation, which will start with 35 machinists and metal workers making universal joints. These industries reflect the wide range of capital-intensive industries now dependent on computers for everything from production schedules to assembly-line management.

Other areas of the state, particularly the nearby Research Triangle, have concentrated on the computer industry itself, including microchip assembly operations. The widely publicized Microelectronics Center of North Carolina (MCNC), begun in 1981, stands as a symbol of state efforts toward attracting more high-tech industries. This center and other programs, particularly the North Carolina Biotechnology Center, are geared specifically toward using computer technology in innovative ways (for more on these two centers, see article on page 74).

Despite the increased investment in high-tech related jobs, in 1985, 48 percent of all *manufacturing* jobs in the state were in apparel, furniture, and textiles. These three sectors are among the lowest paying jobs in the state (see Table 3). Consequently, in 1985, the average *industrial,* hourly wage in North Carolina, $7.32, ranked 49th among the states.

Gov. Martin tours Honda lawnmower plant—similar to Honda plant in Alamance County—while on recruiting trip to Japan in October 1985.

Courtesy N.C. Department of Commerce



Services and Trade—Jobs for the Future

In 1985, American Airlines announced it would make Raleigh-Durham Airport its major north-south hub on the east coast; American Express released plans for its new 2,000-person operations center in the Piedmont Triad area; Purolator, the express mail service, decided to expand its operations in Fayetteville; and Royal Insurance Company indicated it would move its 1,200-person operation from New York to Charlotte.

The arrival of such companies as American Express certainly represents a landmark, but the 2,000 employees at the four-story operations center planned for a hillside near the Greensboro airport will have plenty of company in the burgeoning service and trade economy. In 1984, more than twice as many people worked in *nonmanufacturing* jobs in North Carolina as in *manufacturing* jobs—1,731,200 compared to 830,600 (see Table 1). These 1.7 million jobs fall into six major categories, which can be grouped as the "big three" and the "little three." In 1984, the big three—trade, government, and service—accounted for 53 percent of *all* jobs in the state. (The term "jobs" as used here, and in most articles, excludes the military, farm jobs, and domestic workers.) The little three are: construction; financial, insurance, and real estate; and transportation, communication, and utilities; these three sectors had 14 percent of all jobs. (The other 33 percent are in the manufacturing sector.)

Trade. In 1984, the wholesale and retail trade provided more than one of every five jobs in the state, 549,000 positions. Since 1970, the number of such jobs has jumped 69 percent. While the growth has occurred statewide, metropolitan areas have reaped the most benefits. And no place is thriving more than the state's largest metropolitan area, Charlotte.

"There are 2,300 wholesale firms in the area with annual sales totaling $15 billion," says Tony Crumbley, research director for the Charlotte Chamber of Commerce. "We're the tenth largest wholesale center in the nation. On a per-capita basis, these wholesale figures ranked Charlotte number one in the country." The wholesale companies distribute everything from alcohol to zippers. "About half of the foreign wholesale companies are related to the textile industry," says Crumbley, who emphasized that the textile industry is important to the trade sector.

Meanwhile, retail sales in Charlotte totaled $6.5 billion in fiscal year 1984. Retail sales include fast-food shops and the fancy steak

"The main impact of the computer has been the provision of unlimited jobs for clerks."

—The Sayings of Chairman Peter Drucker, No. 15.

houses, shopping malls and downtown department stores, grocery chains and neighborhood specialty shops. "We're going through an active growth cycle now," explains Crumbley. "We had a stable period from about 1978 until around 1983. But now we're seeing lots of new shopping and retail centers come on." In a December 1985 survey of retail shopping facilities larger than 25,000 square feet, the Charlotte Chamber found 11.1 million square feet in use, with only 2.8 percent of the space empty. In 1985 alone, 1.4 million square feet of retail space came into use, a 14 percent increase in retail space. And Charlotte already served as the corporate headquarters for such retailers as Belk, Ivey's, Pic-N-Pay, Harris Teeter, and Family Dollar Stores.

The growing travel and tourist business reflects a different side of the retail trade boom. Vacationland North Carolina brings jobs to rural areas on the coast and in the mountains. But the seasonal nature of the work is a mixed blessing, not to mention the very low wages—statewide. The hourly production wage for hotel and motel workers ranks at the bottom of all categories, and retail workers aren't much higher. To compare, both are well below the average textile wage (see Table 3).

Government. In 1984, federal, state, and local governments provided 16 percent (413,700) of all North Carolina jobs. This sector had major growth spurts in both the 1960s and 1970s, but began to slow in the mid-1980s. During the 1960s, federal government programs increased dramatically, creating new jobs ranging from Head Start teachers to Farmers Home Administration loan officers. The trend continued in the 1970s, with major new programs coming on line, such as the Environmental Protection Agency facility at the Research Triangle Park. By 1984, there were 50,000 federal employees, but upcoming federal budget cuts are likely to cut this number.

Meanwhile, state government expanded sharply in the 1960s and into the 1970s, keeping pace with the population growth and entering such areas as environmental management, job and technical training, expansion of the university system, and increased health services like Medicaid. In 1984, state government jobs totaled 121,100, but the numbers may not grow much larger. (This figure does not include teachers, who are included in the local government sector even though they are paid primarily with state funds.)

"We're now under an administration that has a different perspective of what the government sector ought to be," says Alice Garland-Swink, research and policy specialist for the State Employees Association of North Carolina. "The Martin administration believes that if there are services that the private sector can provide, that's who ought to be providing them. I don't see the number of state government employees growing by leaps and bounds. As the economy grows, there will be some growth. But it's not going to fill the gap created by industries closing in the state."

By far the largest government employer, though, is local government, with more than 242,000 positions in 1984, including teachers. In the 1970s, local government employment grew rapidly, as counties and municipalities became more active in economic development, the arts, recreation, water and sewer facilities, and social services.

"As the federal government divests itself of responsibilities, you'll see the state and local governments talking more about who ought to be providing what," says Garland-Swink. "I think you'll see increases in jobs first at the local governments and then in state government."

Service. In non-technical terms, the word "service" is used to describe the entire nonmanufacturing sector—meaning everything from the services of a bank, realtor, insurance company, department store, grocer, or lawyer. In government measurements of job categories, the service sector includes people who work in motels, amusement and recreation activities, private health-care facilities (from nursing homes to hospitals), private schools and colleges, churches and other membership organizations, repair shops, motion pictures, child care centers, or private museums—just to name *some* of the places. The service sector also includes doctors, lawyers, engineers, and accountants, so long as they are in the private sector. What is driving the rapid growth of this hodgepodge of activities? The answer is demographics. The two most dramatic demographic trends of the era are the odyssey through life of the baby boomers (and their babies) and the graying of America (see "Policy and the Aging: Moving Toward a Crossroads," *North Carolina Insight,* Vol. 8, No. 1, September 1985).

Jack Betts

The baby boomers (now aged 25 to 40, roughly) and the elders (65 and over) have caused the service sector to grow faster than any other in recent years. These two groups have spawned whole new industries, from child care centers to nursing homes. As technology has helped to cure more diseases and prolong life, so has it dramatically boosted employment in health care—home health aides, nurses, and gerontologists. In 25 years, the number of service-sector jobs in North Carolina has more than tripled, from 127,100 in 1960 to 398,200 in 1984.

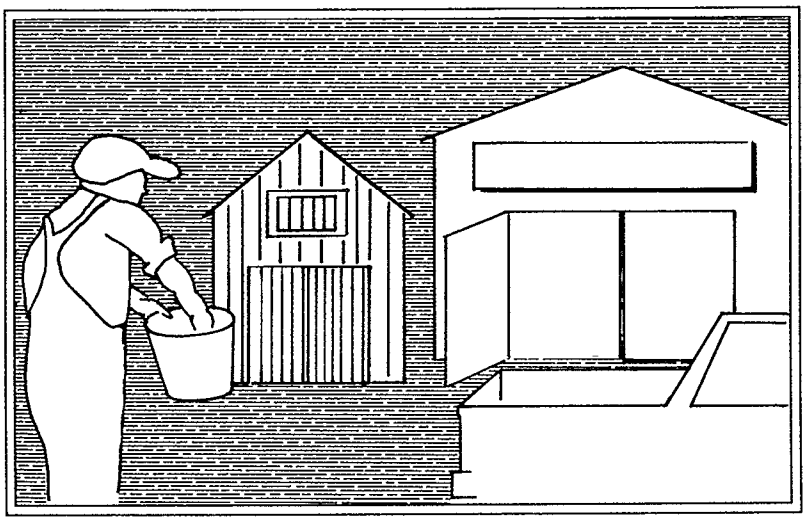
The "Little Three" (see Table 1). What does a banker in pinstripes have in common with a construction worker in jeans? Or how about a realtor (with a new, in-the-car telephone) and a telephone worker installing fiber-optics technology? All four of these jobs depend upon a growing economy, and they are interrelated. Moreover, they depend upon a strong manufacturing base, showing the interrelationships among the sectors. Banks, for example, now offer individual retirement accounts, ready asset accounts, and certificates of deposit as a regular part of a business that only a few years ago rarely went beyond checking and savings accounts. Meanwhile, the insurance industry has moved from whole and term life to universal life, long-term investment schemes, mortgage life, and other new products.

These new offerings by the finance and insurance industry demand sophisticated staff, more computers, the construction of more office space, more business trips, better communication systems, and overnight mail and package service. Because North Carolina's cities are among the fastest growing areas in the country, the 1985 announcements by American Airlines, American Express, Purolator, and Royal Insurance Company are hardly surprising. Together, the "little three" have almost as many jobs as the service sector, 365,000 compared to 398,000.

The new American Express facility in Greensboro illustrates how these three sectors have fueled the transition economy in North Carolina. The company decided to build its fifth American operations center in North Carolina because of the state's good quality of life, the available work force, and competitive wages, says Ken Croft, public affairs manager for the American Express Payment Systems Division. But this familiar refrain of what North Carolina has to offer wasn't enough.

In early 1985, Southern Bell phased in a new $4.3 million electronic switching system serving customers in the Greensboro airport area. "What helped put this site ahead (of competing locations) was the telephone switching systems already in place," adds Croft. "We're a major telephone service center, monitoring credit ratings for merchants all over the region. The telephone system made the specific difference."

The state's strong banking industry also serves as a lure for new finance-related companies. Charlotte, long a banking center, now has 11 banks headquartered there with combined assets (including holding companies) totaling more than $35 billion. This is more than any other city between Dallas and Philadelphia, reports *Business: North Carolina.*[7] NCNB Corporation and First Union, both based in Charlotte, have been among the most aggressive banks in the recent spate of mergers both within North Carolina and across state lines.



The Family Farm Withers

In 1984, Duplin County led the state in total farm income with $259 million. Number one in the state in hog and turkey sales, Duplin County farmers have also diversified into corn and soybeans, to go with a large tobacco business. By 1984, corn and soybeans each represented 6.2 percent of total farm commodities sold in the state; together, they brought in half as much as tobacco (24 percent). (See Table 4 for a ranking of farm products.) Through diversification, Duplin County farmers can survive the increasing problems with the tobacco price support system better than some. But diversification is not enough, as farmers face various pressures, particularly the debt crisis that has swept from the nation's midwestern farm belt into states like North Carolina.

"The farmers have really suffered," says Woodrow Brinson, director of economic development for Duplin County. "The dry weather has hurt. And land values have dropped over the last two years. Their land is also their collateral."

In the 1950s and 1960s, technology came to farms, much as it did the textile industry 20 years later. Machinery of all sorts, from planters to large tractors, filtered from the Midwest into the South. Fertilizers, disease control techniques, and other modern farming methods were adopted. The technology resulted in larger farm units, which in turn stimulated still more machinery purchases—and still larger farms. The 1973 worldwide grain failure did not hit the United States, resulting in a large export market for American farmers. Modern farming meant greater yields. With a ready-made export market, farmers borrowed heavily, investing in machinery and land.

By the end of the decade, however, the overseas market had not only recovered but had become a major competitor. Tobacco imports increased sharply, as cigarette manufacturers began purchasing much larger portions of foreign tobacco, which was far cheaper and nearing the quality of American leaf.[8] Meanwhile, the big jump in oil prices in the early 1980s sent fertilizer and equipment prices skyrocketing. Farmers tried to meet the rising costs and flood of imports with increased yields. But the larger yields, ironically, drove prices down, often resulting in a lower income for the farmer.

"Income will be down 20 to 25 percent (from 1984) for 1985," says Frank Bordeaux, chief economist for the N.C. Department of Agriculture. "It's because of low prices, which bring in less income." Meanwhile, production costs were up about 1 to 2 percent in 1985, adds Bordeaux.

The North Carolina farmers who can survive these pressures will have larger farms, employ more people, and rely on different crops than their fathers did. These trends were already in place before the current pressures of reduced

farm income. From 1959 to 1982, the average North Carolina farm grew from 83 to 142 acres while the number of farms shrunk from 191,000 to 73,000, according the the U.S. Census. The amount of farmland decreased by 35 percent, from 15.9 to 10.3 million acres. But perhaps the most revealing farm statistic is employment status. In 1960, 75 percent of farm jobs were family members; only 25 percent were hired, according to the N.C. Department of Agriculture. But by 1984, only 42 percent were family members and 58 percent were hired workers.[9]

Fifteen counties have the most at stake in this transition, according to a U.S. Department of Agriculture study released in September 1985. In the nationwide study, the USDA classified a county as "farming-dependent" if farming contributed at least 20 percent of the county's income.[10] Duplin County, one of the 15 such counties in North Carolina, got 36 percent of its income from farming and 25 percent from manufacturing in 1979, the year used by the USDA study. Three counties (Greene, Gates, and Jones) had a greater portion of income from farming than Duplin (see Table 5). All but two of the 15 counties (Caswell and Alleghany) are in the eastern belt.

In the short run, the fate of the federal tobacco program will affect many farmers. Throughout 1985, U.S. Sen. Jesse Helms and U.S. Rep. Charlie Rose worked on a compromise in Washington to reduce the $2.5 billion worth of unsold tobacco kept in storage and to keep the price support high enough for farmers to turn a profit. Just before the Christmas 1985 recess, Congress seemed to have reached a complex solution that would alter the federal farm program in the most fundamental way since the 1930s, but the compromise was tied to a budget bill that stalled as Congress left town. Congress finally passed the bill in March 1986.

"Scarecrow on a wooden cross,
blackbird in the barn,
400 empty acres, that used to be
my farm."

—"Rain on
the Scarecrow"
by John Cougar Mellencamp &
George M. Green

About 64,500 people are employed in the agricultural job sector, roughly 2.5 percent of all jobs in North Carolina. But tens of thousands of others use farm income to supplement their wages. In addition, the multiplier effect in farm-belt towns—from seed-supply stores to banks to

Table 4. Top Ten Agricultural Commodities by Percentage of Cash Receipts, 1984 (with historical comparisons)

Commodity	1984	1970	1960	1950
1. Poultry & eggs	26.8%	21.9%	15.0%	7.6%
2. Tobacco (flue-cured & burley)	24.1	38.3	49.1	59.5
3. Hogs	8.7	8.0	4.9	4.3
4. Corn	6.2	4.3	4.3	2.4
5. Soybeans	6.2	4.0	2.2	1.1
6. Farm forest products (pulpwood, timber and Christmas trees)	5.9	2.1	1.9	2.2
7. Dairy products	5.4	6.3	6.2	5.4
8. Greenhouse nursery	3.3	1.5	1.0	.8
9. Peanuts	2.8	3.0	3.1	3.3
10. Cattle & calves	2.1	3.7	3.2	2.2

Source: N.C. Agricultural Statistics, N.C. Crop and Livestock Reporting Service, N.C. Department of Agriculture, published annually.

Table prepared by Robert Gregory, an intern at the N.C. Center for Public Policy Research.

the tobacco warehouses—is enormous. This vibrant farm economy has gradually diversified to make North Carolina a major supplier of many farm products nationwide. In 1983, the state ranked number one in the country in sweet potatoes, turkeys, and *farm* forest products (pulpwood, timber, and Christmas trees), as well as flue-cured and total tobacco. Other high national rankings were in production of peanuts (4th), broilers (4th), eggs (6th), apples (7th), and hogs (7th).

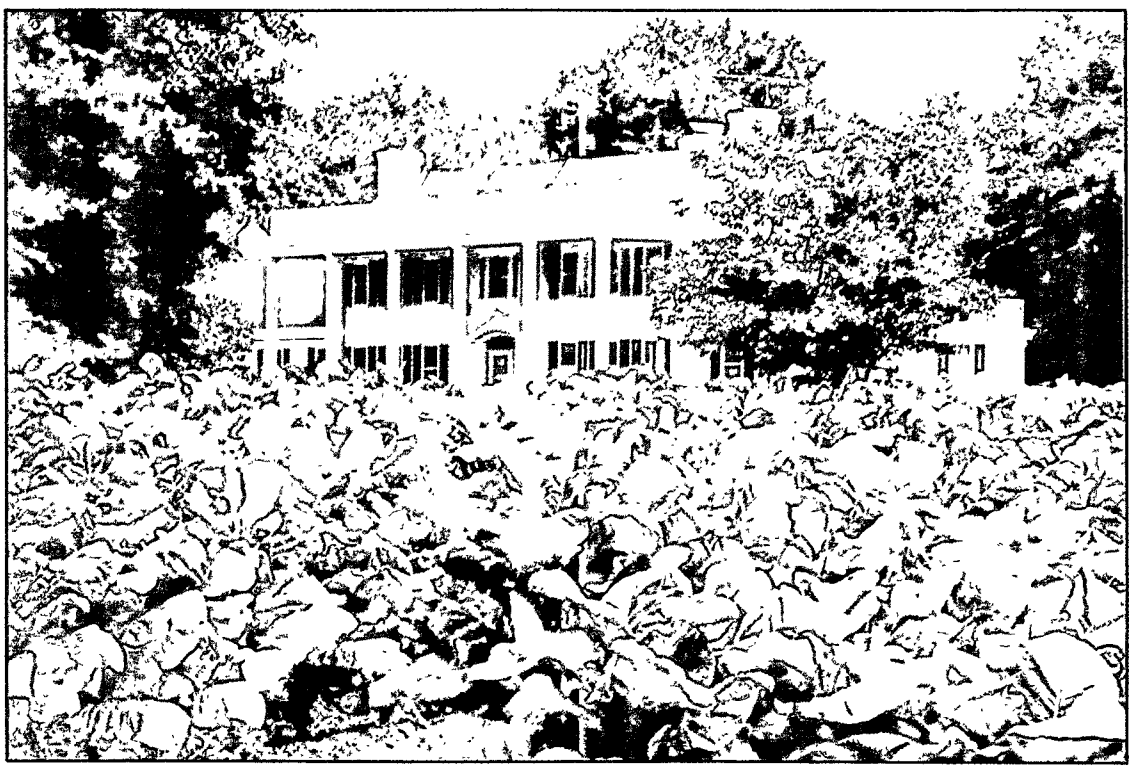
North Carolina farmers will undoubtedly continue to wean themselves from tobacco. Some farmers will manage the transition to other crops, and others will survive with tobacco. But increasingly, those farmers will push their children toward other careers and seek other employment themselves.

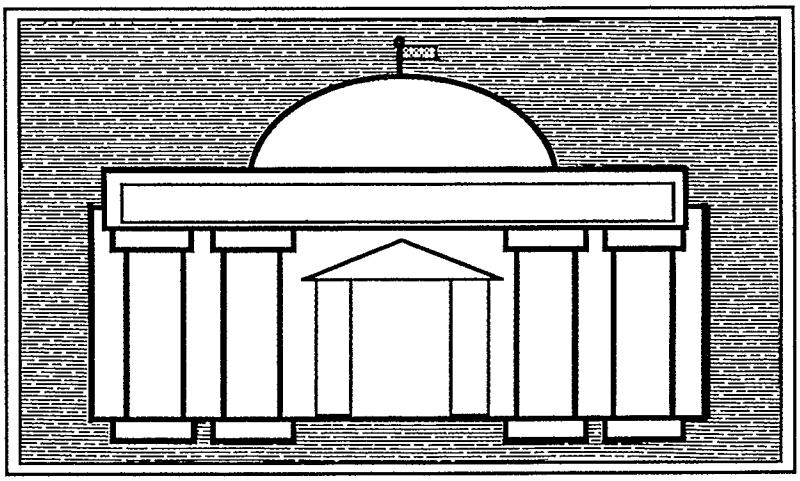
In 1985, the biggest news in Duplin County—after the dry growing season and the debt crisis—was the announcement of a new turkey processing plant. Carolina Turkeys, a new partnership formed by Carroll's Foods in Warsaw and Goldsboro Milling Company, will employ 600 people next year and up to 1,000 in three years, says Woodrow Brinson. Duplin had a 6.5 percent unemployment rate in October 1985, and the new poultry processing jobs will bring that down a point or two. While the jobs will offer a steadier wage than farmers have known in recent years, the pickings won't be so great. The average weekly wage in poultry dressing jobs was $226 a week in 1985, lower than any other manufacturing sector except apparel.

Table 5. North Carolina Counties Most Dependent on Agriculture

County (From Most to Least Dependent)	Percentage of Income From Farming 1975-79	Percent Increase in County's Population 1970-1984
1. Greene	54%	10%
2. Gates	43	9
3. Jones	40	0
4. Duplin	36	10
5. Northampton	33	-5
6. Caswell	32	16
7. Bertie	32	4
8. Sampson	26	12
9. Perquimans	26	18
10. Camden	26	7
11. Warren	24	3
12. Franklin	23	19
13. Pender	23	32
14. Tyrrell	22	8
15. Alleghany	21	21

Source: Bernal Green, U.S. Department of Agriculture, data prepared for *North Carolina Insight.*





Responding to the Transitions: What Kind of Leadership?

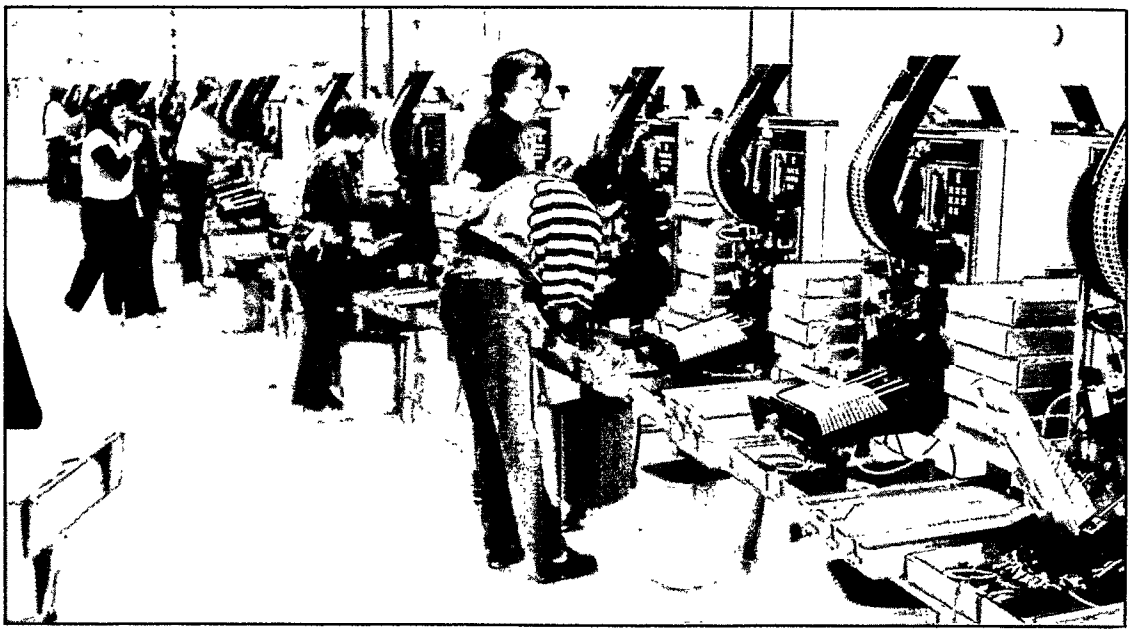
In November 1946, N.C. Gov. Robert Gregg Cherry told a group of utility executives that the state should look "toward the establishment of more small industries, community industries, which will use local capital, local labor, and local raw materials." Concerned about the post-war recession gripping the economy, Cherry said that this strategy would result in "a great number of new businesses, born of our own money and brains and pretty closely related to our agricultural life in this state."[11]

Few state officials paid heed to Cherry's vision. Gov. Luther Hodges (1954-61), known as "the businessman's governor" because of his leadership in establishing the Research Triangle Park and the N.C. Business Development Corporation, stamped the "industrial recruitment" label on the state's economic development strategy. State officials had worked at luring industries to North Carolina prior to Hodges' tenure, but Hodges made industrial recruitment the permanent rallying cry for the state's economic development efforts.

Terry Sanford, Hodges' successor, emphasized education and training for new workers. By expanding the job training centers scattered across the state (begun by Hodges) into a statewide system of technical colleges, Sanford's administration laid the groundwork for a decentralized job training network for new industries. The 58-member community college system today represents one of the state's best inducements for recruiting industries from out of state (for more, see page 84).

In recent years, the industrial recruitment strategy has turned into a kind of mad dash—across the Frostbelt, over to the thriving Japanese and German heartlands, and into the new high-tech market. In 1973, Gov. James Holshouser (1973-77) opened a state recruitment office in Europe. Then Gov. James B. Hunt Jr. (1977-85) kept the state in this fast lane, opening a recruitment office in Japan in 1977 and spearheading the creation of the new Microelectronics Center in 1981.

In 1983, 37 years after Gov. Cherry's speech to the utility executives, the state broadened its economic development strategy beyond industrial recruitment to include concrete support for small businesses. The General Assembly passed a small business development bill, which estab-



Jack Betts

Production workers manufacture cassette tapes at RCA's Weaverville plant.

lished a modest pool of state funds to stimulate "the development of existing and new small businesses."[12]

In 1984, then-state Rep. Parks Helms (D-Mecklenburg) introduced a bill in the legislature to create a Joint Select Committee on North Carolina in Transition.[13] Coming on the heels of a forecast of tobacco difficulties, the bill addressed the fundamental changes taking place in tobacco and throughout the state's economy. But admitting that tobacco was in trouble was still an unacceptable position to most North Carolina legislators, and the bill never got out of committee.

Then in 1985, the General Assembly, at the urging of Lt. Gov. Robert Jordan, created the North Carolina Commission on Jobs and Economic Growth.[14] The legislature appropriated $250,000 to the Office of the Lieutenant Governor, which supports a two-person staff and a 30-person commission (per diem and travel expenses only). Through this group, Lt. Gov. Jordan vows "to seek concrete answers to some of the challenges we face in keeping and creating jobs and assuring a thriving economy for generations to come."

Where does the Martin administration stand in this evolution of leadership regarding economic development? In his first year, Gov. James G. Martin announced that he would pursue what his supporters call a "balanced approach"—help traditional industries (he appointed a special assistant secretary for this task), recruit new industry and foreign investment, keep pursuing the high-tech trade, nurture local businesses, and support the farmers. "Except for the emphasis on traditional industry, this agenda has been policy for some time," says Ivie Clayton, president of North Carolina Citizens for Business and Industry, one of Martin's strongest supporters. "Although the emphasis on traditional industry is new, it is a logical expansion of duties."

Thus far, the Martin administration's clearest commitment related to economic development has been to help the business community in general by seeking the repeal of the inventory and intangible taxes and turning over some governmental functions to the private sector. In a Jan. 25, 1986 televised "Report to the People," however, Martin did begin to address the issue of priorities. "Last year, we only began to explore innovative recruiting concepts for new industries," he said. "To stay ahead, we are developing a new blueprint for economic development, which I will announce in the spring. It will show a special emphasis on rural development to expand job opportunities in those cities that can serve as regional growth centers in our rural east and west. It will also shape new strategies for sustaining a healthy and continuing job market in the populous Piedmont."

Gov. Martin and Lt. Gov. Jordan—and other state and local government policymakers, including the community colleges and the Labor Department's training programs, both run by Democrats—have the task of meshing the possible economic development strategies with the current transitions within the state's economy. A dual economy is in the making, where the urban areas thrive around the service and trade sectors and the rural areas either rely on a vulnerable manu-

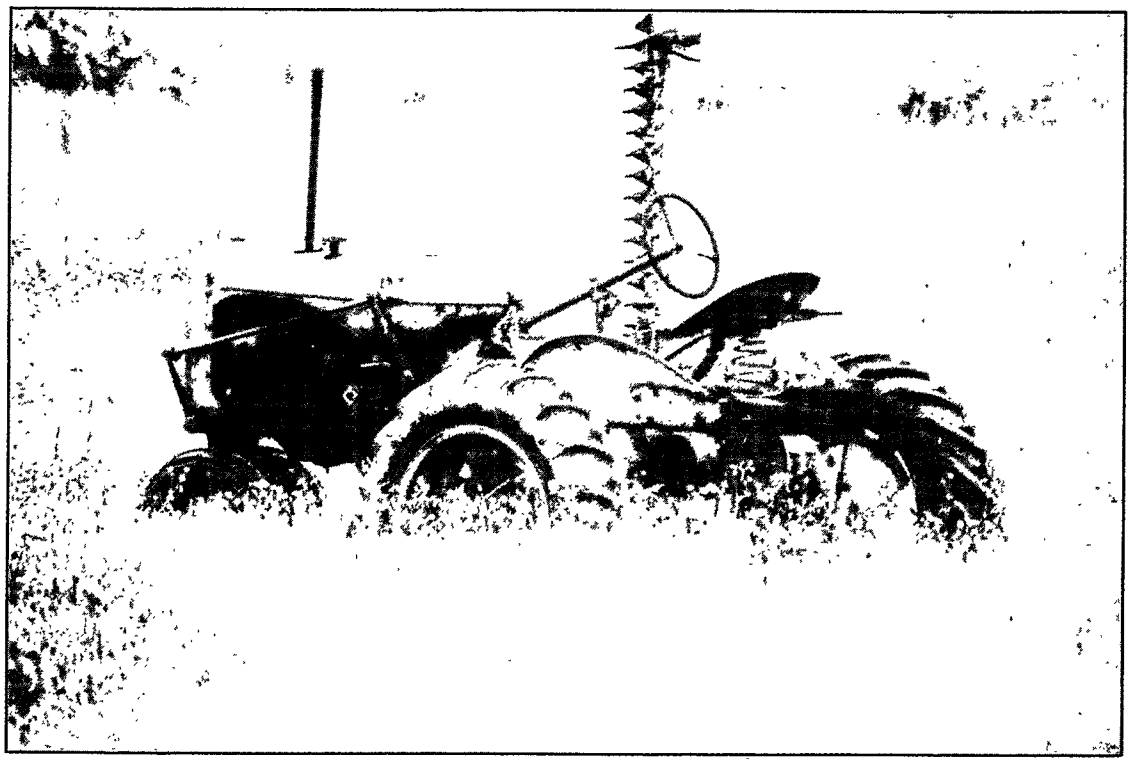
facturing base or serve primarily as home for commuters traveling to city-based jobs. Not only are jobs in the textiles sector and on the tobacco farm vulnerable, but other mainstays in North Carolina's commercial world have also come on hard times—such as McLean Trucking (gone out of business) and FCX Inc. farmers' cooperative (filed for bankruptcy, with assets now being sold to Goldkist Inc. and Southern States Cooperative Inc.).

What strategies can best address the three great transitions—1) from labor- to capital-intensive manufacturing, 2) from relying on the manufacturing sector for jobs to a dependence on the trade and service sectors for new jobs, and 3) from a tobacco-dependent farm sector to a diversified agricultural sector? Government leaders need to anticipate how these transitions will take specific shape in the future. Will the transitions lead to a dual economy with both prosperity and suffering or to a more balanced economy?

Overall, North Carolina is not a poor state. But while the cities are thriving, terrible pockets of poverty exist. The state's average industrial hourly wage of $7.32 ranks 49th in the nation, but per capita personal income of $10,850 ranks 36th. In the South, Virginia (12th), Florida (19th), and Georgia (34th) rank higher, but North Carolina is ahead of Maine, Vermont, Montana, New Mexico, Idaho, Utah, and eight other southern states. And, as state boosters are quick to point out, the cost of living is lower in North Carolina than in many states, and the quality of life is higher.

Anticipating the impact of the economic transitions is not an easy task. Several studies of the future indicate that an economy with increased jobs in the service and information-based sectors will not necessarily lead to greater prosperity. A 1984 Bureau of Labor Statistics forecast for 1995, for example, found that the job categories with the most new openings would be janitors, cashiers, and secretaries—hardly the glamorous jobs that a new "high-tech" era suggests. Another forecast suggests that the growing middle class in places like Alamance County may have trouble ahead. "If it's not the clerks and secretaries who will disappear from the office setting, who will be eliminated?" asks David Pearce Snyder in an article called "The Future" in the September 1984 issue of *Association Management* magazine. "The answer is middle managers—5 million (nationwide) in this decade."

In recent years, North Carolina has been extremely susceptible to national recessions because of the concentration of the textile, apparel, and furniture industries. The influx of more diversified industry has broadened the state's industrial base, which in turn has provided fertile ground for service and trade companies. "In the last decade, the state's economy has grown about 15 percent faster than the U.S. economy," explains David Crotts, economic analyst for the



legislature's Fiscal Research Division.[15] But Crotts sees this pattern ending. "During the foreseeable future, our economy will be hard-pressed to keep up with the overall national experience."

A complex period of economic transition challenges the leadership of Gov. Martin and Lt. Gov. Jordan. Thus far, Martin has not been willing to make hard choices that mesh economic development strategies with these transitions. Jordan, meanwhile, holds the key to pushing legislation through the General Assembly, but he is only beginning to stake out his position regarding the economy through his new study commission. Citizens of the state deserve to know Martin's and Jordan's priorities for addressing the economic transitions.

Will government officials take steps that address the needs of both the boomtowns and the depressed towns? Will these leaders direct the mixed economy away from a dual economy of prosperity and suffering to a mixed economy that is spread more evenly across the state? Innovative economic development strategies will be needed to avoid a dual economy (see the group of articles beginning on page 42 for more). But even if government leaders cannot affect all aspects of the transition, they can articulate their economic development priorities—and pursue those priorities with all the persuasion they can muster. The key question for Martin, Jordan, analysts, and the public is this: What role will state government assume in managing the transitions toward a mixed economy?

"I remember the smell of the creosote plant,
When we'd have to eat on Easter with my crazy old uncle and aunt.
They lived in a big house, antebellum style,
And the winds would blow across the old silo,
When I was just a tranquil little child,
Life is just a tire swing."

—"Life is Just a Tire Swing"
by Jimmy Buffett

FOOTNOTES

[1]Hugh Talmage Lefler and Albert Ray Newsome, *The History of a Southern State,* The University of North Carolina Press, 1954, p. 83.

[2]For historic employment data, which show year-long averages (such as the 1973 number used here), see *North Carolina Labor Force Estimates by County, Area, and State,* Labor Market Information Division, N.C. Employment Security Commission. For the latest employment data available, see "State Labor Summary" from the same source.

[3]Data provided by the Employment Security Commission from back issues of *North Carolina Labor Force Estimates by County, Area, and State.*

[4]"1977 Annual Report," Burlington Industries, 1977, p. 18. Burlington Industries annual reports for 1976 through 1984 show these amounts of capital expenditures (in millions): $160 in 1976, $206 in 1977, $216 in 1978, $227 in 1979, $214 in 1980, $217 in 1981, $222 in 1982, $147 in 1983, and $215 in 1984.

[5]The 50 percent calculation is based on data from the U.S. Department of Commerce, the U.S. Department of Agriculture, and the Textile Economic Bureau of the Man-Made Fibers Producers Association. The 60 to 70 percent figure comes from an industry survey, as reported by Jim Leonard in a presentation for various government and trade groups (see page 2 of packet that accompanies the presentation). In addition, Leonard's Economic Analysis Department within Burlington Industries has prepared a book of background materials on the import issue, called *Textile Apparel: Papers and Information.*

[6]"Displaced Workers, 1979-83," U.S. Department of Labor, Bureau of Labor Statistics, Bulletin 2240 and accompanying press release, July 1985, Table 2, p. 3.

[7]Ellen Grissett, "Is Raleigh's Business Shadow Creeping Up On Charlotte?" *Business: North Carolina,* December 1985, p. 23. Also, see *Business: North Carolina's* May 1985 issue, which focused on the state's transition economy.

[8]See *The Tobacco Industry in Transition: Policies for the 1980s,* edited by William R. Finger, N.C. Center for Public Policy Research (Lexington Books, 1981), especially part III, "World Leaf Sales Expand — But U.S. Share Shrinks."

[9]The figures on farm size, number of farms, and total farmland acreage come from the Bureau of the Census, U.S. Department of Commerce. The data on farm jobs (family members and hired workers) comes from the N.C. Crop and Livestock Reporting Service, *N.C. Agricultural Statistics Annual.*

[10]Bernal L. Green, et al., "The Diverse Social and Economic Structure of Nonmetropolitan America," U.S. Department of Agriculture, Economic Research Service, Rural Development Research Report Number 49, p. 2. In addition to the published report, Green made separate computer runs on North Carolina counties for this issue of *North Carolina Insight.* Table 5 contains some of that data. North Carolina data on the other USDA county groupings (manufacturing, retirees, etc.) are available from the N.C. Center for Public Policy Research.

[11]Gov. Robert Gregg Cherry, "North Carolina Has a Way of Life," *Public Addresses and Papers of Robert Gregg Cherry,* p. 552.

[12]NCGS 143B-471, Chapter 899 (HB 1122) of the 1983 Session Laws.

[13]HB 1760, postponed indefinitely in the Appropriations Committee, July 7, 1984.

[14]Chapter 757 of the 1985 Session Laws (SB 182), section 52.

[15]David Crotts, "State and Local Fiscal Outlook: Implications for Funding Capital Construction Needs," Dec. 17, 1985, p. 8.

Excerpts
from

Megatrends

by John Naisbitt

The paragraphs below are from Megatrends—Ten New Directions Transforming Our Lives, *copyright © 1982 by John Naisbitt (Warner Books Inc.) and used with permission of Naisbitt and Warner Books. John Naisbitt, the well-known social forecaster, speaker, and author, puts the transitions discussed in the preceding article in a national context.*

Today's information technology—from computers to cable television—did not bring about the new information society. It was already well under way by the late 1950s. Today's sophisticated technology only hastens our plunge into the information society that is already here....

It makes no sense, for instance, to reindustrialize an economy that is based not on industry, but on the production and distribution of information. Without an appreciation of the larger shifts that are restructuring our society, we act on assumptions that are out of date. Out of touch with the present, we are doomed to fail in the unfolding future.

***

The real increase has been in information occupations. In 1950, only about 17 percent of us worked in information jobs. Now more than 60 percent of us work with information as programmers, teachers, clerks, secretaries, accountants, stock brokers, managers, insurance people, bureaucrats, lawyers, bankers, and technicians. And many more workers hold information jobs within manufacturing companies. Most Americans spend their time creating, processing, or distributing information. For example, workers in banking, the stock market, and insurance all hold information jobs.

***

The entrepreneurs who are creating new businesses are also creating new jobs for the rest of us. During a seven-year period ending in 1976, we added 9 million new workers to the labor force—a lot of people! How many of those were jobs in the *Fortune* 1,000 largest industrial concerns? Zero. But 6 million were jobs in small businesses, most of which had been in existence for four years or less.

***

The restructuring of America from an industrial to an information society will easily be as profound as the shift from an agricultural society to an industrial society. But there is one important difference. While the shift from an agricultural to an industrial society took 100 years, the present restructuring from an industrial to an information society took only two decades. Change is occurring so rapidly that there is no time to react: instead we must anticipate the future.

***

Not surprisingly, China will emerge as the textile leader. By the year 2000, it will probably be employing 4 million textile workers, whereas textile employment in South Korea and Taiwan will remain about steady, and in Hong Kong will decrease by 25 percent. In fact, textile employment decreased in Hong Kong for the first time ever in 1979.

***

We have two economies in the United States today: a sunrise economy and a sunset economy.

***

Generally speaking, the government should stay out of the way of the sunrise industries (electronics, computer software, cable television, biotechnology) and allow the mature industries to level off.

The one exception is training: not that the government should do the training itself, but it could pay workers who have lost their jobs in the old industries to obtain training in the new.

***

Biology will be to the 21st century what physics and chemistry were to this century. In this field, there are three main areas of interest: (1) fermentation technology, from which the Japanese have produced new drugs and chemicals; (2) the production of enzymes or "living catalysts," which act the same way as chemical catalysts, that is, they drive chemical reactions further than they would otherwise go without themselves changing; and (3) the aspect we have heard most about—gene splitting.

Is a "Nerve Center" at the Department of Commerce Enough?

Who Makes Economic Development Policy?

by Ann Sternlicht and Bill Finger

Scores of state agencies run programs related to economic development. Despite these many agencies, past governors have highlighted a single economic development policy: Kerr Scott (roads), Luther Hodges (industrial recruitment and the Research Triangle Park), Jim Hunt (microelectronics). What will Jim Martin's legacy be?

For the first time, this article compiles a comprehensive list of all state programs affecting economic development, with expenditure figures and agency responsibilities. Another table shows the executive-branch boards, commissions, and councils with economic development responsibilities. This broad-brush treatment is designed as an introduction to the articles that begin on page 42, which examine economic development strategies in detail.

Last year, the N.C. Department of Commerce spent $13.2 million in state funds to promote economic development. Sounds like a lot of money, doesn't it? But the state spent another $6.7 million through the Department of Community Colleges and $13.0 million on the Microelectronics Center of North Carolina.

If you add federal funds administered by state agencies and count programs related to economic development, the list of agencies gets more involved. For example, the state Department of Natural Resources and Community Development (NRCD) administered $62.4 million in federal job training funds, and the state Employment Security Commission used $1.2 million in federal dollars for labor market information. At the same time, the Community College system spent $177.2 million on technical and vocational education and another $14.4 million on college transfer programs, while the University of North Carolina system spent $1.2 *billion* for higher education. Also, consider the $708.0 million spent on roads and airports through the N.C. Department of Transportation. And the list goes on (see Table 1).

In this mass of dollars and myriad of agencies, does the state have an overall economic development policy? "We have not had any comprehensive, explicit statewide policy that everyone subscribes to," says E. Walton Jones, former vice-president of research and public services for the University of North Carolina. "There's good reason for this. Virtually every agency of state government has an impact on economic development. No one entity has set forth such a policy."

Leaders in the administration of Gov. James G. Martin say that agreements on policy directions do exist. "Everyone is pretty much for the same goals," says Ernest Carl, deputy secretary of NRCD. "Our missions are pretty well set out."

But Martin administration officials also recognize the importance of the many actors in

Ann Sternlicht, a former intern at the N.C. Center for Public Policy Research, is working on a doctorate in economics at the University of North Carolina at Chapel Hill. Bill Finger is editor of North Carolina Insight.

this area. "A lot of people are interested in economic development, particularly in small business these days," says Kevin Kennelly, deputy secretary of Commerce. "It's inevitable to some extent, and that can be good or bad. For example, the community colleges are a tremendous economic resource, and we sell them very hard. On the other hand, it has the potential to get into a fractured system."

Whatever kind of overall policy does (or does not) exist, leadership must come from the governor, agree virtually all of the government officials, university researchers, industry and labor leaders, and others interviewed for this issue of *North Carolina Insight*. "The policy should emanate from the governor," says Jones.

"The governor is the leading economic development officer," says Alvah Ward, director of the Department of Commerce's business and industry development office.

Beyond this point, however, the details become fuzzy. "The Department of Commerce is the lead agency in state government efforts to promote economic development," says Kirsten Nyrop, former director of the N.C. Technological Development Authority. Martin administration officials agree. "We have small parts of the action. The lead is the Department of Commerce," says Carl of NRCD. Secretary of Commerce Howard Haworth follows Governor Martin as the leading economic development official, adds Ward.

"Government in the U.S. today is a senior partner in every business in the country."

—Norman Cousins

"Within the administration, Secretary Haworth is definitely the point man," says Kennelly. "He has the biggest tool box to open and the most players to work with."

Others think the role of the Department of Commerce is more limited. "We are in essence a non-commissioned, commercial real estate agency," said Clint Abernethy before stepping down as assistant secretary of Commerce in 1985.

The role of the department goes far beyond that of a commercial real estate agency, says Secretary Haworth (see interview on page 36). But Haworth himself is quick to point out the complexity of steering a coherent course for economic development in North Carolina.

"We are primarily a catalyst for economic development," says Haworth. "There are almost 400 individuals and institutions that we've identified who are involved in North Carolina economic development—banks, county developers, chambers of commerce, and many, many other professional institutions and individuals. The Commerce Department can be an important nerve center for coordination of these efforts."

State Government Programs Divide the Action

In North Carolina, state agencies working in economic development can be grouped in eight areas. In addition, 24 different boards and commissions have responsibilities for various aspects of the economy of the state (see Table 2).

Industrial Recruitment/Development. The Department of Commerce takes the lead role in recruiting industry for the state (see article on page 43). The central financial tool for such recruitment is the use of industrial revenue bonds. Commerce also leads the effort to expand international markets for North Carolina products (see article on page 62), to support the growing film industry in the state, to promote travel and tourism, and to manage the state ports. In addition, a substantial portion of the department's overall administrative costs go toward economic development.

Other departments and agencies working to recruit industry include the Department of Administration (long-term planning), the UNC International Trade Center, and the State Treasurer's office, which monitors industrial revenue bonds for financial soundness. While analysts agree that the Department of Commerce has the lead role for recruiting industry, in recent years more state funds for development have gone to the Microelectronics Center of North Carolina. (See article on page 74 for more on this center.)

From FY 80-85, the state spent $51.6 million on a single venture, the Microelectronics Center (MCNC).[1] Such spending levels indicate more than the politics of a particular legislative session. "The state budget is not just an account ledger full of line items and nine digit numbers with dollar signs," explained Ran Coble, executive director of the N.C. Center for Public Policy Center, opening the N.C. Center's 1983 forum on the state budget. "The budget is a policy document that speaks louder than words about what we as North Carolinians care about."[2]

Speaking at this 1983 forum, the late S. Kenneth Howard characterized the spending for

Table 1. N.C. State Government Programs Focusing on Economic Development

State Government Program	Department/Division	Activities
I. INDUSTRIAL RECRUITMENT/DEVELOPMENT		
Industrial Development	Commerce/Business & Industry Development	Handles inquiries and assists companies considering locating in North Carolina
Industrial Financing	Commerce[1]	Administers industrial revenue bonds for manufacturing firms
	Treasurer/State & Local Gov't. Finance	Approves industrial revenue bond issuances for financial soundness
Foreign Investments	Commerce/International Development	Recruits foreign firms, maintains overseas offices in Japan and Germany
Export Development	Commerce/International Development	Provides marketing assistance, publishes trade newsletter, and helps foreign trade delegations
Microelectronics Center of N.C. (Research Triangle Park)	Independent	Promotes research and high-tech industrial recruitment
N.C. Biotechnology Center (Research Triangle Park)	Independent	Promotes research and development of new biotechnology industries
International Trade Center (Raleigh)	Univ. of North Carolina System/NCSU Extension Service	Offers courses, training, and briefings on trade, finance, legal, tax, and other economic issues
Policy Development	Administration/Policy and Planning	Conducts long-range planning and studies on economic development
Film Office	Commerce/Film Office	Encourages and supports the growth of the film industry in N.C.
State Aircraft	Commerce	Provides air transportation for industrial development officials and prospects
II. SMALL BUSINESS DEVELOPMENT		
Small Business Development	Commerce[1]	Provides financial, marketing, and other assistance
Science and Technology Research Center (Research Triangle Park)	Commerce[1]	Assists with inquiries on small business innovation, publishes a technical bulletin, and otherwise markets new technology for small businesses
Technological Development Authority	Commerce[1]	Technical assistance to small businesses
Innovation Research Fund		Provides royalty financing for research and development of new products or processes
Incubator Facilities Program		Provides grants to localities for establishing "incubators" for new small businesses
Minority Business	Commerce/Office of Minority Business Enterprise	Provides technical, managerial assistance to minority-owned businesses
Small Business Assistance Centers	Community Colleges/ Program Services	Assists current and prospective small business through seminars, counseling and referral, information resources, etc., currently through 20 centers.
Small Business & Technology Development Center	UNC System	Provides technical and management assistance to new small business enterprises

Expenditures in N.C. (FY 84-85, in thousands)			
Local	State	Federal	Total
$0	$2,491	$0	$2,491
$0	$212	$0	$212
$0	$142	$0	$142
$0	$807	$0	$807
$0	$53	$0	$53
$0	$13,045	$0	$13,045
$0	$1,490	$375	$2,131[2]
$0	$59	$0	$74[3]
$0	$704	$143	$847
$0	$50	$0	$50
$0	$828	$0	$828
$0	$557[4]	$0	$557
$0	$1,074	$0	$1,074
$0	$100	$175	$275
$0	$375	$0	$375
$0	$705	$0	$705
$0	$100	$35	$135
$0	$600	$0	$600
$0	$289	$48	$337

(continued page 26)

the MCNC as "putting all your chips on the chips." Howard, who was State Budget Officer under Gov. James Holshouser (1973-77) and later executive director of the U.S. Advisory Commission on Intergovernmental Relations, said at the forum that such a spending level "kind of takes my breath away.... It may be the best bet. It may pay the richest dividends you've ever seen, but for a $43 million economic development program, I would suggest there might have been some other options. It does strike me as an awful lot in one basket." (Howard's $43 million figure was the cumulative appropriation for the MCNC at the time he spoke.)

Established with state funds, the MCNC operates as an independent, non-profit corporation. But, apparently, it will continue to rely on substantial state funds to operate. In 1985, the legislature appropriated $11.2 (FY 85-86) and $12.1 (FY 86-87) for operating funds for the MCNC, approximately two-thirds of its operating budget. In one central respect—money—microelectronics has become the *de facto* flagship economic development policy in North Carolina.

This hefty state spending for microelectronics came about primarily because former Gov. James B. Hunt Jr., beginning in 1980, made high-tech industries his number-one priority for economic development (see "Easy Angling in Legislative Waters," *N.C. Insight*, Vol. 4, No. 3, September 1981, pp. 18-22). After 15 months in office, Governor Martin has not made his top priority clear. At first, Martin called attention to the state's mainstream industries by appointing White Watkins, formerly of Blue Bell Inc., as assistant secretary of Commerce for Traditional Industries. At the same time, "recruiting high-tech is still a strategy of this administration," says Alvah Ward, industrial development director during the Hunt administration as well as under Martin. But Martin and Commerce Secretary Haworth have also emphasized the service sector and small business as important for economic development.

Small Business Development. In recent years, the Department of Commerce has also begun to focus on small businesses through its Small Business Assistance office (recently reorganized as the Division of Small Business Development), as well as the Science and Technology Research Center and the Technological Development Authority. The Department of Community Colleges also provides important help through its 20 small business assistance centers, and the University of North Carolina system sponsors the Small Business and Technology Development Center. Compared to the investment in the microelectronics center or industrial

recruitment, state funds for small businesses are modest.

"Little attention is given to small businesses," says Kirsten Nyrop, who left the Technological Development Authority in 1985. "We need better coordination, so the individual entrepreneur knows where to go for help." In addition, Nyrop suggests that the state could do more imaginative things, such as providing extension services for small businesses similar to the agricultural extension service. (For more on small business, see article on page 53.)

Economics: "The Dismal Science."

—Thomas Carlyle

Community Development. The federal Community Development Block Grant program is administered through NRCD. Many of the guidelines for distributing the funds are determined at the state level (see "Small Cities Community Development Block Grants," *N.C. Insight,* Vol. 5, No. 2, August 1982, pp. 16-21).

"We have some choice [over whether] to put more money into community revitalization or into economic development, in assisting small businesses to get going," explains Carl of NRCD, which administers this program. "The money spent on the latter is far better than the former. In the last administration, any money not used in economic development was spent on community development. Our philosophy is that our goal should be loans to businesses for jobs rather than grants for one-time community projects. So we are trying to get the total [portion of the CDBG funds] up to the 20 percent limit for economic development."

Data Collection. The Department of Commerce collects most of the economic development-related data in North Carolina and works closely with federal agencies. The Employment Security Commission (ESC) releases regular information on the labor market, a service done exclusively with federal funds. The ESC services for unemployed workers are not considered an economic development program for the purposes of this article, and hence funds for this service do not appear on Table 1.

Table 1. *(Continued)*

State Government Program	Department/Division	Activities
III. MISCELLANEOUS DEVELOPMENT		
Tourism Development	Commerce/Travel & Tourism	Promotes N.C. travel destinations to out-of-state visitors; operates welcome centers
Administration & Oversight	Commerce/Office of Secretary & Economic Development Board	Directs department economic development programs and coordinates policy
Seafood Industry	Commerce/Wanchese Seafood Industrial Park	Promotes development of seafood processing and related industries
IV. COMMUNITY DEVELOPMENT		
Community Development Block Grants (CDBG)	Natural Resources & Community Development (NRCD)/Community Assistance	Distributes federal CDBG funds to local areas, designed *partially* for job development
Main Street Program	NRCD/Community Assistance	Promotes downtown revitalization
V. DATA COLLECTION		
Employment Data	Commerce/Employment Security Commission (Research Bureau)[5]	Gathers and reports data on employment in many categories and publications
Labor Resources	Commerce/Research	Provides data on labor resources, plant closings, layoffs, and economic conditions

The State Budget Office produces economic forecast data, which serves as the basis for some of the ESC reports. Before 1982, the ESC and the State Budget Office conducted two separate forecasts, using different methods, which in one memorable instance resulted in opposite projections for the textile industry. To avoid the confusion of contradictory predictions, the lead forecasting function was placed in the State Budget Office.

Even so, some concerns over forecast data still exist. "One significant gap in the state's economic development efforts is the need for timely, regular labor market projections on a regional basis," says Sandy Shugart, vice-president for program services in the Department of Community Colleges, which recently contracted with the Department of Economics at the University of North Carolina at Charlotte for a separate analysis. "The ESC has a strong interest in providing the information needed. We might get that done this year."

Greg Sampson, director of research for ESC, however, says that while there were some gaps in the past, the forecast data is sufficient. "ESC does occupational employment projections biennially now, plus special studies on skill shortage occupations and other subjects."

Job Training. Two major but separate systems exist in North Carolina to deliver job training—the community college system and the NRCD system for distributing the federal Job Training Partnership Act (JTPA) funds. In addition, the state Department of Labor administers apprenticeship programs in the state (to train electricians, for example), with $890,000 last year, mostly state funds. (For more on job training, see article on page 84.)

Last year, the state spent $1.6 million through the Department of Community Colleges for two types of programs related to traditional industries, training centers at 19 community college campuses and the semi-autonomous N.C. Vocational Textile School in Belmont. In addition, $4.5 million in state funds went to provide customized job training for new or expanding industries throughout the community college system.

While *state* funds were flowing through the community college system, $62.4 million in *federal* JTPA funds came to North Carolina via NRCD. These training funds went for training and placing economically disadvantaged adults and youth, as well as special target groups, including older workers, welfare recipients, and workers who lost their jobs through plant closings. NRCD distributes the JTPA money through its Employment and Training Division to Private Industry Councils around the state, and through contracts to: private businesses for on-the-job training, the Department of Community Colleges for classroom and customized training, the Department of Labor for pre-apprenticeship training, the Employment Security Commission for placement services (including displaced workers), the Department of Public Instruction for youth programs, and various state and local service agencies.

"I'm generally a person who thinks diversity is a great strength," says Shugart of the Community Colleges. "But I wonder about the JTPA program. We already have an infrastructure in place for delivering job training. Why create an additional structure?"

Mary Joan Pugh, NRCD assistant secretary for community development, answers that question like this. "JTPA is a true partnership in that its mission is to bring together the resources of private business, local training and employment agencies, educational and vocational agencies, and social agencies. One agency cannot do it alone because no one agency is involved in all aspects of training and employment or works with all the various target groups. Thus the role of NRCD is to conduct the orchestra of training and employment professionals so that target groups can be trained and placed on jobs."

Expenditures in N.C. (FY 84-85, in thousands)

Local	State	Federal	Total
$0	$5,151	$0	$5,151
$0	$616	$0	$616
$0	$83	$0	$83
$0	$24	$9,070	$9,094
$0	$133	$6	$139
$0	$0	$1,233	$1,233
$0	$165	$0	$165

(continued page 28)

The disagreements between Shugart and Pugh accentuate the patterns of many economic development-related programs. "No consensus exists as to what the overall economic development policy ought to be," says Sheron Morgan, senior policy analyst in the Department of Administration. "This lack of consensus surfaces with job training because you have so many institutional actors."

Education. Three types of state educational institutions have some direct relationship to the economic development of the state: technical and vocational education, higher education, and the N.C. School of Science and Mathematics (see "And Yet Another Surprise," *N.C. Insight*, Vol. 1, No. 4, Fall 1978, pp. 8-11). One gap in the education system as it relates to the economy, says Shugart, is "the public understanding of the labor market. Schools don't teach people what jobs are going to be available, and that is not necessarily their function. We need to have an adequate supply of labor for specific jobs." To achieve this, says Shugart, "We need some kind of public information project—such as TV spots on labor market alerts—to tell people where jobs are and how to prepare for them."

Sampson of the ESC points out that "the information is available. It may be that it is not

Table 1. *(Continued)*

State Government Program	Department/Division	Activities
VI. JOB TRAINING		
Job Training Partnership Act (JTPA)	NRCD/Employment & Training	Administers federal JTPA funds and distributes these funds to metropolitan areas of the state
	NRCD/Rural Private Industry Council	Distributes federal JTPA funds to rural parts of the state
	Labor/Pre-apprenticeship Training	Subsidizes training for economically disadvantaged persons
	Community Colleges/Program Services	Provides training for JTPA programs
	Commerce/Employment Security Commission	Coordinates dislocated workers program
Apprenticeship Training	Labor/Apprenticeship	Consults with privately funded and privately run apprenticeship programs
Cooperative Skills Training	Community Colleges/Program Services	Provides customized training to traditional industries through 19 campuses
New and Expanding Industries	Community Colleges/Industry Services	Provides customized training to relocating or expanding firms to help with plant start-up
N.C. Vocational Textile School (Belmont)	Community Colleges	Provides skill training for textile, fiber, and apparel industries
VII. EDUCATION		
Technical and Vocational Education	Community Colleges/Program Services	Prepares students for technical and trade jobs
	Public Instruction/Vocational Education	Provides high school students with technical training curriculum
N.C. School of Science and Mathematics (Durham)	UNC System	Provides high school students with specialized scientific curriculum
Higher Education	UNC System	Provides undergraduate and graduate training for professions
	Community Colleges/Program Services	Prepares students to transfer into baccalaureate programs

used by educators and counselors." But Shugart contends that parents and friends largely influence students on career choices—not the school system. Moreover, Shugart points out, many career decisions are made by adults, after they have left school.

Infrastructure. Adequate transportation, communication, and water and sewer systems are critical to any type of company locating or expanding a facility. Of course, roads, sewer systems, and communications networks are important for many other reasons as well—for meeting the needs of the people already living and working in the state. These efforts, like higher education and vocational education, are not the central state efforts for economic development, in the traditional sense of recruiting industry or releasing a labor forecast. Yet in the current transition economy, decisions to target available funds, for example, can make a big difference as to how certain parts of the state develop.

Shifting philosophies regarding governmental roles can also make a big difference. "The Republican attitude is 'Self-help is better than outside help,'" says Carl of NRCD, which supervises federal water and sewer funds. "We're looking at initiatives in sewer system financing, so that cities can use user fees to cover the costs. The grant system is very paralyzing. We have a small amount of money relative to the need. Towns put off doing it themselves until they get a grant. We're trying to use our money to help them do it themselves."

Expenditures in N.C. (FY 84-85, in thousands)

Local	State	Federal	Total
$0	$0	$62,431	$62,431[6]
$0	$746	$144	$890
$0	$1,125	$0	$1,125
$0	$4,503	$0	$4,503
NA	$510	NA	$510[7]
$933	$172,871	$3,388	$177,192
$33,029	$85,806	$14,019	$132,854
$0	$3,836	$535[8]	$4,371
$0	$662,984	$583,824[8]	$1,246,808[9]
$122	$14,303	NA	$14,425

(continued page 30)

Evaluating the Martin Administration's Policy

In addition to the eight areas of activity described in Table 1, citizens work through 24 separate boards, commissions, or councils to influence state government policies in economic development. With so many avenues of input, how could enough coordination exist to make sure, for example, that job training efforts somehow dovetail with recruitment plans? How could any single state economic development policy override the diverse agendas of so many different agencies and citizen commissions?

Secretary of Commerce Haworth and Robert W. Scott, president of the Department of Community Colleges (and former governor) have a regularly scheduled quarterly luncheon. When the Council of State meets, Secretary of Labor John Brooks, State Treasurer Harlan Boyles, and Martin have a chance to discuss the economy. Occasional groups are established by statute which require coordination. For example, the 1985 legislature passed the State Employment and Training Act, which requires representatives from the departments of Commerce, NRCD, Community Colleges, Labor, and Public Instruction to discuss how job training should be integrated with overall economic development efforts.[3]

Overall, however, coordination among these various actors and programs occurs through ad hoc committees and task forces. "I must be on scores of task forces and standing committees," says Shugart. "Staff-to-staff kinds of things are the way we coordinate. It's not formalized."

No matter how smoothly committees or staff-to-staff telephone calls work, however, the ultimate direction of the state's economic devel-

opment efforts rests on the shoulders of one man. As Ernie Carl puts it, "The final answer is, of course, with the governor."

In developing an agenda for economic development, a governor must contend with political demands from all segments of the economy. Consequently, few governors develop a clear sense of priorities for economic development. Governor Hunt, who set into motion the high-spending levels for the Microelectronics Center, made high-tech recruitment his top priority from 1980 until the end of his second term in 1985. This priority appealed primarily to urban areas, where most of the high-tech related jobs would concentrate.

During his first term, however, Hunt advocated a so-called "balanced growth" approach, which in theory would recruit industry to all parts of the state, especially to rural, less prosperous areas. Hunt pushed his Balanced Growth Act through the legislature in 1979. "The rhetoric of

Table 1. *(continued)*

State Government Program	Department/Division	Activities
VIII. INFRASTRUCTURE		
Airports	Transportation/ Aviation	Administers state-funded program for airport improvements
State Ports	Commerce/State Ports Authority	Operates and develops business for Wilmington, Morehead City, and Charlotte (inland staging) ports
Roads and Bridges	Transportation/ Highways	Responsible for state highway construction and maintenance
Primary Highways Urban Highways Secondary Roads		
Totals		
Water and Sewer	NRCD/Environmental Management (Construction Grants Section)	Administers grant process and monitors water and sewer construction and maintenance
Water and Sewer	State Budget Office	Administers funds to local governments for construction, expansion, and renovation of water and sewer facilities
Water and Sewer	Treasurer/State & Local Government Finance	Reviews expansion plan and authorizes bond issue, sells bonds, monitors debt service and financial operations of system
Miscellaneous	Administration/Policy and Planning	Oversees various infrastructure activities with Appalachian Regional Commission funds

FOOTNOTES

[1]For the divisions noted by this footnote, the Department of Commerce is being reorganized.

[2]The Biotechnology Center also received $266,000 from the private sector, which results in the total shown.

[3]The International Trade Center received $15,000 in "other" funds, which results in the total shown.

[4]The small business development program began in August 1985. The budget figures shown are for FY 1985-86.

[5]The ESC bases its labor forecasts on aggregate data prepared by the State Budget Office.

[6]These funds flow through NRCD to a variety of agencies. For more, see chart on page 94.

[7]Figures for local and federal funds going to the N.C. Vocational Textile School are not available.

[8]These figures, which include federal funds, are classified by the University of North Carolina as "other" funds.

Table prepared by Bill Finger based on budget figures supplied by the various state agencies.

balanced growth was symbolically institutionalized," says Shugart, "but it never had any concrete policy built around it, such as providing venture capital to regional groups." Just a year later, Hunt changed directions and began pursuing high-tech industries.

If Hunt can be criticized for changing courses, he must be commended for making his priorities clear. Perhaps his two terms gave Hunt the time to establish clear priorities—and time to appeal to varying political constituencies. During his eight years, Hunt appealed first to rural supporters in his balanced growth priority and then to his urban constituency with his high-tech policy. Regardless of whether you agreed with Hunt's priorities, he did make his economic development direction clear—through the Balanced Growth Act and through spending for the MCNC. The verdict is still out on the wisdom of committing such a large percentage of state economic development resources to the MCNC, but at least Hunt fought hard for a clear priority.

Governor James G. Martin at weekly press conference.

Gov. Martin has yet to identify his economic development priorities to the public. On Jan. 25, 1986, Martin did announce in his televised "Report to the People" that the Department of Commerce is working on a "blueprint for economic development," but the specifics of that blueprint will not be available until at least May. During his first year, Martin indicated some of his concerns—such as focusing on the needs of the state's traditional industries. But no clear plan developed. He seemed to be trying to touch *all* the bases, *reacting* to external circumstances rather than beginning to forge a clear course for his administration.

Last fall, for example, Martin went to Japan and to New York on industry-recruiting trips, and in April he will go to Europe on a similar mission.

Expenditures in N.C. (FY 84-85, in thousands)

Local	State	Federal	Total
$2,823	$3,543	$6,306	$12,672[10]
$0	$0	$0	$12,597[11]
nominal	$111,452	$200,341	$311,793
nominal	$53,924	$90,000	$143,924
nominal	$215,255	$24,313	$239,568
	$380,631	$314,654	$695,285
$0	$0	$43,500	$43,500
$0	$60,000	$0	$60,000[12]
$0	$108	$0	$108
$0	$0	$3,200	$3,200

[9]This figure does not include N.C. Memorial Hospital funds.

[10]Local and federal funds do not flow through the Aviation Division, so the activities column refers to state-funded programs.

[11]The State Ports Authority receives no state appropriation. The 1984-85 expenditures were met through the collection of port fees and other port revenues.

[12]These funds are for FY 85-86; the State Budget Office will administer another $60 million for FY 86-87.

But how these trips fit into any overall strategy remains unclear. Meanwhile, Martin tried to help mediate among North Carolina's tobacco advocates during the pre-Christmas 1985 debates over the federal tobacco support program. And in January 1986, he called for a modified freeze on state government jobs, in anticipation of federal funding cutbacks. Both of these actions were important, but he could spend his entire four years responding to emergencies based in Washington or abroad—rather than articulating and pursuing a clear economic development policy here in North Carolina. The Governor, for example, should certainly be concerned about imports and the textile industry, but decisions affecting that issue will ultimately be made in Washington, not in North Carolina.

"If Karl, instead of writing a lot about Capital, had made a lot of Capital, it would have been much better."

—Karl Marx's mother, quoted in Alan Valentine's "Fathers to Sons"

The Department of Commerce is developing Martin's "blueprint" through a contract with the Research Triangle Institute—which in turn subcontracted with the national consulting firm, Fantus Inc. The Commerce Department asked the Fantus researchers to study four areas, says Deputy Secretary Kennelly: 1) rural development, 2) small business, 3) targeting of economic sectors such as defense and services, and 4) the activities of "our competitors."

The department refers to the contract as its "private sector study," since only funds from private industry are being used for the study, which Kennelly expects to cost $75,000 to $100,000. "We could've taken two different approaches with the study—a laundry list or a rifle-shot approach," says Kennelly. "We decided on the rifle approach, to focus on those four areas, so we could determine the most important things to pursue." The report is scheduled to be completed as early as May 1986.

Perhaps the Fantus study will help the Martin administration establish its economic development priorities. Without some sense of priorities, how can the scores of agencies involved in improving the state's economy coordinate their efforts? How can the state Department of Transportation, for example, know what road patterns will best bolster the Governor's economic development strategy?

Martin must contend with a legislature controlled by Democrats, which was hostile to many of his proposals in 1985. In addition, federal budget cuts may be severe during his administration. What would happen, for example, if federal funds for labor forecast data were cut sharply? Would Martin view such employment data as a priority and go to bat for state funds for this purpose?

Unless the Martin administration articulates its economic development priorities clearly—and then attempts to put them into place—the administration could leave behind a legacy of responding to national and international forces. Such a track record in itself could be significant, depending upon the type of responses. But the Martin administration could go much further—if it can forge an economic development policy that addresses the complex transitions sweeping through the North Carolina economy.

Many past governors have been remembered by a particular policy that addressed the needs of their eras and remain as a vital ingredient of the state's economic development. Kerr Scott was known for farm-to-market roads. Luther Hodges is remembered for beginning the Research Triangle Park. And Jim Hunt concentrated on microelectronics. What will James Martin's legacy be? "A people-to-jobs program would seem to be our mission," says C.C. Cameron, Martin's State Budget Director.

FOOTNOTES

[1]According to the Fiscal Research Division of the N.C. General Assembly, state funding to the Microelectronics Center of North Carolina has been: $1.0 million (Governor's Contingency and Emergency Fund, 1980), $24.5 million (FY 81-83), $20.3 million (FY 83-85), and $5.8 million (transferred from the University of North Carolina system's budget to MCNC, November 1984), for a total of $51.6 million.

[2]*The 1983-85 North Carolina Budget: Finding the Missing Pieces in the Fiscal Jigsaw Puzzle*, edited by Ran Coble, N.C. Center for Public Policy Research, February 1984, page 23. For the quotation by S. Kenneth Howard in the paragraph that follows, see p. 49.

[3]NCGS 143B-344, Chapter 543 (HB 1333) of the 1985 Session Laws.

Table 2. Executive Branch Boards, Commissions, and Councils Affecting Economic Development

Board, Commission, or Council	Established By	Purpose	Members Appointed By	N.C. Department Where Group Housed
INDUSTRIAL RECRUITMENT/DEVELOPMENT				
1. Economic Development Board	GS 143B-434	To advise the Sec. of Commerce on the formulation of a program for 1) economic development and 2) expanding the travel and tourism industry.	22 - Gov. 3 - ex-officio[1] 25 total	Commerce
2. N.C. Board of Science and Technology	GS 143B-440	To identify and support research needs in N.C., allocate funds to support research, purchase equipment, construct facilities, employ consultants, and make recommendations to promote effective use of scientific and technological resources.	11 - Gov. 2 - Gen. Assembly 2 - ex-officio[2] 15 total	Administration
3. N.C. Technological Development Authority Board	GS 143B-471.1	(1) To increase the rate at which new jobs are created by stimulating the development of existing and new small businesses; (2) to administer the Incubator Facilities Program; and (3) to administer the N.C. Innovation Research Fund.	8 - Gov. 4 - Gen. Assembly[3] 12 total	Commerce
4. Microelectronics Center of N.C. (MCNC) Board of Directors	Articles of Incorporation, 1980	To manage MCNC as it develops, constructs, and operates microelectronics facilities in order to support research in participating institutions, and to help develop a good relationship between state government and the industry so as to promote high technology in N.C.	7 - Gov. 1 - RTI Board of directors 6 - ex-officio[4] 14 total	Independent
5. North Carolina Biotechnology Center Board of Directors	N.C. Board of Science and Technology, 1981; Articles of Incorporation, 1984	To promote scientific research and education to encourage the development of the biotechnology industry; to work with companies diversifying into biotechnology and recruit firms from out of state.	5 - Gov. 5 - Lt.-Gov. 5 - Speaker of the House 8 - ex-officio[5] 23 total	Independent
6. N.C. Council on Management and Development, Inc.	Agreement Between Gov. and Businessmen, 1978	To advise the Governor on matters regarding economic development and growth	20 - Gov.	Governor's Office
7. Industry Advisory Board	Voluntary agreement among private industries	To provide private industry with advice on safety matters.	14 - Board	Labor
8. State Advisory Council on Occupational Safety and Health	GS 95-134	To advise, consult with and recommend to the Commissioner of Labor on efforts to reduce the number of occupational safety and health hazards at the workplace and provide safe and healthful working conditions.	11 - Com. of Labor[6]	Labor
9. N.C. Ports Authority	GS 143B-452	To promote, develop, construct, equip, maintain and operate harbors and seaports, to aid freight shipment, and increase movement of waterborne commerce.	7 - Gov. 2 - Lt. Gov. 2 - Speaker of the House 11 total	Commerce
SMALL BUSINESS				
10. Small Business Advocacy Council	Executive Order #10, 6/28/85	To recommend to the Governor and General Assembly legislation assisting small business growth and development and help determine small business needs in education, training, marketing, funding resources, technological assistance, and related areas.	20+ - Gov.	Commerce

Table 2. *(Continued)*

Board, Commission, or Council	Established By	Purpose	Members Appointed By	N.C. Department Where Group Housed
COMMUNITY DEVELOPMENT				
11. Community Development Council	GS 143B-305	To advise the Sec. of NRCD concerning 1) the orderly development of N.C.'s counties and communities, and 2) the type and effectiveness of planning and management services to local governments.	9-Gov. 2-ex-officio[7] 11 total	Natural Resources and Community Development
JOB TRAINING				
12. N.C. Advisory Council on Vocational Education	PL 98-524, Sec. 112 (a); Executive Order #3, 3/27/85	To advise the State Board of Education, the State Board of Community Colleges, the governor, the business community, and the public on vocational education matters.	13-Gov.	Independent/ Treasurer[8]
13. State Board of Community Colleges	GS 115D-2.1	To adopt and administer all policies, regulations, and standards concerning the establishment, administration, and operation of the 58 colleges and institutions in N.C. in order to ensure quality of educational programs, systematic meeting of NC's educational needs, and equitable distribution of state and federal funds.	10 - Gov. 2 - ex-officio Lt. Gov. State Treasurer 8 - Gen. Assembly 20 total	Community Colleges
14. N.C. State Job Training Coordinating Council	PL 97-300, Sec. 122 (Job Training Partnership Act 10/13/83)	To advise the Governor on goals, objectives, and policies regarding employment and training; review plans and programs of agencies or service delivery areas operating federally funded programs or providing employment-related services and make recommendations to the governor and agencies.	17 - Gov.	Natural Resources and Community Development
15. N.C. Apprenticeship Council	GS 94-2	To aid the Commissioner of Labor in formulating policies for apprenticeship programs and to recommend standards for apprenticeship agreements.	11 - Comm. of Labor[9]	Labor
INFRASTRUCTURE				
16. Board of Transportation	GS 143B-350	To assist Secretary in program development and needs assessment; to approve highway construction and maintenance plans, schedules, projects and grants; to advise the Secretary as needed; to promulgate rules concerning all transportation functions assigned to the department to authorize property acquisition by eminent domain; and to delegate authority to the Secretary.	21 - Gov. 1 - Lt. Gov. 1 - Speaker of the House 1 - ex-officio (Sec. of Trans.) 24 total	Transportation
17. N.C. Aeronautics Council	GS 143B-356	To advise Secretary in the issuance of loans and grants to the cities, counties, and public airport authorities for the purpose of planning, acquiring, constructing, or improving airport facilities.	13 - Gov	Transportation
MISCELLANEOUS				
18. Employment Security Commission of North Carolina	GS 96-3	To plan and implement programs which reduce and prevent unemployment, assist in vocational training, provide reserves for public works in high-unemployment periods, and publish results of research.	7 - Gov.	Commerce
19. State Goals and Policy Board	GS 143B-371	To identify goals and priorities of N.C. citizens and to determine alternative course of government action.	15 - Gov. 1 - ex-officio (Gov.) 16 total	Administration

Table 2. *(Continued)*

Board, Commission, or Council	Established By	Purpose	Members Appointed By	N.C. Department Where Group Housed
20. North Carolina Commission on Jobs and Economic Growth	Chapter 757, 1985 Session Laws (SB 182, Section 52)	To work with private and public institutions to identify the major economic challenges facing N.C. and present proposals to the executive branch and 1987 legislature.	30 - Lt. Gov.	Lieutenant Governor
21. Southern Growth Policies Board	GS 143-492	To study and analyze state-level policies requiring economic growth, to help prevent interstate conflicts and promote regional cooperation, and to help coordinate state and local interests on a regional basis.	2 - Gov. 1 - Lt. Gov. (state senator) 1 - Speaker of House (state representative) 1 - ex-officio (Gov.) 5 total (from each of 12 states and Puerto Rico)	Independent
22. State Occupational Information Coordinating Committee	PL 98-524 Sec. 422(b)	To improve coordination, communication, and cooperation in development of occupational and training groups and to use labor market information for counseling and training.	6 - per federal law[10]	Commerce
23. Governor's Advisory Committee on Travel and Tourism	Executive Order #46, 3/19/80	To convey the travel industry's concerns and perceptions to the Governor and work with the Travel and Tourism Committee of the N.C. Economic Development Board.	29 - Gov.	Commerce
24. Women's Economic Development Advisory Council	Executive Order #7, 6/28/1985	To explore and evaluate opportunities for women in the economy and advise the secretaries of Administration and Commerce on actions to integrate women into all aspects of the economy.	12 - Gov.	Administration

FOOTNOTES

[1]Secretary of Commerce, Lt. Gov., and Speaker of the House.

[2]Governor and science advisor to the Governor.

[3]Two members recommended for appointment by Lt. Gov. and two by Speaker of the House.

[4]President of MCNC, and the chancellors of Duke, A&T State, NCSU, UNC-Chapel Hill, and UNC-Charlotte.

[5]President of UNC, chancellors of UNC-CH, NCSU, ECU, Duke University, dean of Bowman Gray Medical School (Wake Forest Univ.), president of the Research Triangle Institute, and president of the N.C. Biotechnology Center.

[6]Three appointees must represent both management and labor.

[7]Executive secretaries of N.C. League of Municipalities and N.C. Association of County Commissioners.

[8]This group is formally under the State Treasurer because it gets federal funds, but it functions independently.

[9]Four appointees must represent both management and labor. In addition to the 11 voting members, there are two non-voting ex-officio members, a designee of the Department of Public Instruction and the Department of Community Colleges.

[10]The law specifies representatives of *five* agencies: the Employment Security Commission, the Division of Vocational Rehabilitation (DHR), the state job training coordinating council (NRCD), economic development (Commerce), and the state education board (interpreted in North Carolina to mean *both* the Department of Public Instruction and the Department of Community Colleges). Hence, there are *six* board members.

Table prepared by Robert Gregory and Jim Bryan. For more, see the Center's report, Boards, Commissions, and Councils in the Executive Branch of N.C. State Government, *1985.*

An Interview with Howard H. Haworth

Howard H. Haworth, 51, became North Carolina's Secretary of Commerce January 7, 1985, when he was appointed by Gov. James G. Martin. Haworth had been chairman of the board of Drexel Heritage Furnishings, Inc. in Morganton and previously served as its president and chief executive officer.

A native of Buffalo, N.Y., Haworth was reared in High Point and graduated from Guilford College, where he was a three-sport letterman and a Rhodes Scholarship nominee. He is vice chairman of the Board of Trustees at Guilford College, a former member and president of the Board of Trustees of Grace Hospital in Morganton, a member of the Executive Board of the Piedmont Council of the Boy Scouts of America, and a member of the Board of Directors of the North Carolina Citizens for Business and Industry. *Insight* Associate Editor Jack Betts conducted this interview on Nov. 13, 1985.

What is the North Carolina Commerce Department doing for economic development? What can it do, and what does it do?

The Commerce Department has a wide variety of functions. We are primarily a catalyst for economic development. Quite often we are the locators of new companies abroad or in other parts of the United States who wish to come here. We work as partners with a number of cities in North Carolina and towns and communities who through their own development efforts locate an opportunity and want us to provide the tools and expertise and people they need.

There are almost 400 individuals and institutions that we've identified who are involved in economic development and who get up every morning to do that job. That is a very reassuring thing to me as Secretary of Commerce. It is a partnership, so to speak. Obviously banks, county developers, chambers of commerce, and many, many more professional institutions and indi-

Jack Betts

viduals are working on economic development. With that many different pieces of economic development prospecting going on, one of the keys is how to better coordinate their efforts. The Commerce Department can be a very important nerve center for coordination.

The Commerce Department's role spans the whole panorama of economic development, including aiding with financial sources, recruitment, the state's ports, and developing import and export opportunities for small, intermediate, and large businesses in North Carolina. Our agenda emphasizes three elements: traditional industries; high-tech industries, whether small business, intermediate or large business; and then the service or non-manufacturing sector. We really don't make much of a distinction.

Our plate is abundantly full this year because we have broadened the agenda at the Department of Commerce. We feel it is just as important to recruit a major new high-tech industry; it is just as important to partner with an existing traditional industry; it is just as important to have a Small Business Development Division to aid a small business person to become more sophisticated; and to at the same time pursue the American Expresses of the world or the Royal Insurances of the world, or any number of other service or non-manufacturing units.[1]

The most recent projections are that nine out of every 10 jobs in the next decade will be non-manufacturing jobs. The manufacturing industry is 21 percent of our current GNP generation. That suggests that 79 percent of the ball game is in the non-manufacturing and service sector. Obviously, we must pursue the manufacturing sector while at the same time providing adequate recruitment efforts for non-manufacturing opportunities as well.

You've seen this from two angles, first in your previous position in manufacturing, and now as Secretary of Commerce. Under previous administrations, North Carolina was said to be at the top nationally in economic development. Is that reputation deserved?

North Carolina is much better than the average state in economic development activities, certainly one of the leaders. It is difficult to specifically add up all the factors in a relevant, apples-to-apples sort of comparison. I think North Carolina is number one in certain things. Economic development and recruitment hinge on whether you can bring a larger list of positives to the selling table than other states, and there are many states that have *part* of what North Carolina has to offer, but not many states have *all* of what we have to offer.

North Carolina has a great university system, above-average infrastructure, including roads, airports, and ports, a pro-business attitude, a reasonable and balanced tax structure for the most part, except for inventory and intangibles taxes, excellent research facilities, and a strong work ethic, among other things.

How good are we? It's really a tough question to answer in absolute accuracy. I think the better way to say it is that North Carolina is very special. It's an outstanding product for a salesman to have in his bag. I used to be one, and now I am in a different way, and it's a great state with a tremendous number of positives to take out in the recruiting battles and the economic development competition battle, a battle where that competition is much keener today than it's ever been before.

What is the so-called transition economy in North Carolina all about? What changes does it herald for North Carolina?

The transition economy is complex in some respects, but it's not terribly difficult for me to describe. We are seeing a contraction of some of our traditional industries, and that contraction has been highly publicized for some, particularly the textile industry, and to some degree in the agricultural industry. I don't put furniture in that category, and I might quickly add that your readers might say, "Well, he comes from the furniture industry, so he wouldn't," but let me tell you why I don't. The furniture industry continues to be larger than it used to be, so that's not a contraction. It does, however, have some import competition problems that are growing. I don't think they're going to follow the same pathway as has occurred in textiles because of the differences in the two industries.

The transition exists in part because of this contraction occurring to a dramatic degree in the textile industry. That industry has lost upwards of 100,000 jobs in the last 10 years in this state alone. That's a major contraction and we know it has been caused primarily by an onslaught of low-cost imports that have simply made it very difficult for certain segments of the textile and apparel industry to continue to be competitive in the marketplace.

Agriculture is somewhat of a different situation. We are concerned that tobacco is under a lot of pressure—pressure in terms of adequate prices to support production, and the actual investment by the farmer growing the crop. We're seeing a lot of pressure coming from the health care question. The U.S. Surgeon General went so far recently as to say that in his opinion, by 1995, smoking would be outlawed in public places. That's pretty strong language. That doesn't necessarily make it true, but that's a strong comment. You would have never heard that comment 20 years ago.

But while there are disturbing contractions occurring, there is also exciting expansion. High-tech manufacturing continues to grow impressively with sitings and expansions such as Northern Telecom and BNR in the Research Triangle Park; B.F. Goodrich in Norwood; DuPont-N.V. Phillips' joint venture in Kings Mountain, and so on. The service industry, too, is on the move, with new job opportunities covering a large panorama. As I mentioned, American Express is one specific company in the service sector. We sited them in Greensboro in April 1985, after competition with the state of Virginia. That means 2,000 jobs and a $65 million investment. That's significant. All communities in our state are going to have to have strategies to identify and pursue such companies because 80 percent of our economy is being fueled by the non-manufacturing sector. Also, a major non-manufacturing growth area for us is travel and tourism, which, at more than $4 billion annually, ranks among our top five industries.

A large textile manufacturer made a key point with me recently. He said we *are* high-tech, and he said we ought to walk out and see how many plants have modernized and see how many people there are out there. Look at the capital-intensiveness versus the older labor-intensiveness. Those machines out there are state of the art. We *are* high-tech. We get so enamored with cliche phrases. If you ask somebody what they mean by "high-tech," you will almost always see them begin to stumble and fumble for a definition. There should be a better understanding of the term. However, the Governor said something that I like very much. He said, "I'm for jobs, whether it be low-tech or high-tech or anything in between."

When the use of high technology in those traditional industries enables them to remain profitable, does that necessarily mean increased automation and fewer jobs?

Sometimes it does mean fewer jobs, but not always. There's a major company in this state, one of the largest, that is going heavily into robotics, but they do a marvelous job of retraining those displaced so that job loss does not occur. So, while in a short-term sense there may be fewer jobs of a certain type, in a long-term sense, a great part of our future strength in this country economically and jobwise depends upon the technology. The "high-techness,"—the modernization, and the competitiveness that comes from it allows us to spend more capital for other expansions and other developments which have job implications. So I would not want to look at automation so shortsightedly as to say that it eliminates jobs. High-tech automation really ultimately becomes the creator of more jobs.

Does the Commerce Department actively recruit industry, or does it, as some officials have said in the past, really react only to those companies that first express an interest in coming here?

It's some of both. The Commerce Department participates in a large number of forums which we hope will attract the attention of those who make the decisions about expansion, movement, siting plans, and so forth. We present our program to companies all over the United States and, for that matter, the world. We conduct trade missions, such as our recent trade mission to Japan. We participated in a U.S. Southeast-Japan conference that gave us the opportunity to learn about some of the creative things they're doing in the Pacific Rim area. It gave us the opportunity to get our hands, first-person, on the shakers and movers of Japanese business. We have 37 Japanese firms sited here in North Carolina now and further expansions and sitings are expected in the future.

We have also conducted missions to Europe. In addition, we work with many of the larger cities in the state who have their own missions but who may consult with us about certain ways to package and sell North Carolina in their missions. So the answer is that we're not simply sitting waiting for somebody to come knock on the door, to call us and say, "We're thinking of expanding and we'd like to come sit down with you to tell you what we're looking for and let you help us find a site, find a building." We're out and about selling North Carolina, not knowing many times who's listening.

There are other times, however, when a contact is provided to us or somebody calls us to say they want to come look at the state. That's when we bring out the helicopters, our extensive inventory of available buildings in the state, and so on. We have every building in the state that is vacant today on our computer. We know about infrastructure, airports, locations, schedules, who flies in and out, and where they go. We know the highway system, we know where the water and sewers systems are adequate, where the gas lines are across the state.

So it's a combination. Sometimes it's passive in the sense that they come to us, but a great portion of the time it's active in the sense of our reaching out in a wide variety of ways to sell North Carolina. What comes to us seemingly passively might have been the result of something we did two or three years ago when the thought stuck in somebody's mind that one of these days we're going to need to build a plant, and North Carolina would be a great place to put it.

Are there ever cases in which you hear from an industry or a company that wants to locate here, but for certain reasons—whether legal or financial or environmental—you don't want to recruit them and don't want them here?

We have on occasion. It's rather rare, but we have occasionally decided against recruiting a company that is financially troubled. We do have occasions, very rarely, where something will come to our attention or we'll get a contact and we'll get into it a bit, and decide that it really is not going to fit, it's not financially very feasible, and we have grave questions about their plans for location or their ability to get adequate financing. We'd better say that we enjoyed visiting with you but we really don't believe this is the place for you. But that's rare.

Is it worthwhile for the state to put a lot of time and commitment and resources into trying to recruit the really big plants, like Campbell Soup or Cummings Diesel? Do they always turn out to be as good as one hoped in terms of big employment, big investment, or are there drawbacks?

My personal feeling is that we ought to be very, very aggressive with the large company opportunities, though not to the exclusion of the intermediate and smaller opportunities. But complications that you might have from larger companies, and I quite frankly can't give you a list of those complications, are far outweighed by the positives they bring in terms of numbers of jobs, the tax base enhancement, and so forth. I have a very positive feeling about recruiting large companies. But it's important to remember that 97 percent of the businesses in North Carolina are small businesses employing 100 or fewer people.

We should always pursue aggressively the development of our small business community. And to that end, we have created a division—one that did not exist previously here in Commerce—to put together small business development. That division is a combination of all the increments that already were in Commerce that naturally relate to small business development. We've just completed 10 small business forums all over the state to hear what small business people say have been their toughest things to cope with, and what their greatest needs are. We want the program to be need-driven, not bureaucratically assembled.

The statistics tell us that the small businesses are already providing the bulk of new jobs in North Carolina. In what fields are those jobs?

They're scattered all over the lot. There are some manufacturing, but a lot of small businesses are in the service sector or non-manufacturing category. One thing you have to remember is the demographics of what's happening to our population. The post-war baby boomers are now 30 years old or more, and they are an enormous group presenting many opportunities for the development of small service-oriented businesses. Our health care is improving by leaps and bounds, so our population is living longer, and this whole movement has enormous implications and is one of the reasons for the projection that nine out of 10 jobs will be in the service sector.

What role should state government have in helping small businesses to find the financing—or venture capital—they need to start operating?

We're studying that right now. We are involved in discussions now on what we need to do and can reasonably do to put a financing increment into the Small Business Development Division. Our forums told us that one of the most important things to that crowd is reason-

able ease—not necessarily unrealistically cheap financing—but reasonable ease of access and direction in seeking and achieving financing.

Should it be venture capital or some sort of privately-managed loan fund?

Those are two of the many things we are going to have to determine. One comment on venture capital: It is very important to economic development in this state. North Carolina is a very poor capital formation state. All the studies will show you that we rank very low. One of the reasons we rank low is the intangibles tax. That tax very badly needs to be repealed. It is looked upon as tax relief for the rich man, but that is a foolish, shortsighted way to look upon the repeal of that tax. Repeal is the trigger mechanism for a considerable amount of capital formation in this state.

Is that more of a deterrent than the inventory tax, for instance?

I'd rather not say more of a deterrent. We got no relief to speak of on intangibles taxes in the 1985 General Assembly, though it's more of a deterrent because we did get some relief on inventory taxes, but they are both big problems. None of the states contiguous to North Carolina has either one.[2] I am sure the Commerce secretaries of surrounding states talk to clients we are competing for about North Carolina's intangibles and inventory taxes. We know that this occurs from time to time with other Southeastern states in the intense battle for economic development and there have been some companies lost on that basis.

What would you want to see in the next few years regarding international trade as it evolves? Will there be more foreign investment in North Carolina? What about exports?

You're going to see us continue to be very aggressive in terms of trade missions to both western Europe and the Far East. The Pacific Rim—Japan, China, and other nations in that part of the world—will, in my opinion, be one of the two most important trading centers for this country and for our economic well-being for the next 50-100 years. The key is to get a fair and balanced playing field. Free trade is one thing but we've got to have free and fair trade. Markets in the Pacific Rim area must be opened more thoroughly to U.S.-manufactured goods and services.

A balanced playing field, equally open markets, ease of access to our markets and theirs are musts. That is a far better strategy than to see us deteriorate into protectionism and isolationism, which will be a detriment to both our countries. I think you're going to see a lot more contact with the Pacific Rim, maybe to a lesser extent Europe, but you're going to see a lot of reverse investment in the future. That is investment from abroad to here.

What role if any does the Department of Commerce have in such things as worker retraining or technical education? Is there a relationship with the Community College system, for example?

Let me cast a major accolade to the Community College system. Our Community College system is the third largest one in the U.S. with 58 community colleges. It is an outstanding economic development tool for the purpose of training certain types of labor that are needed for certain types of industries we recruit.

They also have a very major responsibility that benefits the department and the whole state, and that is their Adult Basic Education Program. We've got 800,000 adults in this state who can't read. We've got to correct that. We've got to improve the delivery system at the primary and secondary school level because if we don't do those things, we're not going to have labor with the adequate education to match the shift in the type of jobs that we're going to be recruiting. Many of those jobs will require computer skills or the ability to read computer display terminals, or will require math and science skills in order to be trained to handle these jobs.

As far as retraining and technical education, we have certain responsibilities through our Employment Security Commission. We have 87 offices across the state with 2,000 employees. They are involved up to their earlobes in working with people who are dislocated, people who are in search of jobs, need help in relocating and becoming re-employed.

What other built-in detriments to economic development does North Carolina have?

A critical element in economic development is an adequate infrastructure—the highways, bridges, ports, water and sewer facilities, and the like. We've got the largest highway system in the United States, with 76,000 miles of road, 18,000 miles of it unpaved. That is a blessing and somewhat of a burden. The upkeep is a burden to the state. The blessing is we've got roads to more and more places than other states. That's a help in economic development.

We have identified, however, approximately $1.5 billion to $2 billion in needed projects. Not dream projects, but just basic need projects. That's got Secretary of Transportation Jim Harrington burning the midnight oil to

think of creative ways to alleviate that problem. It's a long-term problem. Even with a lot of help, there is something like a 60-year backlog at the present rate of construction.

What about balanced growth? Is that a policy that is effective? Or is the Balanced Growth Act just a lot of verbiage?

The Balanced Growth Policy Act is the declaration of the state's balanced growth policy.[3] And it waxes on fairly thoroughly about the matter. The thrust of it is to find more and more creative ways to spread economic development particularly to eastern and western North Carolina. We absolutely must find better answers to cause that to happen. But I don't really like the term "balanced growth." I don't care what you call the effort—to me the effort is rural economic development for the most part, and we do have to get a lot better at that.

We're entering into a period where we must do a better job of creating economic growth in rural areas as well as in urban areas. We accept that as a major challenge. I hope the legislature will see fit to reconsider the term "balanced growth" because I think it's a myth. It connotes something that is not really doable, in the sense of the term. "Balanced growth" would require that the 100 counties have equality of growth in each. But we're not going to have exactly the same amount of economic development in each of the 100 counties. So I think the term balanced growth tends to connote or send a message to those who so desperately want it, that in our great wisdom we're going to deliver to them equally on a county-by-county basis. That's not in the cards.

FOOTNOTES

[1]American Express is opening a credit card service facility in Greensboro, and Royal Insurance is moving its corporate headquarters to Charlotte.

[2]For further information on intangibles and inventory taxes, see *North Carolina Insight*, Vol. 7, No. 4, May 1985, "The Tax Debate of 1985," pp. 2 to 23. In this series of pro-con articles, some writers agree with Haworth, and others contend that neither tax is a significant deterrent to recruiting industry. A number of studies are cited in the articles.

[3]NCGS 143-506.6, "Declaration of State Balanced Growth Policy," was adopted in 1979 to bring more and better jobs to where people live; to encourage the development of adequate public services on an equitable basis for all of the State's people at an efficient cost; and to maintain the State's natural environmental heritage while accommodating urban and agricultural growth.

Future Policy Directions

Economic Development Strategies

The 1980s have cast American economic development policies adrift. Codewords have seduced policymakers as often as they have sharpened state strategies. Smokestack chasing for the Sunbelt gave way to retooling and microchips. Now venture capital and incubators are the latest buzzwords, along with import quotas and displaced workers. Within N.C. state government, four primary economic development strategies have evolved. These four overlap and reinforce each other to some degree, but they also compete for money and attention, like four well-educated baby boomers seeking a job in the shrinking middle-management sector. Where will state officials focus their time and money? And why?

Industrial Recruitment: Persuading a company to come to North Carolina is a sophisticated business which is now in transition itself: from recruiting manufacturing firms to seeking service-sector companies; from recruiting *new* plants to encouraging *existing* companies to expand; and from a Raleigh-based effort to a more decentralized, local orientation.

International Trade: Since the 1950s, Tar Heel governors have actively sought foreign investment in this state, and agricultural exports have helped make the state's balance of trade favorable. But only recently have state policies been specifically designed to enhance prospects for international trade.

Small Business: Guess what accounts for 97 percent of the state's businesses? And for more than half the new jobs? Small businesses of 100 or fewer workers. The state has taken some steps to promote small businesses, but much more could be done to promote this area of job growth, such as state-backed venture capital funding and more assistance to persons setting up new businesses.

High-Tech Industry: Since 1980, the state has made high-tech efforts its flagship strategy, with more than $50 million in state funds going to the Microelectronics Center of North Carolina (MCNC) alone. As the MCNC moves beyond its infancy, a new kid has come on the block, the Biotechnology Center. The euphoria that surrounded the beginnings of the high-tech boom is now giving way to an examination of the long-range impact of this investment.

John Rottet/The News and Observer

Alvah Ward in his office.

Selling Industry on North Carolina — A Strategy in Transition

by Ken Friedlein

Framed color photographs and drawings of long, low buildings turn the white-walled offices at the N.C. Department of Commerce's industrial recruitment center into a sort of trophy room. Artists' renderings record the success stories. Captions at the bottom of each frame honor the state employee who helped sell the company on North Carolina. There's even a trophy for the boss, recalling his earlier days in the field:

Campbell Soup Co. Alvah Ward Jr.
Maxton, N.C. June 12, 1978

Ken Friedlein has been a reporter and editor at The Charlotte Observer *since 1979. He is currently the government/politics editor.*

"Campbell Soup could have gone, and almost did, to McBee, South Carolina," remembers Ward, now director of the state agency charged with bringing new industry to the state. "They could have gone to almost anywhere in the Southeast." Of all those places where the soil was right—porous enough to accept a soup maker's considerable effluent but dense enough to hold settling solids back from the water table—Campbell Soup chose Maxton, in west Robeson County. Cost, labor force, geography, and other factors being nearly equal in the three southern states, the site decision rested on less objective measures—such as the skill that Alvah Ward took to his job as a salesman.

With 24 "development representatives" and a $2 million annual budget, Ward runs one of the high-profile sides of North Carolina's economic development efforts. Functioning more like a commercial sales force than actual "recruiters" (as coaches recruit sports stars), Ward's staff collects site information, coordinates projects with local officials, and tries to supply as much information as possible to a potential new company. Rarely do these "recruiters" make blind calls—say to California trying to pick up rumors of an aerospace company that might consider coming to North Carolina. The high-profile industry "recruitment" trips by governors to Japan, West Germany, and New York are more of a sowing of North Carolina's good name than recruiting of specific companies. But this show of public relations can pay important benefits, sometimes years later.

"If ignorance paid dividends, most Americans could make a fortune out of what they don't know about economics."

—Luther Hodges

Often, industry representatives asking for information use only first names, and no company names. Or they work through relocation consultants—the middlemen in economic development—who guard their clients' names like patented trade secrets. Few businesses open their doors wide to solicitors. The secrecy and the economic realities make salesmanship all the more challenging.

"There are very few plants that can go *anywhere*," Ward says. At the same time, very few plants can go in only one place, or in only one state. The extras from a salesman can push the decision in North Carolina's favor. People in the business tell of the rush that comes with landing a big one, several hundred jobs, another trophy for the office wall. "Campbell Soup—that was my project," recalls Ward.

From Traditional Leader to Competitive Crunch

Southern states, including North Carolina, have been finding ways to lure businesses since the 19th century land and financial subsidies offered to the railroads. By the Depression years, local communities had turned their attention to luring industry. Enticements ranged from near larceny (one Tennessee garment plant was built by withholding 6 percent of the workers' wages) to constitutional sleights-of-hand (factories built with tax funds were called "municipal buildings for public purposes"). One Mississippi hosiery company got an educational tax exemption and rent-free building on a high school campus, where it "trained" its labor force in 40-hour shifts.[1]

In 1936, Mississippi inaugurated the modern-day industry hunt in the South with its Balance Agriculture With Industry (BAWI) plan. "By introducing a system wherein the state sanctioned and supervised the use of municipal bonds to finance plant construction, the BAWI program lifted the curtain on an era of more competitive subsidization and broader state and local government involvement in industrial development efforts," wrote Mississippi historian James C. Cobb.[2] Across the South, states and local communities, aglow with the fever, offered tax lures. Whether by underassessment or outright exemption, the willingness to forgo property tax revenue represented another stride in the pursuit of industry. Participating governments were, in essence, paying for jobs.

North Carolina, however, had little to do with broad scale enticements. With extensive furniture, textile, and tobacco operations in place in the early 20th century, its economy was far more diversified from agriculture than other southern states. Between 1900 and 1940, manufacturing grew faster in North Carolina than elsewhere in the South, employing more of the N.C. labor force than any other state's. But the labor force stayed close to the land. The early industries could scatter plants and grow, so industrialization didn't concentrate population. Consequently, the nation's most thoroughly factoried state remained, oddly, the most thoroughly rural.

Such patterns helped place industrial progress among North Carolina's oldest and strongest ethics. The "progressive plutocracy" V. O. Key

described in the late 1940s included participation by the state's considerable business elite in a loose but effective economic oligarchy. "A sympathetic respect for the problems of corporate capital, and of large employers permeates the state' politics and government," Key wrote.[3]

Industrial recruitment began in earnest in North Carolina during the administration of Gov. Luther H. Hodges (1954-61), known as the "businessman's governor." Best remembered as putting together the public-private partnership in 1956 that launched the Research Triangle Park, Hodges made a more immediate mark as a 1950's scrapper for new factories. In October 1957, Hodges rounded up 75 citizens to hunt industry in New York, resulting in calls on some 250 prospects. Six months later, a similar expedition hit Chicago and seven months after that, Philadelphia. Then in October 1959, Hodges and company struck out on a two-week tour of western Europe. At the end of his term, Hodges touted the extent of investment in new and expanded plants ($1.1 billion) and jobs *expected* to result (140,233).[4] This numbers tradition continues today, despite important problems with using numbers based on company *announcements* as opposed to actual operations (see article on page 50).

The early presence and steady growth of nonagricultural ventures may explain why North Carolina was alone among southern states at the end of the 1960s in not offering industrial revenue bonds to finance new plants. Tax breaks, too, were scarce. But North Carolina didn't seem to need such outright lures, relying instead on the personal touch. "In the early days, there probably weren't a half-dozen states that had a formal industrial recruitment effort," says Ward. "We had it all to ourselves."

As the competition grew, North Carolina boosters began to realize it couldn't depend for success only upon personal contacts and its image as the "progressive" southern state. The administrations of Hodges and Terry Sanford (1961-65) laid the groundwork for the statewide community college system, which has evolved with its job training capabilities into a key element in the package of benefits North Carolina now has to offer (for more on community colleges and job training, see page 84).

During the administration of Gov. James E. Holshouser Jr. (1973-77), industrial recruitment became a high-profile business as the state began running slick ads in national magazines and newspapers. Gov. James B. Hunt Jr. (1977-85) had a new tool available to him in his recruitment efforts. After several false starts, local governments—with state approval—were finally able to offer industrial revenue bonds in 1977. Hunt inundated the media with announcements of new

Governor Luther Hodges, right, with businessman Robert Hanes, at 1959 press conference on the Research Triangle Park.

N.C. Division of Archives

industries coming to the state, all the while playing to the hilt the numbers game on *announced* new jobs begun by Hodges. Hunt also brought the state into the race for big microelectronics companies (see article on page 74).

In addition, Hunt led the state beyond a traditional reluctance to accept unionized companies. Local officials in towns such as Smithfield discouraged high-paying, unionized companies from coming to their towns for fear the plants would disrupt the prevailing low-wage market in their area. When Philip Morris, a unionized company paying high wages, announced interest in building a plant in Cabarrus County (in the heart of the low-paying textile belt), initial reactions were unfavorable. Hunt went to a public rally in Cabarrus County and made a speech supporting high-wage industries coming to the state. Local officials then gave the plant the support it needed.

Hunt's overall recruitment efforts evidently paid dividends. In 1984, for example, *Industrial Development* magazine reported that North Carolina led the nation in attracting new manufacturing plants. Also, the N.C. Department of Commerce reported that in 1984, $2.67 billion in industrial investments were *announced* by new and expanding industry. "This investment level represents both a new record, surpassing the previous record of $2.24 billion set in 1980, and a 25 percent increase over 1983's investment of $2.15."[5] North Carolina consistently ranked high in attractiveness to industries, and in 1984 the well-known management firm of Alexander Grant & Co. ranked North Carolina eighth in the nation in general manufacturing climate. The annual Grant rankings are based on 22 factors, grouped into government and non-government controlled factors. North Carolina ranked second in factors controlled by government.

Former Governor James B. Hunt, Jr.

"The business of America is business."

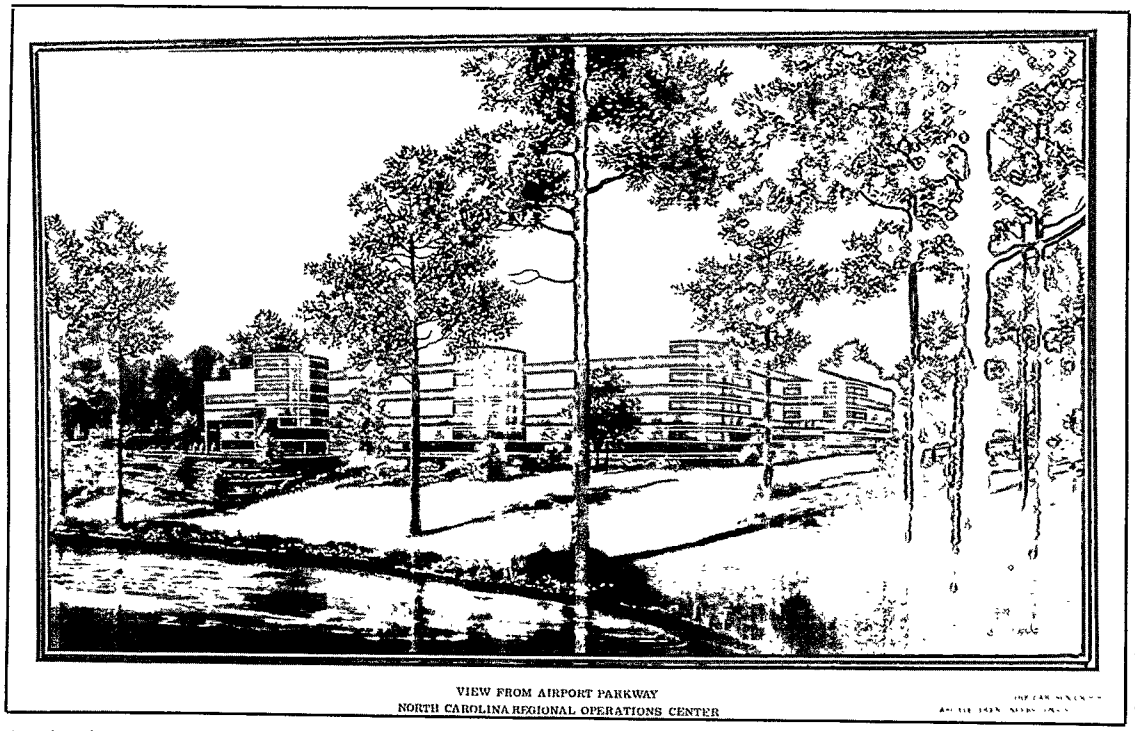
—Calvin Coolidge

In 1984, James G. Martin campaigned on a platform of tax relief to businesses. Martin's supporters pointed to such studies as that done by *Industrial Development* magazine, which ranked North Carolina last among the 50 states in financial assistance offered to industry by public agencies. In 1985, after many tries, the business community—with the strong support of Gov. Martin—persuaded the General Assembly to reduce the tax on business inventories (through credits on local property taxes). Businesses have never liked paying it, and industrial recruiters have never enjoyed explaining it to prospects who knew their inventories would be tax-exempt in, say, Tennessee and Virginia. (For a five-part series on these taxes, including pro and con articles, see "The Tax Debate of 1985," *North Carolina Insight,* April 1985.)

Despite the tax breaks, industrial revenue bonds, and slick advertising now used by North Carolina recruiters, the competition is more keen than ever—and the targets have gotten fewer. "Economic development is a competitive activity," says Dennis Durden, director of public policy at R. J. Reynolds Industries. "It's not how good you are. It's how much better you are than your competitor."

Alvah Ward describes the current recruitment battles this way: "It's no longer feasible to send large numbers of people on industry missions. It used to be you'd go to New York and knock on doors. Now you've got 10,000 communities knocking on the same doors."

But competition among recruiters tells only half the story. The other half lies in the changing economy itself. Adjusting to an economy rapidly shifting from the manufacturing to the service and trade sectors has prompted discussions about the value of industrial recruitment itself, in the traditional sense of the term. "Perhaps the fundamental flaw in current policy is our over-



The Carlson Group

Architect's rendering of the regional operations center that American Express is building near the Greensboro airport.

dependence on industrial recruitment for our economic salvation," writes George B. Autry, president of MDC, Inc., which specializes in research on employment policies. "Yankee plants are like the buffalo herds that roamed the West in the 1870s. There are not enough left, and the southern states may go bankrupt competing with each other for the last hide."

The New Face of Industrial Recruitment

The industrial recruitment business has gradually but fundamentally changed since the time Alvah Ward courted Campbell Soup. Certainly, the Martin and Hunt administrations have their differences in emphasis. Martin, for example, has broadened recruitment efforts to include small businesses, traditional industries, and retaining existing industries, while Hunt focused in his later years on microelectronics. An analysis of industrial recruitment as an economic development strategy, however, goes beyond the preferences of governors. Three important shifts are taking place that reflect the larger economy:

- from recruiting manufacturing firms to seeking service-sector companies;
- from recruiting new companies to encouraging expansion of existing facilities and to keeping existing companies from leaving North Carolina; and
- from a predominantly Raleigh-based effort to a more decentralized, local orientation.

Recruiting the Service Sector. In 1985, American Express opened a center near Greensboro that will employ 2,000 people to process credit card transactions and customer inquiries. The Greensboro center will be bigger than any of the manufacturing investments announced in 1984, the year N.C. industry hunters received a secretive call from the New York relocation consultant hired by American Express. In Charlotte, local recruiters got a similar call in behalf of an "industrial prospect," which turned out to be AT&T, now building an 800-employee data services center in the University Research Park.[6]

Until 1985, North Carolina didn't even publicize nonmanufacturing investment totals. The Department of Commerce, in its "Six-Month Economic Activity Report: January—June 1985," noted the addition of nonmanufacturing investment figures to better reflect "the full panorama of economic activity." In the same report, Secretary of Commerce Howard Haworth noted that the new administration's pursuit of the service sector will be in concert with "the state's continued commitment to attract high-tech industries."

To pursue the service sector at all, even in a broader-based effort that includes high-tech industries, the state will need more than community colleges and industrial revenue bonds.

Deciding factors in American Express picking Greensboro were the telephone system in place and a good airport facility. Before AT&T finally decided on Charlotte, University Research Park President Seddon "Rusty" Goode had to get a commitment from Billy Rose, then deputy secretary of the N.C. Department of Transportation, that the state would complete the construction of a ramp onto I-85.

Expanding What's Here—and Keeping It Here. A pronounced shift of investment from new plants to expansions of existing industries began during Hunt's second term. In three of Hunt's first four years as governor, investment by *new* industry exceeded expansion of *existing* industry. But in his second term, only one-third of announced investments were new industries; the other two-thirds were expansions. The trend continued into the Martin administration. During the first six months of 1985, new industry announcements accounted for only 17 percent of the investment total.[7]

In a recent industry recruitment trip to New York, Gov. Martin saw only companies that already have a facility in North Carolina. He did not call on a single industry about moving to the state. Martin describes himself as "working behind the scenes to recruit new industry." This may be an effective strategy if all the buffalo that North Carolina can bag are already here.

Recruitment at the Local Level. The state formally began to encourage local recruitment efforts through the Governor's Awards program for small towns during the Robert W. Scott administration (1969-73). Governor Hunt picked up the idea, making a volunteer or paid economic development effort a criterion in his Community of Excellence program. Today, according to Alvah Ward's count, North Carolina communities with industrial recruitment programs number around 340. A Department of Commerce computer printout lists many of these programs, according to where the local official is based in each county and municipality. For example, in 17 counties, the chamber of commerce is the official economic development office, while 58 counties have separate economic development councils or offices (see Table 1 for complete figures).

Urban areas have long maintained major economic development efforts, and now most rural areas have begun to organize local recruitment strategies. Tiny Clay County in the mountains, where two-thirds of the workers are employed across the county line, has prepared a 50-acre industrial park. The Kannapolis and Concord chambers of commerce jointly hired a professional recruiter for the new Greater Cabarrus Economic Development Corporation. The county in North Carolina most dependent upon agriculture, Greene County, has recently created a "Committee of 100" to seek new industry. And the Chatham County Industrial Commission in 1985 produced a dozen copies of a 12-minute promotional videotape (with the

Table 1. Location of Local Government Development Officials, 1984

Location of Official	No. of Counties	No. of Municipalities	Total
Economic Development Council or Office	58	28	86
Chamber of Commerce	17	34	51
Mayor	0	25	25
City/Town Manager or Administrator	0	23	23
Private Sector Person	3	11	14
County Manager	11	0	11
Bank	2	3	5
County Board of Commissioners	3	0	3
Electric Company	0	2	2
Housing Authority	1	0	1
Resource Management Team	1	0	1
Electric Membership Corporation	0	1	1
Airport Commission	0	1	1
Insurance Agency	0	1	1
Totals	96	129	225
Total No. of Counties/ Municipalities in North Carolina	100	490	

Source: 1984 North Carolina Economic Development Contact List, N.C. Department of Commerce, Industrial Development Division.

Table prepared by Ann Sternlicht

Maintaining and building new roads and bridges are critical for attracting new industry to the state.

Jack Betts

financial assistance of Carolina Power and Light).

Thomas G. Long Jr., director of economic development for Chatham County, showed the slick videotape to a packed meeting at the Triangle J Council of Governments last October. "We have already sent off a copy of the videotape to a new industry," Long said after the showing. The videotape, called "Chatham: A Carolina Masterpiece," combines state-of-the-art graphics and filmwork with a script that echoes such familiar recruitment phrases as North Carolina's "hard-working and conservative people."

What Future for Recruitment?

The increased sophistication of counties and small towns in recruiting jobs to their areas has created a new level of competition *within* the state. Desperate communities compete to find jobs for displaced textile workers. Rural areas try to out-hustle their neighbors, piecing together a better deal with industrial revenue bonds, Urban Development Action Grant funds, and free extension of water and sewer lines for a facility that might employ farmers who otherwise face bankruptcy or dislocation.

One inherent weakness in industrial recruitment as an economic development strategy is the ultimate outcome of simply moving jobs around—from the northeast United States to North Carolina to Hong Kong, or from the Silicon Valley to North Carolina to Japan. An emphasis on keeping the jobs that we do have seems to make sense in a rapidly changing economy.

Economic development analysts more and more are realizing that recruitment tends to *follow* the overall economy. At any given time, certain industries are in a period of expansion, regardless of who happens to be governor and what his industrial recruitment priorities are.

"The companies make the location decisions, not the communities," says Ward. "We do not have the capacity to direct industry where we want it to go. Companies locate for reasons that are in their best interests — not because it is in the interest of the governor and not because of pressure tactics from the state development staff."

Because the low-paying textile, apparel, and furniture jobs have long dominated the manufacturing sector, North Carolina has ranked near the bottom among the 50 states in average industrial wages. Consequently, industry hunters, especially during the Hunt years, made the recruitment of higher-paying industries a goal. But if companies follow primarily their own self-interest, what can the state do?

"An important part of our job is to point out to companies the advantages of locating in North Carolina," explains Ward. In addition, says Ward, even within economic constraints, specific industries that are experiencing periods of growth can be influenced.

In a 1982 study, Joseph T. Hughes Jr. developed a "desirable" industry index, based on three factors: economic (high capital intensity and wages), environmental (low chemical use and hazardous waste generation), and worker health (low illness and injury rates).[8] Hughes found that certain industrial sectors are more desirable to recruit than others, with the printing industry coming out at the top. The next group, in order of desirability, included transportation, machinery, petroleum, tobacco, electronics, measuring instruments, and food. Without such a priority of industries, Hughes contends state recruiters tend to ignore environmental and worker health issues — or even high-wage considerations — just to get more jobs, *any* jobs.

The Department of Commerce has recently emphasized targeting its recruitment efforts. The department has contracted for a private study of its economic development priorities. Fantus Inc., a national consulting firm, is conducting the study. "We asked them to look at the possibility of targeting certain industries, particularly the services sector and defense," says Deputy Secretary of Commerce Kevin Kennelly. "Let's monitor how the economy is changing and adjust (our recruitment) appropriately. We're asking them (Fantus) to tell us what we ought to go after."

Kennelly cautions, however, against believing that the state can go out and recruit specific companies. "First, we have to get on *their* list," he says, referring to desirable companies. "That happens because North Carolina is a very attractive state. Then we go head-to-head with our competition. At that point, by virtue of being a good salesman, you might be able to persuade a company to come to North Carolina."

FOOTNOTES

[1]James C. Cobb, *The Selling of the South: The Crusade for Industrial Development, 1936—1980*, Louisiana State University Press, 1982.

[2]*Ibid.*, p. 5.

[3]V.O. Key Jr., *Southern Politics*, Alfred A. Knopf Inc., 1949, p. 211.

[4]Luther H. Hodges, *Businessman in the Statehouse: Six Years as Governor of North Carolina*, University of North Carolina Press, 1962, p. 78.

[5]N.C. Department of Commerce, *North Carolina Economic Development Report — 1984*, p. ii.

[6]Bea Quirk, "University Research Park: Growing With Industry Giants," *Business: North Carolina*, January 1985, p. 35.

[7]Figures from Department of Commerce publications.

[8]Joseph T. Hughes Jr., "Targeting Desirable Industries," *North Carolina Insight*, Vol. 5, No. 1, May 1982, pp. 27-35.

Phantom Jobs: New Studies Find Department of Commerce Data To Be Misleading

by Bill Finger

Two 1985 studies—conducted independently—show that the "new and expanded" industry figures used by the N.C. Department of Commerce have vastly overstated the number of new jobs generated in North Carolina. In a report prepared for the N.C. Department of Administration, three researchers at North Carolina State University found that for the 1971-80 time period, only 47 percent of the announced new jobs—less than one of every two—for new and expanding industries actually came to exist. The state's main indicator series of industrial growth is used primarily for "promotional purposes," says the NCSU study. "The announcement series have very little independent value as a leading indicator."[1]

In addition, three University of North Carolina at Chapel Hill students, working in conjunction with the N.C. Center for Public Policy Research, found similar results. "Only 61 percent of the total number of employees that the department reports as existing actually do exist," they explained in a paper for Thad Beyle, political science professor and editor of recent anthologies for the Congressional Quarterly Press and Duke University Press. "We do believe that the deception of economic growth in terms of jobs available is significant to the citizens of North Carolina," they concluded.[2]

The problems with the data have been recognized for some years. In a March 24, 1980 story headlined "Fewer New Jobs Created Than Hunt Says," *The Charlotte Observer* pointed out that all 37,000 new jobs announced by Gov. James B. Hunt Jr. for 1979 would not be in place that year. Hunt acknowledged at the time that all 37,000 jobs might not come on line in 1979, but he refused to consider whether some of the announced jobs would *never* come to pass. Hunt points out another factor, however: "Whereas the jobs announced by some of the new industries coming may not all pan out, the additional jobs that are created because of them in the community will be very substantial, and these jobs are generally never reported."

Until 1985, no one had attempted to determine how far off the "announced" new-and-expanding industry data were from the actual number of jobs created. Using the percentages found in the two 1985 studies, only 17,000-24,000 of those 37,000 jobs Hunt bragged about in 1980 would have been created. Moreover, the Department of Commerce reporting series on industrial development does *not* include employee *reductions* from plants that have closed or scaled back jobs since 1979. The cumulative data reported by the Department of Commerce for "new jobs" created continue to use Hunt's 1979 figure of 37,000 (see graphic on next page). "The apparent unreliability of the data does raise a question regarding why decision-makers find these data to be useful," reported the NCSU researchers.[3]

The NCSU study examined all new and expanding manufacturing industries from 1971-84 for two counties, Wake and Chatham, checking both the number of jobs and the amount of investment announced. They divided their results into the 1971-80 and the 1981-84 period, putting less emphasis on the latter period because such recent announced jobs and investments may not have had sufficient time to materialize. The

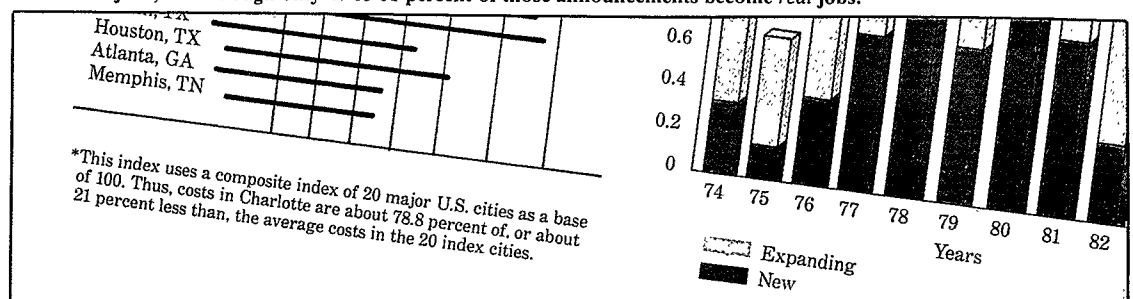
researchers checked the announced data against Employment Security Commission records (where employers must report the actual number of employees), county property tax records (where companies must report their actual property investments), and the biennial *Directory of N.C. Manufacturing Firms* put out by the Department of Commerce.

Using a different methodology, the UNC group reviewed the annual reports on new and expanded industry for the 1978-84 period and found that the top-ranking job sectors were electronics (most "new industry" jobs listed, 19,192) and textiles (most "expanded industry" jobs listed, 20,842). These researchers checked *all* new and expanding industries announced in the textiles and electronics sectors statewide for 1978-84. They checked the data by sending a one-page survey to all companies shown in the Commerce announcements.

The survey asked the companies: 1) if they opened on time; 2) how many people they employed (the year they opened and as of October 31, 1985); 3) why the number of employees either exceeded or was lower than the Department of Commerce announcement; and 4) the percentage of the new employees who lived in North Carolina, lived in another state, and were transferred from within the company. The survey included follow-up telephone calls to all companies that did not return the written questionnaire. Of the 64 textile and electronics companies in the new and expanding industry announcements, 22 companies responded to the survey and 15 had gone out of business. The remaining 27 companies either would not cooperate, could not be reached, or had not announced how many employees they would hire in the first place.

Because this study picked textiles as one of its areas to check, the results magnify the problems with the Department of Commerce data. In the UNC survey, 84 percent of the announced jobs for the textile sector were actually in place, compared to only 50 percent of the electronics jobs. Given the steep cutback in textile jobs due

The Department of Commerce publications, such as "North Carolina Business Climate" (excerpt below from page S-3), use *announced* jobs, even though only 47 to 61 percent of those announcements become *real* jobs.



Investment and Employment in New and Expanding Industries
1974 - 1983

Year	Number New	Number Exp.	Number Total	Investment ($,000) New	Investment ($,000) Exp.	Investment ($,000) Total	Employees New	Employees Exp.	Employees Total
1974	85	147	232	345980	526331	872311	9936	8842	18778
1975	116	219	335	169458	531828	701286	8211	10379	18590
1978	169	215	384	1500716	522751	2023467	20512	9048	29560
1979	192	346	538	730697	1095984	1826681	16592	20282	36874
1982	144	441	585	406891	882793	1289684	9075	13032	22107
1983	176	349	525	896420	1261775	2158195	14142	16064	30206

to imports and mechanization of the industry, the 84 percent figure is particularly surprising. It shows that some textile companies have carved out a solid niche in the market—and hence have met their new job expectations. But this figure does not reflect the large number of textile workers who have lost their jobs through plant closings. Under the current state reporting system, the lost textile jobs will not show up at all in the Commerce Department's indicator series of economic growth.

Both studies emphasized that the Commerce data show only what a company *intends* to do. "Because announcements reflect intentions and not actions, they are easily subject to manipulation," concluded the NCSU study.[4] A Department of Commerce source who asked not to be identified acknowledged that data which are intended for use as a barometer of investment activity can be misconstrued as an economic indicator.

Neither of the studies faulted the professional approach with which the department compiles the report—only the emphasis on "announced" jobs data. "The indicator's announced industrial development series does seem to be carefully and professionally constructed with fairly consistent attempts to confirm announcements," said the NCSU study.[5]

The NCSU study made five recommendations that would streamline the data-gathering process but not alter the current system significantly. These include assigning the same SIC code to all data bases and conducting the survey for the *Directory of N.C. Manufacturing Firms* annually instead of biennially. The NCSU study also pointed out that using announced rather than actual data may be necessary because of the drawbacks in waiting to see how many jobs or how much investment actually materializes: "Planning of public facilities, budgets, and other government activities may require advance notice."[6]

Accepting the need for advance notice, the report then suggested that announcement data could be identified as preliminary and later updated with final data—or at least, emphasized in Commerce Department publications as *announcement figures only*. The latest department publications do point out that the data are only announcements; nevertheless, the cumulative data are not altered. And the public relations comparisons among years and gubernatorial administrations continues. Meanwhile, the public is misled about what kinds of jobs and new investment actually exist, and economic analysts are left with insufficient data.

While the recommendations in the NCSU study should help somewhat with the problems discussed here, the basic problem would remain: Data designed to be an indication of what *will happen* form the basis for what the public thinks *actually happened.* The fundamental solution to this problem is to publish a new follow-up report called *actual* new and expanded industry, which would include actual jobs and capital investment added in each year.[7]

This option would correct the root of the problem, and the logistics involved are not necessarily difficult. Companies already report the *actual* number of employees to the Employment Security Commission, which is in the Department of Commerce. The ESC could then forward this data to the industrial development office within the department for publication. The state could require companies to report on their annual declaration of real property (the basis for county property taxes) the years for which capital investments were actually added to their tax base. As more county tax offices get computerized, reporting that data to the N.C. Department of Revenue (or Commerce) would become a more routine matter.

The report should show a cumulative year-by-year account of jobs and investment actually added (new and expanded). To be most effective, these figures could be juxtaposed with the "announced" new and expanded data. This year-by-year adjustment to the announced data would provide an additional barometer in itself—indicating which job sectors actually produce the highest percentage of jobs and investment announced, for example. With this *actual* data readily available to the public and analysts of the state's economy, the announcement data would no longer be misleading.

Recommendation: The best way to end the potential for its data to be misleading is for the N.C. Department of Commerce to begin publishing a new report on *actual* new and expanded industry.

FOOTNOTES

[1]Yevonne S. Brannon *et al.*, "Review of the Department of Commerce's Industrial Development Announcement Series," prepared for the Office of Policy and Planning, N.C. Department of Administration, August 1985, pp. 46 and 47.

[2]Beth Barnes *et al.*, "Economic Development in North Carolina," prepared for Thad Beyle, Dec. 12, 1985, p. 1.

[3]Brannon, p. 46.

[4]Brannon, p. 46.

[5]Brannon, p. 48.

[6]Brannon, p. 47.

[7]In a section called "Suggestions for Improvement" (pp. 47-50), the NCSU study discusses the need for measuring actual jobs and investment and some of the methods for collecting actual data, so that "discovered or confirmed added employment could be reported separately from intended added employment" (p. 49). The study, however, stops short of *recommending* that the Department of Commerce publish a new report.

Jack Betts

Scotty Young, left, and Paul Murtha of Touch America, assemble therapeutic tables at small business incubator in Hillsborough.

Small Business: Big Business in North Carolina

By Todd Cohen

Alvah Ward, the state's chief industrial recruiter, leaned back in his office swivel chair one day last summer and frowned as he pondered how to illustrate the job facing the state's economic developers. The circumstances are well known: North Carolina, despite all the economic progress of the post-World War II era, is still a low-wage state marked by illiteracy and poverty. Finally Ward put his finger on it.

"We would have to recruit a Miller Brewing Company *per month* for *five years* just to increase the average manufacturing wage *five cents an hour,"* Ward said, referring to the big brewing plant in Rockingham County that employs hundreds of workers in high-wage jobs. Unfortunately for working North Carolinians, though, there are too few big businesses like Miller Brewing, which has a long line of job applicants, who are willing to bring their high payrolls to the state. And the fact is that *big* businesses—defined by the N.C. Department of Commerce as those with *more* than 100 employees—don't provide the bulk of new jobs in North Carolina.

Instead, most of the new jobs in this state come from *small* businesses, those companies employing *fewer* than 100 employees. They shoulder a heavy part of North Carolina's economic load—and they could use a bigger boost from state government. From 1979 through 1983, they supplied 104,382 *new jobs* in the state—almost three-fourths of the new jobs generated for the period. By comparison, large businesses (those with 100 or more workers) accounted for only 38,928 jobs (see Table 1).[1]

Todd Cohen is a staff writer for The News & Observer *in Raleigh.*

"If all the economists were laid end to end, they would not reach a conclusion."

—George Bernard Shaw

And that's not all. Consider these assorted facts:

- Small businesses account for 97 percent of North Carolina business firms, or more than 110,000 companies out of a total of 114,000 firms.
- Small businesses account for 45 percent of all jobs in the private sector and, with the gains of recent years, the total number of small-business jobs is slowly catching up with the number of large-business jobs.
- And very small businesses (20 workers or fewer) account for 86 percent of the firms and about 20 percent of the jobs.

Small businesses "have been the backbone of our revenue base and economic base for many, many years," says Commerce Secretary Howard H. Haworth.

But that backbone has an ache in it: An estimated 65 to 85 percent of small businesses fail in their first two years, and an estimated nine out of 10 fail eventually.[2] George Bernstein, chief executive officer of Laventhol & Horwath, an accounting firm specializing in service establishments, says that most new businesses fail "soon after they start up," and fewer than three in 10 survive to be passed on to a new generation of owners. Those failures are the result of a lack of one or both of the two key ingredients to success—sufficient capital and the know-how to start or expand a small business.

What's North Carolina Doing To Keep Small Businesses Rolling?

A growing number of states assist small businesses through such means as investment of state employee pension funds. In North Carolina, however, the woes of small businesses have not been a top priority of government. Under the eight-year tenure of Democratic Gov. James B. Hunt Jr., for example, the economic focus was on luring new industry to the state, especially high-technology companies. Under Gov. James G. Martin, efforts are being made to bolster traditional industries, such as textiles, tobacco, and furniture.

"Up until very recently, we haven't acknowledged the importance of that business sector to generate jobs," says Sheron K. Morgan, a senior policy analyst in the state Division of Policy and Planning. Echoing Ward, she asked, "Do you realize how many new plants you'd have to get to relocate to North Carolina to generate that many new jobs?"

In recent years, state government has begun to cultivate the growth of small businesses in the state. That effort thus far has focused on providing technical help, such as assistance in the preparation of business plans and loan applications. The state also has begun to provide direct financial assistance, though in limited fashion.

R. Jack Hawke, policy and planning director for Governor Martin, says that the administration hoped by this summer to write a plan designed to ensure the survival and growth of small businesses. That plan is expected to build on existing government efforts, which have focused on two types of small businesses—the "mom-and-pop" shop that may need help in securing a loan or managing its operations, and the high-tech entrepreneur equipped with an idea for a product or service but lacking the capital or knowledge to translate the idea into black ink.

Current state policies to help small businesses focus on providing small business operators with advice and information, although some direct funding is available. State officials are mulling over the possibility of establishing a privately managed loan program for small businesses that would be financed either by the state or by private lenders, or both. However, additional assistance also may be needed in the form of a restructuring of state tax policy to provide incentives to small business people and entrepreneurs, as well as investors and large corporations that help define the overall business environment.

Existing state programs to assist small business include:

- The Small Business Centers program in the N.C. Department of Community Colleges. The program, with a budget of $850,000 and centers at 20 of the state's 58 community colleges, provides counseling, workshops, and classes for small business people and those seeking to start a small business. The program began in February 1984 and may eventually expand to all but a few campuses.
- The N.C. Small Business and Technology Development Center in the University of North Carolina system. The center, with a budget of $790,000 and six offices, also provides small business counseling. The program began late in

1984. Its basic mission, according to its own promotional brochure, is "to provide one-on-one management and technical assistance to small business persons drawing largely from schools of business and engineering."

- The Small Business Development Division in the state Department of Commerce. Previously called the Small Business Assistance Division until a departmental reorganization in 1985, this division, with an annual budget of about $500,000, also provides advice to small businesses. (Other state programs within Commerce also deal with small business, including the Minority Business Development Agency and the Governor's Small Business Council.) Among the division's aims, says Assistant Secretary Lewis H. Myers, are increasing business starts in North Carolina, and reducing small business failures through information, referral, and other assistance.

- The N.C. Technological Development Authority. With a budget for FY 85-86 of $1.35 million, the authority provides royalty grants—which must be repaid—for research and development. It also provides grants to non-profit corporations to develop "incubator facilities" in which entrepreneurs can obtain low-rent space and support services. The authority was established in 1983.

Another facet of the state's interest in small business development is the Commission on Jobs for Economic Growth, appointed in late 1985 by Lt. Gov. Robert B. Jordan III to study how the state might improve the climate for creation of new jobs. Billy Ray Hall, a former key policy aide in the Department of Natural Resources and Community Development under Governor Hunt, directs the commission's work. Hall recommended creation of a Job Development Committee that would focus on small business "to see if there are ways we can improve it. Are there things we can do to engender small business development?"

Hall says the commission is not a matter of partisan politics and should not be interpreted as the Democrats' reaction to a Republican administration's programs. "That's not the feeling so much as the fact that we know that changes in our economy are going on out there," Hall explains. "The thing you have to be impressed with in North Carolina is the number of jobs that have been created by small businesses in the past few years."

While the Technological Development Authority is the only one of the four state programs that actually provides funding for small businesses, all four share a common goal. "We're trying to give small businesses at least a chance to survive," says R. Jean Overton, associate director for small business and business occupations for the Department of Community Colleges.

Each community college Small Business Center, with a budget of $40,000 to $50,000, has one director and one clerical worker. Dr. Overton's target is to operate centers at all 58 community colleges with a total budget of about $5.8 million—or $100,000 per center. The UNC program, which began in January 1985, provides counseling similar to that offered by the community college program. It already has helped more than 600 small business people.

Like the programs at UNC and the community colleges, the Small Business Development Division in the Commerce Department would like to be a "one-stop center" to provide whatever help a small business person needs—including such routine items as helping with applicable licenses, certification, or other regulatory permits. "But we do not have that yet," says Myers. Myers hopes to establish a computer system soon that would function as a clearinghouse capable of providing answers to any question about small business—accessible by a single telephone call.

But How About Keeping Small Businesses Profitable?

Myers also hopes the state can move beyond providing information and begin to provide the second key element needed by small businesses—cash. "I think we have a capital shortage here in the state," he says. Myers advocates state assistance to small business through investment in venture capital funds.

The state already has begun investing in small businesses through the Technological Development Authority. The authority runs two funding programs. The first provides innovation research funds of up to $50,000 for developing new products. The second provides grants of up to $200,000 to non-profit organizations to establish

---

"The propensity to truck, barter, and exchange . . . is common to all men, and to be found in no other race of animals."

—Adam Smith, "The Wealth of Nations"

Table 1. Private Sector Employment Trends In Small Businesses, 1979-1983

North Carolina

Number of Employees

SIZE OF BUSINESS	1979	1980	1981	1982	1983	Increase Over Five-Year Period
1 to 20 Employees	398,963	402,018	411,571	408,945	438,571	39,608 (+9.9%)
20 to 49 Employees	248,540	256,350	260,195	258,325	283,872	35,332 (+14.2%)
50 to 99 Employees	204,986	206,857	204,429	203,349	234,428	29,442 (+14.3%)
Sub-Total in Companies <100 Employees	852,489	865,725	876,195	870,619	956,871	104,382 (+12.2%)
Big Business Sub-Total in Companies >100 Employees	1,063,696	1,054,480	1,041,768	1,022,988	1,102,624	38,928 (+3.6%)
Total Business Employees	1,916,185	1,920,205	1,917,963	1,893,607	2,059,495	143,310 (+7.4%)

Source: Small Business Development Division, N.C. Department of Commerce.

incubator facilities to "hatch" new businesses. The authority already has made 16 research awards to small businesses totaling $600,000, covering research in agriculture, medical technology, textile automation, and chemical and electrical engineering.

The Incubator Facilities Program, begun in 1983, has awarded four incubator grants totaling $800,000, and expects to award three more with $600,000 appropriated by the 1985 General Assembly. The incubators—buildings constructed or renovated by the non-profit groups—provide a package of services that are available at lower rates than each service would cost separately on the open market. The incubators provide space, clerical services, and technical support, including access to professors at area community colleges who provide advice on financing, management, and marketing.

"There is a dearth of available expertise," says Juliann Tenney, the executive director of the Technological Development Authority. "Small business people tend to reinvent the wheel over and over again for business purposes. They also are crippled by overhead expenses."

The first privately funded incubator to open began in September 1985. Called Hillsborough Business Center, the incubator is part of a commercial redevelopment of an old cotton mill that eventually will also offer manufacturing, distribution, and laboratory space to help hatch and rear new businesses. Another effort is underway in Winston-Salem, and others are planned, including one for the Research Triangle area.

Tenney hopes that lawmakers will continue to fund the Technological Development Authority at current levels. But she says that small businesses need additional help from the state.

Nothing Ventured, Nothing Gained

"I think the state probably ought to develop some type of loan fund," says Tenney, referring to low-interest loans. "Most small businesses need a loan of about $10,000 to $35,000. That money is just not available."

There is a sharp difference of opinion among experts in the state about whether additional venture capital is needed. C. C. Cameron, the Governor's executive assistant for budget and management and the retired chairman of First Union Corp., believes that risk capital is not as readily available to North Carolinians as it is to entrepreneurs in the high-tech centers of Massachusetts, California, and Texas.

Cameron says the state needs "a venture capital source—whether it's a public or private or joint venture—to encourage the entrepeneur to spin off" new businesses from large high-tech companies such as IBM, Data General, or Northern Telecom.

According to Venture Capital Journal of Wellesley, Mass., nearly $19 billion was being managed in the United States in 1985—and the magazine estimates that more than $50 million of that sum went *to* North Carolina companies. J. Douglas Mullins, a partner in Venture First Associates, a Winston-Salem venture capital fund, estimates that about $30 million is being managed *by* Tar Heel venture capital funds—less than 1 percent of the total in the country. "There's an insufficient amount of early-stage venture capital in the state," says Mullins.

To spur additional investment, the private Council for Entrepreneurial Development was formed in late 1983. The group has held two annual venture capital fairs, with would-be entrepreneurs presenting their business proposals to potential investors. An estimated $2 to $4 billion in potential investment was represented at each fair—but most of it was out-of-state money, says Fred O. Hutchison, a Raleigh lawyer and former president of the council.

Dennis J. Dougherty, a general partner in Intersouth Partners, a venture capital fund in Durham with a goal of managing $20 million, says that North Carolina needs its own venture capital funds because entrepreneurs require the cash, business expertise, and time of their investors. But others disagree, saying that investors are not inhibited by geographical boundaries. Emil E. Malizia, an associate professor of city and regional planning at UNC-Chapel Hill, acknowledges that North Carolina does not have a native venture capital industry. But the market for venture capital is a "national market," he says. "I think North Carolina companies have been relatively successful in accessing capital in that market."

Melissa Thomas, property manager, Hillsborough Business Center, a small business incubator, stands in former workroom of old Eno Cotton Mill in Hillsborough, where new businesses will be hatched.

Jack Betts

Kirsten A. Nyrop, a consultant to local governments and small businesses who served as the first executive director of the Technological Development Authority, says the state's top priority in helping to finance small businesses should be to establish a guaranteed loan program. She favors a program that would guarantee 10 to 20 percent of loans by banks to small businesses. The partial loan guarantees would encourage banks to take the risk in providing venture capital that they otherwise might not have been willing to lend—thus making more money available to potential entrepreneurs.

Other States Have Ventured Into Venture Capital Funds

Other states have begun to invest in small business and venture capital funds. Michigan, for example, allows the investment of up to 5 percent of money in its $13 billion retirement system—about $500 million. Since 1982, when the investment program was authorized by legislation, Michigan has invested $4.8 million directly in 27 companies and $100 million in 14 venture capital funds. The investments thus far have generated about 3,500 new jobs in the state, although the program's top priority is earning an adequate rate of return on its investment. Minnesota is one of about 10 states that are using unemployment funds to help would-be entrepreneurs who are receiving public assistance payments because they don't have jobs to get off the welfare rolls and into their own businesses. At least seven states have formal, state-operated venture capital funds, according to the National Association of State Development Agencies, and 15 others allow pension funds to be invested in venture capital funds.

What should government do in North Carolina to make the state more hospitable to small businesses? Experts agree that small businesses need two types of help—money in the form of loans, and a better, more organized system of providing technical assistance. Government leaders like Commerce Secretary Haworth, Budget Officer Cameron, and State Treasurer Harlan E. Boyles favor some type of government program to spur investment in small business.

Those officials are considering establishing a privately managed fund that would make low-interest loans to small businesses. The fund would consist either of state funds or private funds, or both. As a possible state funding source, Boyles has proposed that the state sell its stock in two railroad companies that it has owned since the 1800s. (For more on the state-owned railroads, and the Center's critique of proposals to sell the railroads, see "North Carolina's Railroads: Which Track for the Future?", *North Carolina Insight,* Vol. 6, No. 1, pp. 2-16). Boyles estimates the stock to be worth $50 million to $75 million. A legislative committee meanwhile is studying what to do with the stock.[3]

Another option would be changes in state tax policies to encourage private investment in small businesses and to ease the pressures faced by small businesses that frequently find themselves short of cash. M. Campbell Cawood, a general partner at Venture First, says that an overhaul of the state's tax policy could provide more effective and immediate assistance to small business than the state's current set of programs. Cawood suggests that shifting to a graduated tax structure for corporations and individuals with net taxable income above $10,000 would allow small businesses to retain cash. That would give them capital for operating and expansion purposes, help ensure their survival, and make small businesses more attractive to investors.

Cawood also suggests repealing the taxes on intangible assets (such as stocks) and on business inventories, thus removing obstacles to capital formation in the state. (For a pro and con

A Small Glossary of Small Business Nomenclature

Entrepreneur: An individual or group of individuals with an idea for a small business producing a new product or service, but generally lacking the financial backing and the management, administrative, production or marketing skills to start and maintain the business without assistance from technical or financial sources.

Venture Capital: The cash, credit, and other assets that are available for investment in new small business ventures. Because of the high rate of failure and substantial risk of investing in small businesses, the interest rates on venture capital may be much higher than for more conventional loans. In some cases, the loan may be secured or reduced by granting the venture capital investor a part ownership in the company.

Incubator Facility: An office setting available to house multiple small business operators who need space to begin operation but cannot afford separate quarters. Services available in an incubator facility may include telephone answering, secretarial and clerical, and even accounting and legal services on an hourly basis as needed.

Small Business the Hard Way: Starting from Scratch

Small business success stories aren't all tales of high-tech entrepeneurship nurtured by an array of state programs and funding devices. Just ask Mary Moore Ritchie of Raleigh.

"I do not have a college degree," says Ritchie, president and owner of Court Reporting Services, the largest free-lance court reporting company in North Carolina. "I have no formal education in how to run a business."

What Ritchie does have is hands-on experience at learning her trade, earning a living at it on a free-lance basis—and turning that solo effort into business. She can meet a payroll, pay rent and overhead, generate cash, and balance a bottom line.

She also is skeptical about state government programs designed to help small business people. Those programs, she says, lack experts who actually have experienced the practical problems that small business people face.

"You can take all the theory you want in the world, but if you can't apply it in the real world, it's not worth much," says Ritchie, who graduated from a two-year junior college.

State government programs also seem to focus on small businesses geared toward high technology, Ritchie says. But if small businesses are the backbone of North Carolina's economy, Ritchie adds that mom-and-pop operations like hers are the backbone of small business.

"The state," she says, "should recognize that high-tech is not all there is" to business—large or small. Her story illustrates the point graphically.

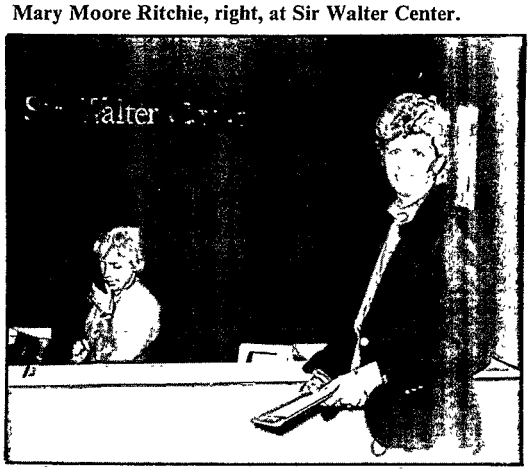
In 1969, with three young children, Ritchie taught herself to be a court reporter, mailed letters soliciting business to all the lawyers in Wake County, and began working on a free-lance basis. She transcribed her work on a typewriter at home. Today, her company has 15 employees. She also runs the Sir Walter Center, which leases office space to lobbyists and branch offices of national corporations and provides support services, including a receptionist, telephones, a conference room, and janitor.

The gross income of her two businesses is in six figures. And in recognition of her success in the small business world, the Small Business Council of the Greater Raleigh Chamber of Commerce named Ritchie its Entrepreneur of the Year in 1985.

Ritchie's story is symbolic of a national trend involving women in small businesses. N.C. Assistant Secretary of Administration Gloria Whitman says recent surveys show that women are creating or involved in four out of every five new businesses in the United States. From 1972 to 1982, she says, the percentage of businesses owned by women grew from less than 5 percent to more than 26 percent. Precise figures are not available, she adds, but current estimates are that as many as 60,000 North Carolina businesses are owned by women—and that doesn't even count the number of firms that are incorporated or where women are in partnerships.

Ritchie attributes her success to hard work, self-education, and eventually, the assistance of several financial advisers—but not state small business programs. She says that state government can help small business people—but that it first must understand their needs. *(continued, next page)*

Mary Moore Ritchie, right, at Sir Walter Center.



Jack Betts

"The biggest thing the state has to overcome is that people do not have confidence in federal and state agencies for assistance," she says. "And (these agencies) have got to overcome that by having competently trained people who know small business, not some state employee who's been there for 50 years." Small business people, she says, need "bodies to go and talk to that understand, that can help with personal problems."

Ritchie says she sought assistance from state government when her sales had leveled off and she wanted to know how state government could help her increase sales. But the experience left her wary of state government's value in helping small business people, she adds.

After beginning her business and working on her own for a year and a half, Ritchie hired part-time typists, with some of them transcribing her work in their homes and others transcribing in Ritchie's home. Six months later, she hired a full-time court reporter. By 1974, Ritchie had plenty of work but found herself short of cash. A key problem, she says, was that payments by her lawyer-clients lagged behind her schedule for paying her part-time employees. So, to keep herself afloat, she used her accounts receivable to borrow 90-day notes worth $1,000 to $5,000 from local banks.

By 1978, she had two full-time employees working in her home and she herself was working seven days a week. "I couldn't get away from it," she remembers. That's when she decided to open an office in downtown Raleigh. "That was the hardest year-and-a-half I've ever had in business," she recalls. "The business was growing. I had no working capital."

Her staff grew as she added fulltime typists, a proofreader, clerical workers, an office administrator, and finally, a third court reporter. All this time, Ritchie was running the business by trial-and-error. But in the fall of 1978, she heard about SCORE—an acronym for the Service Corps of Retired Executives, an agency of the federal Small Business Administration. SCORE assigned her a counselor who reviewed her business's financial history and recommended she incorporate and obtain a credit line at a bank based on her high level of accounts receivable.

Her advice to state government now is to provide seminars on the practical aspects of operating a small business—seminars taught by experienced small business owners.

Small business people "can start a business before they educate themselves," she says. "But they need to budget time and funds in educating themselves in the practical aspects of business operations"—including financial management, personnel management, marketing and sales, legal matters, and insurance.

—Todd Cohen

discussion of these tax repeal proposals, see "The Tax Debate of 1985," *North Carolina Insight,* Vol. 7, No. 4, pp. 8-15). Another way to create more capital for investment would be to grant tax credits to taxpayers for long-term capital gains, Cawood says.

"If you're talking about government having the ability to do something, this is the area where they can make some changes where they will have an impact," Cawood says. "I believe that changes in the income tax structure will have a broader impact and a more meaningful impact than anything else the state can do—and a more immediate impact."

Secretary Haworth agrees that the overall impact of taxes on small business development needs to be studied and says it is imperative that the tax on intangible assets be repealed—though Governor Martin retreated from earlier stands on January 16 when he said the state should not immediately remove the tax because of sluggish tax revenues. In general, Haworth is bullish on the state's efforts to assist small business. "We have not been really as well organized to serve and pursue the development of small business in the past," Haworth says, "as we are and will be in the future."

In 1986, Governor Martin began responding to calls for help from the small business sector. On January 28, he told the N.C. Small Business Council he would support developing a corporation to channel low-interest government loans to small businesses and create enterprise zones designed to help create small businesses in rural areas. The Governor's strategy for helping small businesses will be part of his administration's new blueprint for economic development, to be released in the spring of 1986.

That the state has been remiss in the past to boost small business is reflected in a recent

"Business will be better or worse."

—Calvin Coolidge

Forbes magazine report designating what it called the best 200 small companies in America.[4] Selected on the basis of such factors as growth and rate of return on investment, the companies are the sort of firms most development-minded states would seek. One measure related the number of top small company headquarters to each state's population. In this ranking, North Carolina ranked 21st among the 50 states, with an average of 0.5 headquarters per million residents. Only 16 states had above the national average of 0.85 headquarters per million. Eighteen states had no such headquarters.

But the news isn't all bad. According to another survey, North Carolina has 16 businesses on *Inc.* magazine's list of the 500 fastest-growing companies.[5] The list of these North Carolina companies shows what kinds of small businesses will be riding the crest of the future business wave. Among them were Masterclean of Winston-Salem, a general cleaning contractor, which had a growth in sales of 3600 percent from 1980 to 1984; Captive-Aire Systems of Raleigh, a ventilation equipment manufacturer, with more than a 2600 percent sales growth in the period; Southern Office Furniture Distributors of Greensboro, a distributor of office furniture, with a growth of more than 2200 percent; Pioneer/Eclipse of Sparta, a floor cleaning equipment maker, with more than 2100 percent sales growth rate; and ATCOM, a Research Triangle Park manufacturer of business telephones, with more than a 2000 percent growth rate.

Obviously, the potential for opening new small businesses lies in many more products and services than microchips or fast-food franchises. And the survey indicates that small businesses don't have to stay small, either in sales or in the number of jobs. Captive-Aire, for instance, grew from four jobs to 60 jobs in four years; Pioneer/Eclipse grew from 10 to 65 jobs; ATCOM, from five to 42.

Others on the list have already exceeded the general small business definition and have become big businesses. Among them are Roberts Welding Contractors of Winterville, which grew from 25 to 107 employees from 1980 to 1984; SAS Institute of Cary, a computer software distributor, which grew from 58 to 454 employees in the same period; and Dorothy's Ruffled Originals of Wilmington, a curtain retailer and manufacturer, which grew from 29 to 181 employees in four years.

These statistics reflect precisely what John Naisbitt wrote in *Megatrends*: "The entrepreneurs who are creating new businesses are also creating new jobs for the rest of us. During a seven-year period ending in 1976, we added 9 million new workers to the labor force—a lot of people! How many of those were jobs in the *Fortune* 1000 largest industrial concerns? *Zero.* But 6 million were jobs in small businesses, most of which had been in existence for four years or less."

To say that small business is the wave of the future is to miss the point. Small business is already the future, and state efforts to promote small business should pay off in far more jobs than anyone previously thought. In other words, small business promotion can be an effective state economic development policy—in spades, doubled, and redoubled. And North Carolina seems to be holding a good hand.

The 1984 President's Report on the State of Small Business, published in March 1984, predicted that 87 percent of the new jobs in the future will come from small businesses.[6] Promoting the start of those new jobs—and helping small businesses keep those jobs—appears to hold great promise for long-term economic growth. North Carolina might move closer to prosperity by nurturing its own progeny to develop new small businesses—and for those small businesses to develop into bigger businesses.

FOOTNOTES

[1]"Facts About Small Business In North Carolina," typewritten report by Small Business Development Division, N.C. Department of Commerce, October 1985. Note: The U.S. Department of Commerce's Small Business Administration defines a small business as one with fewer than *500 employees*, while the N.C. Department of Commerce generally considers a small business to have fewer than *100 employees*. If the federal standard of 500 workers were used to define a small business in this article, the points would be far more dramatic, because the vast majority of both North Carolina businesses and N.C. jobs would be considered to be in small businesses.

[2]Estimates provided in personal interviews with various representatives of Policy and Planning Division, N.C. Department of Administration, and N.C. Technological Development Authority, October 1985.

[3]Chapter 792 (HB 344) of the 1985 Session Laws, sections 13.1-13.26, "Railroad Negotiating Commission."

[4]"Where the Best 200 Are," *Forbes* magazine, November 1985, p. 126.

[5]"The *Inc.* 500," *Inc.* magazine, December 1985, pp. 115 to 148.

[6]"President's Report on the State of Small Business," Executive Summary, published by U.S. Small Business Administration, U.S. Department of Commerce, March 1984.

Beyond the Horizon: North Carolina and Foreign Trade

By J. Barlow Herget

For more than two centuries, North Carolina's chief executives have called upon international trade as a means of helping North Carolina grow and prosper. "The natural produce and Staple Commodities of this Province," wrote Royal Governor Arthur Dobbs in 1761, "consist of Naval Stores Mast yards Plank and Ship Timber, Tar pitch and Turpentine Lumber of all Kinds, furs and peltry Beef pork Hides, and some tanned Leather—Indian Corn pease Rice and of late flour Hemp flax and flax seed, Tobacco Bees and Myrtle wax and some Indigo." North Carolina's third royal governor then identified the problem with the province's efforts at promoting trade. "We export little or no bullion or Sterling the whole Trade being carried on by paper Currency."

In the intervening 225 years, the state has added to the list of 1760 exports, even if little bullion has appeared and trading still depends upon the vagaries of paper currency. While some private businesses have always sought markets abroad for their products, efforts by state government have also contributed to the importance of foreign trade. And that's largely because North Carolina governors—at least in modern times—have tried to promote economic development and increase trade with Europe and the Orient. Among them is Gov. James G. Martin, who just last fall led a trade mission to Japan. On Oct. 31, 1985, upon his return, Martin held a press conference to discuss his enthusiasm for trade in the East.

It had been Martin's first visit to the country, and the journey obviously agreed with him. He described Japanese politeness, demonstrated the ritual of exchanging greeting cards, and declared his optimism for increased Japanese business. He also told the reporters that he had assured the Japanese that he—a Republican only 11 months in office—clearly wanted to continue the trade and investment policies of his Democratic predecessor, Gov. James B. Hunt Jr.

The Governor's excitement aroused only modest interest from the assembled scribes. His search for foreign trade was hardly new; rather, it continued a trading tradition dating to colonial days. By 1981, the latest year for which official figures are available, North Carolina ranked 11th in the nation in total dollar exports, $4.68 billion with another $3.1 billion in supporting products.[1]

Today, few analysts, even among laissez faire Republicans like Governor Martin, question whether state government has a role in developing international markets. But for nearly as long as the state has sought international trade, defining that role has eluded politicians and policymakers alike. Such difficulties in the past have resulted in the absence of a well-defined state trade policy. But many would consider that a natural state of affairs.

After all, the major industries, like tobacco and textiles, have long sought international markets for their products. And the average North Carolinian is more likely to associate foreign trade efforts with the federal government than with the state. Indeed, the federal government establishes foreign trade policy and oversees its attendant parts such as tariffs, favored-nation treaties, and trade information reports. Between federal policy and private business practices, however, much room exists for the individual states to affect foreign trade directly and indirectly.

North Carolina policy regarding foreign trade has evolved over the years to meet the needs of an economy that has progressed from agrarian to industrial and now to the brink of high-tech and service-oriented trades. Today, that policy involves three general thrusts;

- assistance to the manufacturing sector, through recruiting foreign companies to locate new plants here, and through helping North Carolina companies export goods;
- assistance to the agriculture sector, by promoting exports; and
- support for both manufacturing and agriculture through a variety of cultural and technical assistance programs.

Industrial Assistance—From Recruitment to Trade Promotion

Since Luther Hodges served as the "businessman's" governor (1954-61), the state has aggressively hunted for foreign companies to locate in North Carolina. In fact, Hodges led the first state-sponsored industry-hunting trip abroad in 1959. In the mid-1970s, the state opened a European office, now located in Dusseldorf, West Germany, to extend its search for foreign industries and investment. In 1977, the state Department of Commerce established an International Development Division to oversee this search. The same year, the state opened a Tokyo office, also to help lure new industry to North Carolina. New York state opened the first such overseas office in 1968. Today, 21 states have "one or more full-time offices in Europe" and a number of states also have offices in the Far East.[2]

J. Barlow Herget is a Raleigh free-lance writer and a former N.C. Department of Commerce official.

N.C. Division of Archives & History

Governor Dobbs bemoaned the lack of exports 225 years ago.

According to the August 1985 issue of "Comparative State Politics Newsletter," evaluating the effectiveness of those offices is difficult. "Reports of the number of European contacts made or potential clients recruited each year are useful, but they do not measure outcomes." For that reason, more comprehensive reports from the state's foreign offices to the General Assembly would be helpful in measuring their effectiveness and making trade policy decisions.

The state has been quite successful in attracting foreign industries and investments—sometimes called reverse investment—according to Wachovia Bank's 1985 edition of "N.C. Economic Information."[3] The bank showed the state attracting $467 million worth of foreign projects in 1984, more than almost any other state. Meanwhile, a Georgia State College study found that North Carolina attracted 20 foreign plants in 1984, ranking the state third behind New Jersey and California. The year before, in 1983, the state got 25 new foreign operations, which was better than any other state except New York.[4] (For more, see Table 1.)

At the beginning of 1985, according to the N.C. Department of Commerce, North Carolina had 355 foreign or foreign-owned corporate facilities within its borders—including 234 manufacturing concerns. That latter number put North Carolina sixth in the country, behind New York, New Jersey, Pennsylvania, California, and Georgia. The net effect of all this reverse investment over the years, according to the U.S. Department of Commerce, means 61,000 jobs and $5.7 billion in investment in North Carolina alone.

In 1979, the International Division moved beyond its original mission of recruiting foreign industry to North Carolina. It established a new International Marketing section and began to promote the state's wares abroad in earnest. This marked a new emphasis for the division, and such efforts have gradually increased in the last six years, says Division Director Jim Hinkle, a veteran employee and survivor of Democratic and Republican administrations. For example, the marketing section placed a new trade specialist in the Dusseldorf office. Then in 1985, the General Assembly more than doubled the division's budget for trade promotion, from $110,000 to $292,000 for 1985-86.[5]

Gordon C. McRoberts, with 20 years of export experience in the private sector, joined the division in 1979 as the international marketing director. The office was being "bombarded by phone calls," remembers McRoberts, from North Carolinians wanting to know how to export and from foreign traders anxious to buy North Carolina products. "That was when the dollar was low," he explains, referring to the weakness of U.S. currency in comparison to foreign currency. The current strong dollar makes it more difficult to develop export markets because foreign buyers must pay more for U.S.-produced goods. He estimates that his office has continued to receive about 3,500 phone calls a year in regard to marketing questions.

The trade office offers one-on-one assistance with North Carolina companies. The office also organizes trade missions overseas, represents North Carolina businesses at foreign catalog shows, coordinates visits from visiting trade delegations, and directs a "mentor program" whereby experienced exporting companies are asked to help newcomers. Finally, the office has also worked on special projects that meet needs particular to North Carolina and to the times.

In 1980, for example, the International Marketing office persuaded the U.S. Department of Commerce to underwrite a study of international furniture markets and export requirements. Recognized as the nation's "furniture capital," North Carolina sent surprisingly few furniture products overseas. When the report was completed in 1981, the state helped host a national conference on the topic which attracted foreign buyers.[6] "It's one of the most outstanding things we've done," concludes McRoberts.

Since the 1981 conference, state furniture makers have begun to seek increased overseas markets. While the industry still relies on the

domestic market during years of growth, an export market has begun to stabilize. "Drexel-Heritage, which exported all along, continues to do so and so does Broyhill and Century," says McRoberts. "Thomasville sold $1 million worth in China in 1984."

The state's most recent strategy is to identify industries whose products are sought overseas and remain competitive despite the strong dollar. McRoberts is targeting for exports those companies involved with process controls (to regulate systems machinery), safety and security devices, biomedical equipment, computer software and hardware, telecommunications, and instrumentation. "We're taking a systematic approach," he explains. "We find who they (the companies) are, where they are internationally, and what they need to export."

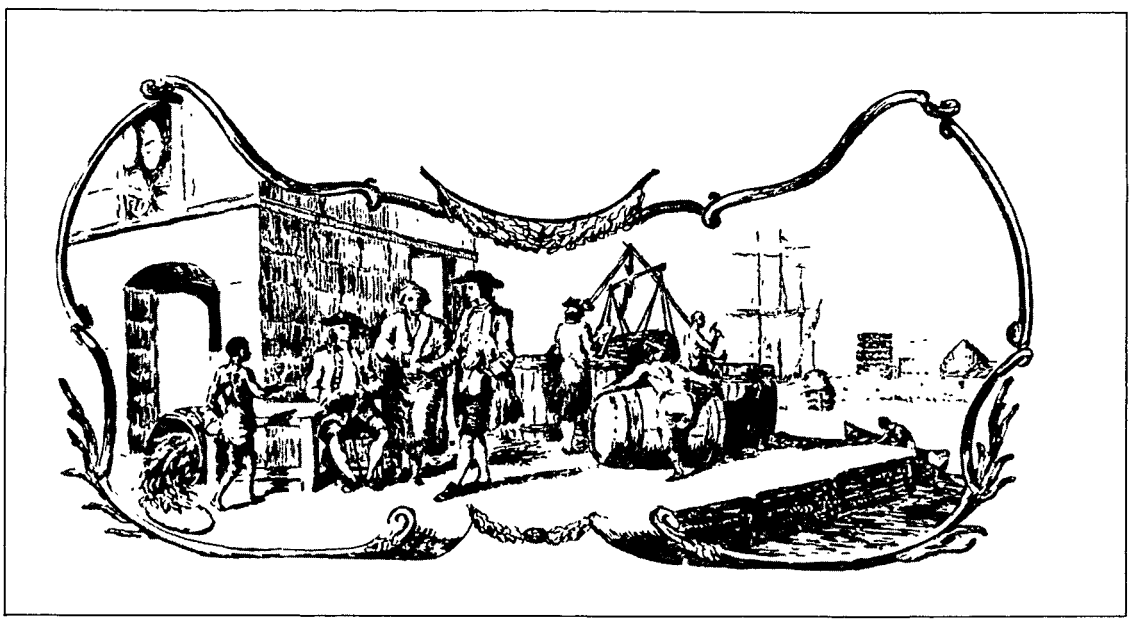
Such efforts by the Department of Commerce have not gone unnoticed. "North Carolina has one of the most carefully integrated and highly successful export programs in the country," concluded the U.S. House of Representatives Committee on Small Business in a 1984 report. "The almost 100 percent increase of exporter manufactured goods from 1977 to 1980, and the 96,000 jobs created by the increase, dramatically illustrates the success of North Carolina's efforts."[7] (Table 2 shows North Carolina exports by manufacturing sector.)

Despite these increases, however, in 1980 and 1981 the state ranked at roughly the same level nationally as it did in population. Ten other states had more exports in terms of the value of total export-related manufactured shipments—including agricultural products. North Carolina also ranked 10th in population in the country; eight of the 10 states ahead of North Carolina in exports also exceeded North Carolina in population (see Table 3).

Determining how well North Carolina has done since 1981 is difficult, at best, because of the astonishing lack of up-to-date data on exports by state and by commodity. The most recent statistics available are for the year 1981, published by the U.S. Department of Commerce in the Annual Survey of Manufactures. The next figures are set to be released in the spring of 1986—for the year 1982. Thus, businesses in North Carolina—and elsewhere—must rely on badly out-of-date information. "It's fairly depressing to try to figure out how to respond to trade problems when you don't really know what trade problems there are," says Bud Skinner of the state Commerce Department.

But it's clear that state officials, in North Carolina and throughout the country, will continue to seek ways to promote exports. "It is clear that the states have turned a new page," reported the April 1985 issue of *State Legislatures* magazine. "The heightened activities of federal trade agencies—because of the record U.S. trade deficit ($123 billion in 1984), the administration's 'New Federalism' philosophy, and the federal budget crunch—have prompted the states to step up trade development efforts." The increased interest, no doubt, also is related to the estimate that $1 billion in exports creates 25,000 jobs.[8]

In Colonial Days, the state's chief exports were agricultural products and pine stores.



N.C. Division of Archives & History

Courtesy N.C. Department of Agriculture

Meat and meat products now rank 8th in the list of North Carolina's farm exports.

Agriculture—Promoting Exports

The N.C. Department of Agriculture has had a full-fledged program to promote trade since 1968 when it hired its first international trade officer. The assignment recognized the state's long history of farm exports in products such as tobacco, cotton, and feed grains. Commissioner of Agriculture James A. Graham in a message printed in the department's current "N.C. Agricultural Export Directory" reminds readers that "tobacco, of course, is the state's leading commodity, contributing a $1.1 billion gross to farmers. However, N.C.'s total gross farm income is $3 billion. That is, two-thirds of our farm sales come from livestock and crops other than tobacco. This diversified farm production provides an excellent base for exports."

In 1984, an 11-person staff administered the department's domestic and international marketing efforts. "One (person) spends full time working livestock exports on anything from chickens to rabbits," says marketing director W. Britt Cobb Jr. "We used to have a person in Dusseldorf and I felt the office earned its keep at the time," adds Cobb, who worked in the state's Dusseldorf office in the mid-1970s. "With the dollar so strong, it was much harder to develop markets and we no longer have a person in the office. When economic conditions change, we'll probably get back in there."

The department works closely with the U.S. Department of Commerce and embassies abroad to help farmers and processors export their goods, especially when they are unfamiliar with the country or the market. The department also helps put North Carolina agricultural businesses in direct contact with foreign buyers. "We participated in a trade mission not long ago to Europe—England, Belgium, Holland, and West Germany," says Cobb. "You try to get someone from an exporting company to go—they pay their own way—who can sell direct. We had a chicken person, two beef people, and someone in turkeys and peanuts. In London, we stayed at the Britannia Hotel on Grosvenor's Square across from the U.S. Embassy and lined up people they would meet. The two peanut people called on roasters and others such as supermarket chains."

In 1984, tobacco was the leading farm export for the state, with $693.8 million. The other top 10 exports and their values (in millions) were: soybeans, $152.3; feed grain, $72.5; poultry, $39.2; wheat, $34.6; peanuts and peanut oil, $20.3; cotton, $13.3; meat and meat products, $8.8; fruit, $8.3; and feed and fodder, $3.5. The total value of farm exports was listed as $1.059 billion.[9]

Cobb concedes that the department's program is not inclusive. For instance, the state seldom gets involved in tobacco exports because the industry itself has developed over the years a very successful and sophisticated close-knit system. "We learn from them," says Cobb, speaking of the tobacco dealers. "Occasionally, they might call the state, but I can't even remember the last time they did."

Table 1. N.C. Foreign Investment
Number of firms locating facilities in North Carolina

Country	1960-1980	1981	1982	1983	1984
West Germany	79	9	5	12	20
England	43	7	7	7	16
Canada	30	3	0	7	11
The Netherlands	23	0	1	1	4
Japan	21	2	3	3	5
Switzerland	21	0	1	3	3
France	16	0	0	3	4
Sweden	8	0	0	0	2
Italy	7	0	0	0	0
Denmark	5	1	0	0	2
Belgium	4	0	0	0	1
Singapore	0	0	1	0	0
Philippines	0	0	0	1	0
Austria	0	0	0	0	2
Norway	0	0	0	0	1

Source: N.C. Department of Commerce. These figures differ from other studies (see text) because of counting methodologies.

The department's strength, he adds, lies more in helping "the small company that doesn't know how to export." An Albemarle popcorn processor, for example, had a surplus and called for advice on exporting the product. "I made some contact with people I know overseas in the popcorn business," says Cobb. "We worked closely with the U.S. Department of Agriculture and identified the major importers in Europe. After some telexing and shipping some samples, now he's shipping to or negotiating with 10 to 15 countries."

Cultural and Technical Assistance

A number of quasi-public programs in the state affect foreign trade directly or indirectly. Two centers are located at North Carolina State University—the International Trade Center, founded in 1978, and the North Carolina Japan Center, begun in 1980. The trade center, directed by Charles A. Shields, helps to educate and assist business persons and others. For example, it has sponsored workshops on "Export Documentation and Traffic," "Finance and Letters of Credit," and "Tax Aspects of Doing Business Overseas." It also seeks to offer "hands-on" instruction, guidance, and practical advice at a series of seminars and short courses, as well as in-house training programs "designed to meet specific needs of companies and business organizations," says a recent ITC brochure.

The Japan Center conducts academic programs such as teaching the Japanese language to business people and sponsoring overseas research. It also teaches courses to North Carolina companies about Japanese customs and has developed a video program on "Selling to the

Japanese Market" and a short audio course, "Essential Japanese for Business Travelers." On Nov. 1, 1985, it helped sponsor a major conference for state businesses on "Japan and North Carolina: Trade and Investment."

Director John Sylvester Jr., an ex-Foreign Service officer who speaks Japanese fluently, says the center also assists Japanese nationals on assignment to North Carolina. For instance, it helped establish the Saturday Japanese School at Effie Green Elementary School in Raleigh where Japanese children continue to take courses in their native language so they will not fall behind their counterparts back home. The center also works closely with the state's International Division when Japanese businessmen visit the state. Finally, it helps escort visiting Japanese reporters and dignitaries.

Other trade organizations with government ties include the N.C. District Export Council and the N.C. World Trade Association. The council is composed of 42 state businesses, most of whom are exporters and education leaders appointed by the U.S. Secretary of Commerce. The World Trade Association includes manufacturers, exporters, bankers, customs officials, freighters, and others involved in international trade. Without any formal staff, the association serves as an exchange for trade information.

Another facet of the state's overall trade program is Foreign Trade Zones or FTZs, of which North Carolina contains four: Charlotte, the two ports at Wilmington and Morehead City, and most recently, the Research Triangle's FTZ No. 93. Such zones were first established in 1934 by President Franklin D. Roosevelt to help American companies delay paying import duties until the companies were ready to sell the products.

The Wilmington and Morehead City FTZs are operated by the State Ports Authority port facilities in those two cities. The ports themselves have become increasingly important to the state's international trade programs in recent years as tonnage and revenue have gradually risen. The Wilmington port terminal features more than one mile of continuous wharf and three 40-ton container cranes, plus another 85 acres of open storage and more than 1 million square feet of warehouse space. The smaller terminal at Morehead City is principally a bulk commodity terminal. It, too, has a mile-long wharf, 14 acres of open storage and half a million square feet of warehouse space.

The zones are approved by the U.S. Department of Commerce but regulated by the U.S. Customs Office. (The zones also provide state business tax exemptions.)[10] Today, with many products built with parts from all over the world (called world sourcing), the FTZs have an additional use. A company, for instance, may avoid paying duties on a foreign part if that part is a component of a product—such as a computerized telephone switch system—that is as-

N.C. Department of Commerce

One of the State Ports Authority's whopping cranes dominates the wharf at Wilmington on the Cape Fear River.

Table 2. Shipments of Export-Related Products and Export-Related Employment by Major Industry Group for North Carolina, 1981

Manufacturing Sector	Total Manufacturer's Shipments' Value (in millions of dollars)	Total Export-Related Products (in millions of dollars)	Exports as a Percentage of Total Shipments	Total Employment (in 1000s)	Total Export-Related Employment (in 1000s)
Total Manufacturing	$62,196.6	$ 7,808.5	12.5%	822.3	80.6
Food	5,824.5	262.2	4.5%	42.4	1.6
Tobacco	6,512.4	1,354.6	20.8%	22.9	4.4
Textiles	14,021.2	1,591.9	11.3%	233.3	24.2
Apparel	2,621.0	93.1	3.5%	77.9	1.9
Lumber	2,053.0	225.6	10.9%	38.2	3.6
Furniture	3,704.5	127.9	3.4%	83.5	2.7
Paper	2,575.2	439.5	17.0%	22.8	3.2
Printing	869.7	18.1	2.0%	18.8	0.3
Chemicals	5,341.5	1,169.0	1.8%	32.2	5.9
Petroleum and Coal	123.6	6.1	4.9%	0.3	
Rubber and Plastics	2,314.7	269.8	11.6%	28.1	3.0
Stone, Clay and Glass	1,198.4	116.2	9.7%	16.0	1.4
Primary Metals	942.7	215.3	22.8%	7.6	1.6
Fabricated Metals	2,656.6	303.8	11.4%	26.5	2.6
Machinery	4,352.4	717.8	16.4%	47.1	7.7
Electronics	4,525.6	595.5	13.1%	50.4	7.2
Transportation Equipment	991.6	153.1	15.4%	13.2	1.9
Instruments	869.2	109.7	12.6%	10.4	1.3
Miscellaneous Manufacturing	432.3	28.6	6.6%	9.3	0.4
Administrative	NA	NA	NA	35.9	4.7

Source: Annual Survey of Manufactures, 1981, U.S. Bureau of the Census, U.S. Department of Commerce, May 1985

sembled in the FTZ itself and then exported.

According to Lee H. Capps, director for economic development for Consolidated Ventures Corp. of Chapel Hill, the zones permit an exporter or importer to "fine tune the business cycle" and help his cash flow.

Exporters will also get new help in 1986 from construction of a world trade center in the state port city of Wilmington. The 200,000 square-foot center, part of an eventual 45-acre complex, will bring international trade facilities and services under one roof for the first time in the Carolinas. It will provide one-stop shopping for state companies interested in world trade, and will make the state's products more attractive to foreign buyers and to investors.

Table 3. Total Export-Related Shipments, 1981 and 1982 (In Millions of Dollars)

State (rank in population)	1981	1980
1. California (1)	$27,389.9	$24,533.8
2. Texas (3)	22,650.8	19,530.5
3. Ohio (6)	18,132.3	17,394.4
4. Illinois (5)	17,038.9	16,444.6
5. Michigan (8)	15,512.3	13,494.6
6. Pennsylvania (4)	15,485.1	14,235.7
7. New York (2)	15,259.5	13,780.6
8. Washington (20)	10,772.8	10,124.0
9. Indiana (12)	9,692.2	8,741.2
10. New Jersey (9)	8,203.5	7,859.6
11. North Carolina (10)	7,808.5	7,371.4

Source: Annual Survey of Manufactures, 1981, U.S. Bureau of the Census, U.S. Department of Commerce, May, 1985.

Finally, outside of the direct and indirect state programs there are numerous private sector trading resources such as the tobacco trade network. Often, they are used by state government, as in the International Division's "mentor program," to augment state efforts to educate less sophisticated companies.

What Prospects for North Carolina's Trade Programs?

The increase in state resources for international trade in recent years indicates a commitment to expanding export markets. More exports mean more jobs, and it's an unusual politician who doesn't favor finding jobs for his constituents. Exports no doubt also help the state's "balance of trade"—its ability to sell more goods abroad than it imports. The big question, however, is how much of a commitment does North Carolina have? The answer is difficult to find. Import figures other than those very limited amounts coming through North Carolina ports are difficult to measure. Also, such a "balance" can be misleading as an indicator of the state's economic well-being.

For example, state furniture manufacturers traditionally have cultivated domestic markets over exports and have sought foreign customers only when U.S. sales lagged. Conversely, when sales boomed at home the companies often neglected foreign customers and exports dropped.

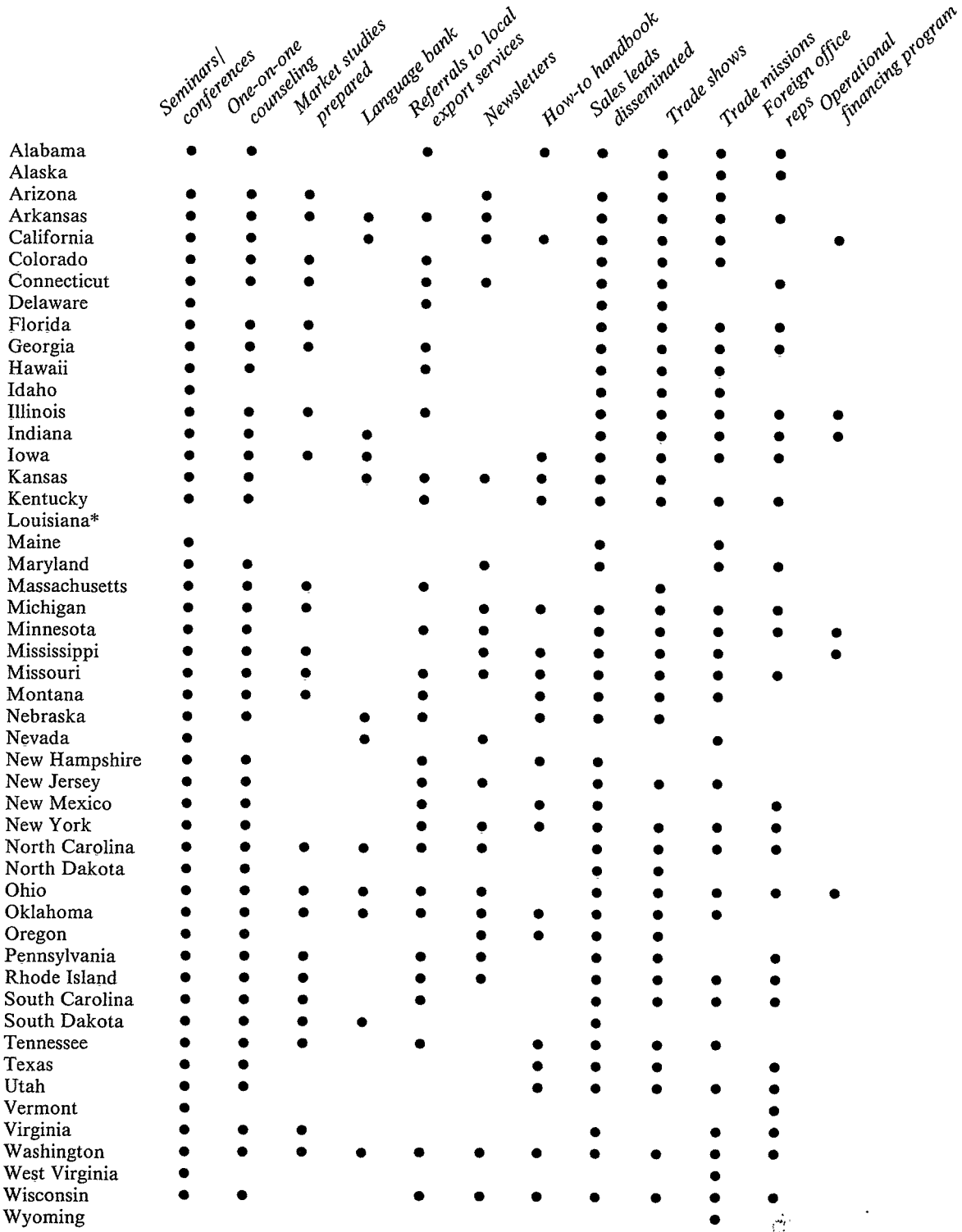
Governor Martin, at his Oct. 31, 1985 press conference, exhibited an enthusiasm for the prospect of more trade with foreign countries but also showed caution about endorsing any expansion of existing state agencies to attain export growth. In 1985, the Commerce Department with its increased budget was putting into effect its first comprehensive foreign trade program. New professional employees were hired, and plans were developed to engage more actively in trade shows. But when asked whether the state should make further strides in its trade programs, such as adding a trade officer to its Tokyo office, Martin replied that the idea should be studied first and said he had asked Secretary of Commerce Howard H. Haworth to "look into it." He said, "There's no point in putting people in Japan if they're not going to be useful."

Nonetheless, one trade official who asked not to be identified said the need for such trading experts was immediate. The state has added a trade official to its Dusseldorf office, but state officials privately say more trade officers could produce greater trade results. Also, several observers including McRoberts and the ITC's Charles Shields say that the state should focus more of its attention on the developing China and Southeast Asian markets.

One businessman active in the state's foreign trade community, James F. Kelly, president of Aeroglide Corp. of Cary, believes that far too many people do not understand international trade and its potential. It is also a view shared by Jeana Dunn McKinney, who co-authored a July 1985 study titled, "Accessing North Carolina's International Resources: Public and Private Partnerships."[11] Ms. McKinney's report found, for example, a "widespread international (language) illiteracy," and in a later interview, she said that further export gains should be tied to greater long-range public education efforts.

Kelly, a member of the World Trade Association and the District Export Council, calls for a more prominent role from state officials. "We need somebody who has status who can open the door, someone who can make the business person in Nigeria or Saudi Arabia

State foreign-trade development programs



Source: National Association of State Development Agencies

*Office of International Trade, Finance and Development was recently established and is in the process of developing programs.

Reprinted with permission of State Legislatures *magazine.*

respect what he says. Now they send someone just out of school," Kelly explains. His company builds driers and roasters and dehydrators for cereal grains, processed grains, wood chips, and forage crops. A third of his machines are exported, mostly to Third World countries which he, too, saw as North Carolina's market of opportunity. Moreover, he described the state's future role as one that would develop better marketing information and more aggressive sales representation abroad. "We need somebody who can come back to smaller companies and say, 'Fellows, here's a place you can look.'"

Kelly's call for better information reflects a national attitude about foreign trade by many businessmen, expecially those in small companies. A survey conducted by Yankelovich, Skelly and White for the National Association of State Development Agencies in 1982, for example, found that nearly one-third of small businesses have not even considered exporting.[12] It found further that the majority of small business that did export and 90 percent of non-exporters needed assistance in market research and overseas promotion of their products.

Other states are exploring programs involving export trading companies (ETCs)—organized with certain tax advantages and anti-trust exemptions designed to help promote the export of certain types of products, and offering a wide variety of direct services to export-minded companies—and export financing operations. In the past two years, 14 states have enacted various types of export finance legislation that offer such help as guarantees to banks for working-capital loans made to firms before an export shipment is made; post-shipment guarantees to banks for short and medium term

Agencies and Organizations Involved in International Trade

A. N.C. State Government Agencies

1. International Development Division
   N.C. Department of Commerce
   430 N. Salisbury Street
   Raleigh, North Carolina 27611
   919-733-7193
2. North Carolina European Office
   N.C. Department of Commerce
   Wasserstrasse 2
   4000 Dusseldorf 1 West Germany
   Telephone 49-211-320533
3. International & Domestic Marketing Office
   N.C. Department of Agriculture
   P.O. Box 27647
   Raleigh, North Carolina 27611
   919-733-7912
4. International Trade Center
   Jane S. McKimmon Center
   N.C. State University
   P.O. Box 7401
   Raleigh, North Carolina 27695
   919-737-3793
5. N.C. Japan Center
   N.C. State University
   P.O. Box 8112
   Raleigh, North Carolina 27695-8112
   919-737-3450

For a list of advisory councils affecting trace, see table on "Executive Branch Boards, Commissions, and Councils Affecting Economic Development," p. 33.

B. Other Organizations Involved in Foreign Trade

1. N.C. District Export Council
   Contact: U.S. Department of Commerce
   North Carolina Office
   203 Federal Building, P.O. Box 1950
   Greensboro, North Carolina 27402
   919-378-5345
2. N.C. World Trade Association
   P.O. Box 36160
   Raleigh, North Carolina 27602
   919-851-2901
3. Foreign Trade Zones
   Charlotte (Zone #57)
   P.O. Box 16100
   Charlotte, North Carolina 28216
   704-398-2076

   Durham (Zone #93)
   P.O. Box 13487
   Research Triangle Park, North Carolina 27709
   919-541-9331

   Morehead City (Zone #67)
   P.O. Drawer 829
   Morehead City, North Carolina 28557
   919-726-3158

   Wilmington (Zone #66)
   P.O. Box 9002
   Wilmington, North Carolina 28406
   919-763-1621

loans to foreign buyers; insurance for the banks from federal or private sources against the risk of default by a foreign buyer; coordination for services from the U.S. Export-Import Bank to exporters; and advice on state and federal finance programs.[13] If North Carolina wishes to help promote exports, the General Assembly should consider similar legislative vehicles.

North Carolina might also benefit from better coordination of its disparate and sometimes far-flung elements that affect international trade. A position paper written for the International Trade Center in 1981 noted that trade assistance programs in the state suffered from a lack of cooperation. It observed, "Under these conditions (of non-cooperation of programs) North Carolina will not have a single coordinated program of international development; it will have many, fragmented incomplete programs . . . (and) opportunities will be lost to neighboring states that are 'run like a business.' "[14]

Since that report was written, the state has done little to develop more cohesive trade policies or programs. Tom Vass, a former N.C. Department of Labor official, examined the state's lack of a coordinated trade program in a report written for the N.C. 2000 Commission.[15] Vass recommends that the state develop "a strong, coordinated administrative structure to tie the activities of the U.S. Department of Commerce, private banks, the various chapters of the International Trade Centers, and other existing programs in international trade, together for a more unified approach to trade development and assistance."

But the Martin administration, already leery of more bureaucracy, seems hardly likely to embrace creating even more of an "administrative structure." However, it might be interested in another Vass recommendation for which there appears to be a critical demand: developing "a comprehensive computerized information system for coordinating the market demands of foreign buyers with the market supply of North Carolina's manufacturers." McRoberts pointed out in an interview that the Commerce Department was putting into place its new computerized information system, and said the improved data retrieval would produce immediate benefits.

Such a system would seem to be elemental to any hopes for significantly increasing foreign trade, and the state Department of Commerce would be the likeliest respository and operator of such an information system. The benefits would be numerous. Not only would the state be able to rely on more up-to-date data, but it could also tell potential exporters whether a market for their products may exist—and perhaps more important, where that market is.

The United States, if not North Carolina, compiled its largest trade deficits ever in 1984, and the trend was not abated in 1985. Individual states have turned to their own resources to promote their goods and products, and North Carolina has joined in the pursuit of the elusive foreign trade fox. The record suggests that the state has benefited from its efforts in terms of new jobs and increased exports. Governor Martin, while enthusiastic about trade opportunities, has called for a study before endorsing any expansion of the state's programs. At the same time, he acknowledged that his Japan trip "showed me that our past efforts have paid off." The question remains whether a larger state role will pay off even more.

FOOTNOTES

[1]Annual Survey of Manufactures, 1981, U.S. Bureau of the Census, U.S. Department of Commerce, May 1985.

[2]"State Offices in Europe," *Comparative State Politics Newsletter*, August 1985, published by Sangamon State University, Springfield, Ill., p. 22.

[3]"N.C. Economic Information," 1985 Edition, Wachovia Bank & Trust Co., Winston-Salem, N.C., August 1985, p. 5.

[4]*Directory of Foreign Manufacturers in the United States*, Third Edition, 1985, published by the Business Publications Division, College of Business Administration, Georgia State College, Atlanta, Georgia.

[5]SB 1, approved and ratified June 27, 1985, as Chapter 479 of the 1985 Session Laws.

[6]"Tailored Export Marketing Plan, North Carolina Furniture," by International Trade Administration, U.S. Department of Commerce, December 1981.

[7]"State, Local, and Private Sector Small Business Initiatives," a report of the Committee on Small Business, U.S. House of Representatives, Ninety-Eighth Congress, Second Session, by U.S. Government Printing Office, Sept. 18, 1984, p. 35.

[8]"State Roles in Foreign Trade," *State Legislatures* magazine, April 1985, published by National Conference of State Legislatures, Denver, Colo., p. 18.

[9]"Exports from North Carolina in Millions of Dollars, 1984," compiled by International and Domestic Marketing Office, N.C. Department of Agriculture.

[10]NCGS 105-275.

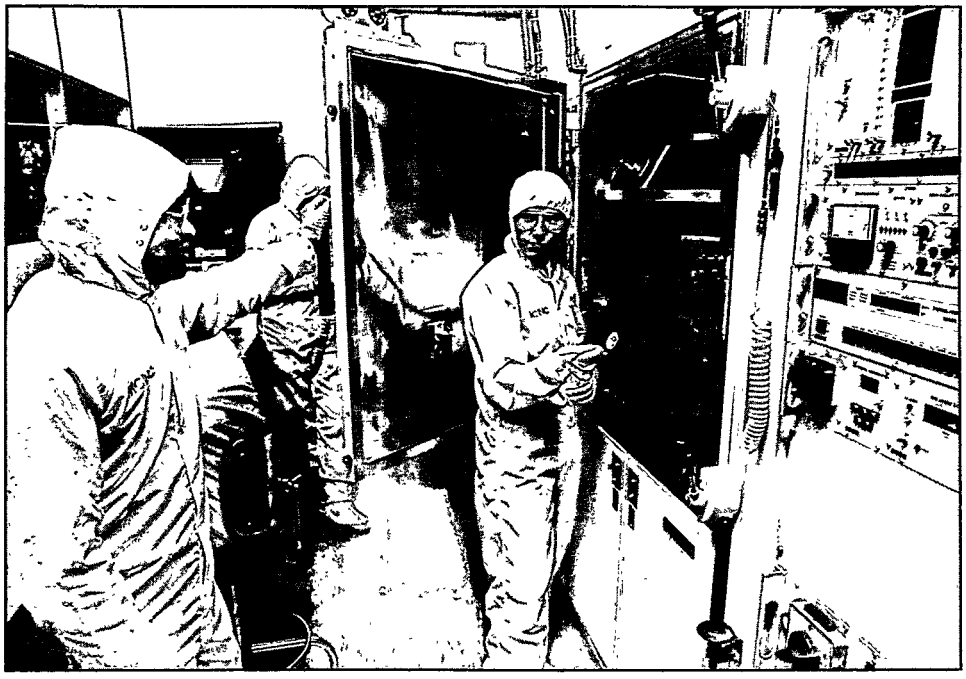
[11]"Accessing North Carolina's International Resources: Public and Private Partnerships," by Jeana Dunn McKinney and Thomas P. Norman, Office of International Programs, N.C. State University, July 1985.

[12]"Export Trading Companies: Possible Structures, Small Business Response, Public Sector Roles," November 1982, by the National Association of State Development Agencies.

[13]"State Offices in Europe," *Comparative State Politics Newsletter*, August 1985, published by Sangamon State University, Springfield, Ill., p. 22.

[14]"North Carolina 2000: The International Imperative," position paper, N.C. State University at Raleigh, International Trade Center, Nov. 16, 1981, p. 3.

[15]"Industrial Recruitment and the Path of North Carolina's Economic Development to the Year 2000," N.C. Department of Labor, April 1982.



Jeff VanDyke

Microelectronics research is conducted in "clean space" fabrication facility at MCNC.

Drop Anchor or Full Steam Ahead?

High Tech—The State's Flagship Strategy?

by Dale Whittington and Bill Finger

Can high-technology applications assist small business growth? Does the state need stronger technical and analytical planning to shape long-range high-tech policy initiatives? And will high tech endure as the favorite son in the current world of economic development?

During the early 1980s, promoting high-tech development was everyone's top economic development policy. Many believed North Carolina had hit on a hot new economic development strategy that would provide new high-wage jobs and help retool traditional industries. But the groundwork for this leap into the high-tech world had been laid 20 years before.

In the early 1960s, Gov. Terry Sanford held a series of informal meetings with business and academic leaders to explore possible new scientific programs. These gatherings led to the 1963 formation of the Board of Science and Technology, with offices in the Research Triangle Park. It had the dual purpose of strengthening scientific research in the state and monitoring scientific-related areas as they affect industrial development. This effort "represented in essence a state-level National Science Foundation to provide grants for the state's scientists," writes Ezra F. Vogel in *Comeback*, a 1985 book analyzing how American business can build a resurgence.[1]

Dale Whittington, professor of planning at the Department of City and Regional Planning at the University of North Carolina at Chapel Hill, is editor of High Hopes for High Tech, *University of North Carolina Press, 1985. Bill Finger is editor of* North Carolina Insight.

While interest in this board declined in the early 1970s, Gov. James B. Hunt Jr. (1977-85) brought the group back to center stage in his administration, along with other high-tech related ideas. The first of Hunt's high-tech initiatives began to take shape in 1978 when the legislature appropriated $150,000 to start the N.C. School of Science and Mathematics. Now part of the University of North Carolina system, this high school in Durham draws students from around the state who are highly motivated and talented in science and math. Three other initiatives followed shortly: the Microelectronics Center of North Carolina (MCNC) in 1980, the Biotechnology Center in 1981 (see sidebar on page 78), and the N.C. Technological Development Authority in 1983 (see article on page 53). Collectively, these four, according to Vogel, "benefited the universities, whose faculties had enhanced facilities for work in new areas, companies which had access to new technology and trained manpower, and workers and families seeking better jobs and a higher standard of living."[2]

In recent years, high-tech jobs in general have increased in the state, helping the average state hourly manufacturing wage climb to $7.01 an hour in July 1984 (the first time over $7.00). From 1983 to 1984, North Carolina moved from 15th to 13th nationwide in high-tech employment, going from 47,000 to 55,000 high-tech jobs, according to a study by the American Electronics Association, a California-based trade group. Finally, in a December 1985 paper, the Southern Growth Policies Board reported that the results of the Microelectronics Center's work "strongly support the belief that R&D (research and development) are effective economic development strategies and good investments .... [A]pproximately $600 million in new capital investment and about 6,000 new jobs are directly attributable to MCNC's efforts to advance technology, which increases state tax revenues by about $25 million from initial investments and by approximately $32 million each year from recurring taxes."[3]

Despite these upbeat figures, by 1986, some of the luster was off the high-tech boom. Last year, the microelectronics industry nationwide laid off almost one of every four employees — 64,000 of the 336,840 workers, or 19 percent. The top five producers of integrated circuits lost $195 million in the third quarter of 1985 alone. Sales of U.S. circuits fell from $11.6 billion in 1984 to $8.3 billion in 1985, due largely to the slump in sales of personal computers. North Carolina did not suffer as much as California's Silicon Valley, but employment in the electronics industry did decline. And the upbeat figures on new electronics jobs, announced by the N.C. Department of Commerce at the end of 1984, came into question as one study found that *only one of every two announced* electronics jobs have come on line (see page 50 for a discussion of this study).

Even so, high-tech jobs remain the state's number one economic development strategy in terms of total dollars spent. From 1980 through 1985, the state spent some $51.6 million on the Microelectronics Center alone. Last year, the General Assembly continued this commitment by approving $11.2 million for the MCNC in fiscal year 85-86 and $12.1 million for FY 86-87. In addition, the legislature sent $5.8 million in capital funds through the MCNC to UNC-Asheville, Winston-Salem State University, and Wake Forest University's Bowman Gray School of Medicine (for high-tech communications systems). And these figures don't even count the millions going to the Biotechnology Center, the Technological Development Authority, and the School of Science and Mathematics (see table on page 24 for expenditures for these and other state economic programs).

"My occupational hazard is, my occupation's just not around."

—"A Pirate Looks at Forty" by Jimmy Buffett

"I am of the opinion that having a strong basic manufacturing industrial sector is essential for the 'services industries' to exist," says former Governor Hunt. "Thus, I believe it is nationally important for us to have centers where high technology manufacturing is going on and one of those is clearly in North Carolina."

The administration of Gov. James G. Martin inherited the state's financial commitment to these high-tech endeavors. The euphoria that surrounded their beginnings can now give way to an examination of the long-range impact of the state's investment in this business. Much can be learned from the public-private partnership that helped establish the MCNC, such as the benefits of such a partnership and the weaknesses of giving so much state money to nonprofit corporations. Other questions range from examining what "high tech" actually means to potential dangers of this industry to workers and the environment.

What is High Tech?

Alvah Ward, head of North Carolina's industrial recruitment efforts, takes the term "high tech" to its broadest common denominator. "Soon there will be very little difference between high tech and basic industries because any new plant that goes in will employ the highest technology available," says Ward. Under this definition, "high tech" could refer to virtually any capital improvement that employs computers in some way—from the textile and furniture industries to large farming operations planned and managed through computer technology.

The U.S. Bureau of Labor Statistics classifies as high tech those companies with at least twice the portion of their net sales *devoted to research and development*, compared to all manufacturing companies. Under such a definition, a company in *any* Standard Industrial Classification (SIC) code could be called "high tech."

In 1984, Kirsten Nyrop, then director of the N.C. Technological Development Authority, developed a table called "Employment in N.C. High-Technology Firms, by SIC Codes." In the table, published with an article in *North Carolina* magazine, Nyrop included 27 separate SIC code lines, taken to three digits; these 27 subgroups fit into nine two-digit categories. The largest number of jobs in the chart (23,525) appeared under SIC 739, "research and development laboratories."[4]

Everyone's definition of a high-tech industry would include the microelectronics industry, a part of the electronics sector (SIC 36). This sector has three main parts: 1) electrical equipment (power distribution, transformers, generators, telecommunications equipment, and other products); 2) electronic consumer goods (television receivers, phonographs, hi-fi equipment, and other products); and 3) electronic components (resistors, capacitors, electronic tubes, and semiconductor devices). The microelectronics—or semiconductor sector—falls under this third category (although integrated circuits for in-house use are not included under SIC 36). The Bureau of Labor Statistics (BLS) treats SIC 367—electronic components and parts—as a surrogate for the microelectronics industry. Others use the more restricted SIC 3674, semiconductors and related devices.

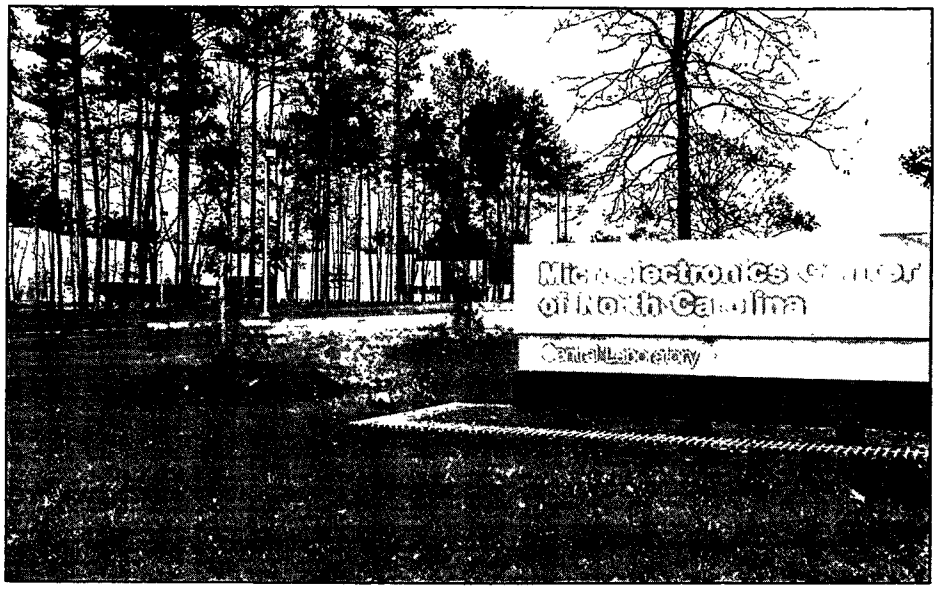
Increasingly, people use interchangeably the terms "microelectronics" (*one* BLS three-digit SIC code) and "high tech" (*27* three-digit codes in Nyrop's study). This usage reflects the conventional wisdom that the microelectronics industry includes firms that are routine *producers and users* of integrated circuits. The use of integrated circuits has already expanded beyond the computer, electronic components, and scientific and measuring instrument industries. Soon, as Alvah Ward suggests, most American manufacturing will fall within this larger characterization of microelectronics.

The *lack of precision* in classifying the microelectronics and other high-tech industries *makes evaluating the success of high-tech economic development policies difficult*. At various times, the Hunt administration claimed that its efforts in the microelectronics area were directed at: 1) recruiting semiconductor *research and development* companies; 2) recruiting semiconductor wafer *assembly* plants; 3) promoting microelectronics technology in North Carolina's traditional industries; and 4) creating spin-off enterprises, including research and development firms, not tied directly to microelectronics (of the narrow SIC 367 variety). These objectives need not be mutually exclusive. In fact, the Hunt administration tied the success of all of them to a single flagship enterprise—the Microelectronics Center of North Carolina (MCNC).

The Microelectronics Center Today

In 1980, Governor Hunt launched the Microelectronics Center with an organizational strategy similar to that used by Gov. Luther Hodges 21 years before for the Research Triangle Park.[5] Both governors endorsed a private, nonprofit organizational structure that incorporated the state's political and financial elite in the planning stages and the university hierarchy in the final structure.[6] But there was one major difference—taxpayers' money. The Research Triangle Foundation and Research Triangle Institute (the nonprofit vehicles Hodges helped create) received almost no state funds, while the MCNC depended upon direct state appropriations from the General Assembly, both for capital seed money *and* for continuing operating support. The MCNC could have begun as a laboratory or branch of RTI, evolving slowly from internally generated contract revenues, or as a separate institution within the University of North Carolina system. But Hunt rejected such options. He chose the creation of a new organization, which had both high visibility and political appeal.

Of the initial $24.4 million in state funds going to the MCNC, $10.5 million went to build a new, 100,000 square foot building in the Research Triangle Park, and $8.6 million went for purchasing equipment, much of it highly sophisticated. From later appropriations, another $6.5 million went for a telecommunications system linking campuses and private corporations around the state for broadcasting lec-



Jack Betts

Microelectronics Center of North Carolina is nestled among the pines in Research Triangle Park.

tures in computer science, electrical engineering, and other sciences. The main purpose of the center is to sponsor research and development efforts and to train students in microelectronics technology and applications. This resource, ideally, would be an added inducement to bringing new high-tech companies to North Carolina such as General Electric, which opened a major facility in the Park after Governor Hunt made the initial commitment to the MCNC.

Research and development at MCNC concentrates in three areas: 1) semi-conductor materials, devices, and fabrication processes; 2) computer science and computer-aided design; and 3) integrated circuit design to support advanced microelectronics applications. The MCNC offers state-of-the-art facilities for such research, including a world-class, 10,000 square-foot "clean space" fabrication facility. To assist with industrial recruitment, the MCNC assists the Department of Commerce in welcoming visitors and prospects and seeks to create a national and international awareness of North Carolina's growing potential in the field.

"We have a dual role—to enhance the participating universities in their education and research and to support the state in attracting industry," says Richard Fair, MCNC vice-president of design research and technology. "We're trying to play both roles, but mostly our orientation is to support the universities as a means of getting to that final goal—developing the state."

Microelectronics firms rely heavily on the skills of physicists, chemists, electrical engineers, metallurgists, ceramicists, mechanical engineers, industrial and software engineers, computer scientists, and optic specialists who have been trained at the graduate level. MCNC has tried to strengthen university education in these fields. But why did the state create a new organization to do this training instead of allocating more money to existing universities for computer science and electrical engineering?

There are several explanations. First, the MCNC is a much more visible and politically useful symbol than a beefed-up computer science department. In any case, obtaining the level of funding granted the MCNC for universities would have been politically impossible. Second, the MCNC provides an institutional arrangement that can pay university faculty in computer sciences and electrical engineering more than would be possible through the university pay structure alone. Third, the MCNC laboratory facilities and equipment are too expensive to be duplicated and can be shared to some extent because of the location of the MCNC facility.

Unlike the Microelectronics and Computer Technology Corporation created by 12 major corporations in Austin, Texas, the MCNC is primarily a public-sector initiative tied to five participating universities (UNC-Chapel Hill, Duke University, North Carolina State University, North Carolina A&T State University, and UNC-Charlotte). Financially, the MCNC has asked the legislature to meet at least two-thirds of the MCNC's operating budget. "We've told the state that we will bring in from external sources the other one-third of our operations cost so that the state doesn't have to support the MCNC completely," says Fair, who holds a dual appointment at MCNC and in the Duke Univer-

sity electrical engineering department. "Given our current level of external support, we could not plan to operate with less than two-thirds state support." The MCNC currently has a 120-person staff, 10 of whom have a joint appointment with a university. Its annual operating budget is $16.9 million, according to MCNC documents presented to the General Assembly.

The MCNC gets external funds through two primary means, from affiliate private-sector members and through sales of products it has developed. The center currently has seven corporate affiliates, including Northern Telecom Inc., General Electric Co., and International Business Machines Corp. (IBM). An affiliate must contribute $250,000 in money or equipment per year for a minimum of three years, which allows that company's staff to participate in MCNC research programs and work with the MCNC facilities. Ownership of inventions or products arising from MCNC's research resides with MCNC. Affiliates can use these new products in-house at no charge and on the open market on a "preferred royalty" basis. Under such an arrangement, the affiliate company pays the MCNC a one-time royalty fee so that it won't be enjoined from using the "intellectual" property created at the MCNC.

The first major product from MCNC's research efforts was VIVID, a software system for custom VLSI (very large scale integration) design. In 1985, the center made two sales with VIVID. The Metheus Corporation, based in Massachusetts, paid the MCNC $25,000 to be able to use VIVID as part of its software offerings. Then in October, the Canadian Microelectronics Center paid $225,000 for VIVID (and backup support) for use in its own work. While the state receives none of the profits from such sales, "all the dollars get plowed back into our

Biotechnology

Manipulating Cells for the Economy

In high-tech economic development policies, the new kid on the block is biotechnology. Until 1981, only a handful of state officials had ever even heard the word, and most of them worked for, or with, the N.C. Board of Science and Technology. Gradually, this intimidating term worked its way into the vocabularies—and then onto the agendas—of influential political figures like state Rep. Bobby Etheridge (D-Harnett), who chairs the House Base Budget Appropriations Committee.

"I think it's germane to many sectors of our economy—agriculture, high technology, pharmaceuticals," says Etheridge, who co-chaired the legislature's two-year Biotechnology Study Committee (1983-84). "We spent a lot of time and received an awful lot of input. We heard a lot about the long-term economic benefits."

In 1983, the General Assembly appropriated $500,000 to the N.C. Biotechnology Center (then under the rubric of the N.C. Board of Science and Technology) and created the Biotechnology Study Committee under the Legislative Research Commission. Responding to an interim report from the study committee, the 1984 legislature voted another $1 million to the Biotechnology Center and $3.6 million to the University of North Carolina system for biotechnology research. Also in 1984, the N.C. Biotechnology Center incorporated as a private, nonprofit corporation. Then in 1985, the General Assembly voted $6.5 million to the center for the upcoming fiscal year, plus another $1.2 million for a new building.[1]

While biotechnology seems to have arrived only recently as a prominent area of research for economic development, biotechnology in the traditional sense has been around as long as people have used living organisms to help make some kind of product. "People have used biotechnology since the discovery of leavened bread and alcoholic beverages, and today fermentation is an important production method that relies on biotechnology," explain Frank B. Armstrong and Durward F. Bateman of N.C. State University. "The new biotechnology deals with manipulating the chemistry of living organisms or their components to bring about desired effects.... Many of the current developments in the biological sciences are a direct result of discovery of Watson and Crick of the structure of the genetic material of DNA (in 1953)."[2]

What's new about biotechnology is the ability of scientists to manipulate components of a cell and reproduce the results of that manipulation. "Biology will be to the 21st

research program," says Fair.

Policy Considerations

The Martin Administration has begun to refine its economic development priorities (see article on page 22). As the administration moves into its second year, how much will it—or should it—continue to stress high-tech efforts? Answering that question requires some awareness of four policy issues: the role of state-funded nonprofit groups, wage levels and job location, health and environmental risks, and applying microelectronics technology.

State-funded nonprofit groups. Some national analysts see the public-private partnerships involved in the Microelectronics Center and Biotechnology Center as models for the nation. This cooperative activity "was much easier for North Carolina to undertake because of the working relationships between universities, government, and industry developed through the Research Triangle," writes Ezra Vogel. "This pattern of relationships was extended not only within the triangle area but in other parts of the state as well. In Charlotte, for example, a smaller-scale research park was developed, and in Wilmington new cooperative relationships were established between academics and business, both drawing on the positive lessons from the original Research Triangle Park."[7] Visitors from around the world have come to the Research Triangle Park hoping to learn how such a model might work for them.

While these nonprofit groups have been perceived by some as ideal models, their organizational structure also raises a key policy question. Should the state channel tens of millions of dollars for high-tech recruitment and research to private organizations, outside the purview of traditional government budgetary and oversight

century what physics and chemistry were to this century," writes John Naisbitt in *Megatrends*. "The next 20 years will be the age of biology in the way that the last 20 years have been the age of microelectronics."[3]

Because cells can be altered, concern has arisen that organisms can be rearranged in dangerous ways. "With the arrival of bioengineering, humanity approaches a crossroads in its own technological history," explains Jeremy Rifkin at the beginning of his book, *Algeny*. "It will soon be possible to engineer and produce living systems by the same technological principles we now employ in our industrial processes. The wholesale engineering of life... raises fundamental questions." Rifkin identifies the critical concern as the day when " 'harmful' genetic traits can be eliminated from the fetus at conception."[4]

Many scientists, however, say that Rifkin exaggerates these dangers. "The majority of the scientific community believe that Rifkin's predictions concerning the wholesale manipulation of life are not well-founded," says Laura Meagher, vice-president of the N.C. Biotechnology Center. "He does not do justice to the scientific complexities involved."

Meagher, along with Rifkin and many others, point out the many benefits of biotechnology. In the pharmaceutical industry, bioengineering might revolutionize the production of antibiotics, enzymes, hormones, and vaccines. In the energy field, oil companies are experimenting with renewable resources as a substitute for oil and gas. In the chemical industry, scientists say that renewable plant and animal material might one day replace petroleum. Organisms might one day even do the work of miners, eating away salts in the ore and leaving pure metals.

Other important industries that might benefit from biotechnology are forestry and agriculture, which are important to North Carolina. To produce a stronger, faster growing pine tree, for example, botanists once required a 20-year growing period before being able to select the strongest trees for a new strain. Now scientists have the potential to develop new breeds much faster by manipulating the actual tree cells. The forestry industry, vital to many North Carolina farmers and corporations, might benefit enormously from such research breakthroughs.[5] Other areas of potential benefit include agriculture, marine life, and pharmaceuticals. One analysis "showed that a breakthrough in agriculture biotechnology in even a single area, such as corn, could return approximately $42 million in incremental farming profits over a 15-year period, in discounted 1985 dollars."[6]

The legislative study committee designated the N.C. Biotechnology Center as the lead agency for this research, "in consultation with appropriate groups, such as the universities, the Department of Commerce, the Department of Agriculture, and the commercial sector."[7] The funds, the report explained, "should be for the attraction and support of world-class researchers and for promoting interaction between universities and industry, bridging any gaps

continued page 80

procedures? The state has already spent more than $50 million for the MCNC. The state's flagship economic development policy, in terms of state monies, has been launched through private nonprofit corporations. The question for the future is how long should the state continue to underwrite two-thirds of the operations of the MCNC? Answering this question now is important because the legislature appears prepared to begin underwriting the N.C. Biotechnology Center in a similar fashion (see sidebar on page 78).

In addition, if MCNC research efforts result in scientific discoveries or products with significant commercial value, the revenues from sales would belong exclusively to MCNC. At some point in the future, MCNC conceivably could sell enough products to become financially independent—which would appear to be a desirable goal. That possibility raises the question of what rights the citizens of North Carolina have in the ownership of MCNC's research. Already, IBM, Northern Telecom, and other corporate affiliates use the MCNC facilities and products.

Wage Levels and Job Locations. The hopes tied to the microelectronics industry for new, high-wage jobs must be analyzed in the context of the type of jobs actually created by microelectronics companies and the location of those jobs. The hope of microelectronics recruitment depends on "how well a resulting supply of new jobs 'matches' the existing pool of unemployed workers in the state," says Michael I. Luger of the Duke University Institute of Policy Sciences and Public Affairs.[8] Luger and others point out the importance of distinguishing within this industry among skilled jobs (engineers), semi-skilled jobs (technicians), and unskilled jobs (assemblers). Moreover, Luger explains that factors such as the location of the Microelectronics Center and the need for a major airport will mean that most new microelectronics jobs will come to a seven-county "projected location zone" extending from Wake to Guilford counties.

Luger's study yielded three conclusions: 1) microelectronics, when considering all jobs, may not be a high-wage industry; 2) these companies are unlikely to spread far beyond the Research Triangle area; and 3) the demand for skilled and semi-skilled jobs in the "location zone" will outstrip the supply of workers since these counties have low unemployment rates.

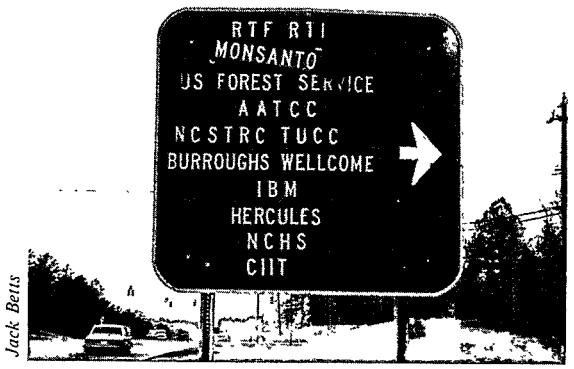
Health and Environmental Risks. Some

between them, so that, where appropriate, the results of basic research can quickly benefit industrial and agricultural development. In addition, there needs to be aggressive promotion of the state as an international center of excellence for biotechnology, both academically and commercially."

Calling itself a "nerve center" for the biotech business, the Biotechnology Center appears to have laid the groundwork for such an ambitious program through various activities. "The role of the Biotechnology Center is to catalyze research and commercial activity in biotechnology," explains a recent newsletter. "The center itself is not planning to establish an independent biotechnology research or training facility." The center's latest annual report groups its programs into eight categories. Five of the eight concern various specialized research activities, such as industrial scientists and engineers, biomolecular engineering and materials applications, and others which may never be in a legislator's vocabulary—the Monoclonal Lymphocyte Technology Center and the Polysacharide Materials Interdisciplinary Group.

A key difference exists between the structure of the Microelectronics Center of North Carolina and the Biotechnology Center. Specifically, the Microelectronics Center (MCNC) is an independent research facility *itself* and thus could be complementary—or competitive—with other university research programs. This independent research capability has caused tension among some university personnel, say legislative observers, because the MCNC now has the capability of setting research directions in a critical high-tech field independent of the directions being pursued through the UNC system. The Biotechnology Center, in contrast, does not intend to function as a research center itself but rather as a catalyst and coordinator for biotechnology research efforts. (See pp. 76-78 for more on the MCNC.)

The Biotechnology Center represents a potential national model. In a 1984 report to the U.S. Congress, the Office of Technology Assessment examined local efforts to promote the development of biotechnology in the United States. "The oldest and best known of these (local efforts) is the North Carolina Biotechnology Center," the report found.[8] But the materials introducing the center contain a heavy promotional tone, occasionally detracting from the genuine accomplishments of the



Jack Betts

analysts of high-tech industries have stressed the potential health risks for workers and for the environment caused by the wide range of chemicals used in the electronics industry, and particularly in semiconductor manufacturing.[9] In 1983, the N.C. Department of Labor reported that employee illness rates for North Carolina's electronics workers ran about three times higher than manufacturing workers as a whole. Workers create microcircuits on wafers of silicon using various chemical manipulations, and some of the chemicals such as the solvents trichloroethane (TCE) and 1,1,1, trichloroethane (TCA) can be harmful. The first big reported leak from a Silicon Valley, California plant was 60,000 gallons of discarded TCA, according to a 1984 report by the U.S. Environmental Protection Agency and other regulatory agencies.

Such reports indicate how this industry poses potential dangers to those who make the silicon wafers as well as those who live near such plants. Leaders in the field are aware of potential dangers and use elaborate protection systems. The General Electric Co., which runs a wafer production facility at the Research Triangle Park, has elaborate filtration machinery to help keep stray chemicals from contaminating the wafers, yet the GE plant uses some 120 chemical "products" regularly. Because technology in this field is changing so rapidly, keeping abreast of dangers to workers and the environment is difficult, even for the best trained people. Currently, there appears to be a shortage of technical expertise in the public sector to monitor this technology and to determine problems that might accompany certain recruitment strategies.

Applying Microelectronics Technology. The investment made in the MCNC, the Biotechnology Center, and other high-tech enterprises can enhance other economic development strategies. For example, the MCNC and the Textiles

four-year old center. "Among comparable technological centers nationwide, the center is unique in its commitment to an enlightened constitutency," boasts its own brochure.

Because biotechnology has come into the economic development vocabulary only recently, policy issues for state officials outside the scientific community are only gradually emerging. At the least, legislators and others following this state investment of funds for biotechnology research should:

- Monitor the activities of the N.C. Biotechnology Center, a private, nonprofit group, to be sure that: 1) its work complements (and doesn't duplicate) other economic development efforts, and 2) it oversees the biotech research being done in universities and other state agencies;[9]
- Assume responsibility for helping ensure that biotech research focuses on areas of potential economic benefits and does not stray into potentially harmful areas; and
- Continue to educate themselves and the public about what biotechnology is, and can become, and to what extent the N.C. Biotechnology Center really is a leader in this field.

—Bill Finger

FOOTNOTES

[1]In 1985, Republican Gov. James G. Martin deleted $5 million for biotechnology research from his proposed budget; the money had been included in the budget proposed by former Gov. James B. Hunt Jr. Martin's action prompted some partisan debate in the legislature, with leading Democrats considering moving the funding mechanism for the Biotechnology Center from the Department of Commerce (under the Martin administration) to the office of Lt. Gov. Robert Jordan, a Democrat. This action never came to pass, however, and the 1985 appropriation went to the Biotechnology Center via the Department of Commerce. (See Senate Bill 1, sections 2 and 132.)

[2]Frank B. Armstrong and Durward F. Bateman, "The Nature of Biotechnology," *Tar Heel Economist,* Agricultural Extension Service, North Carolina State University, November 1985, p. 1.

[3]John Naisbitt, *Megatrends—Ten New Directions Transforming Our Lives,* Warner Books, p. 73.

[4]Jeremy Rifkin, *Algeny: A New Work—A New World,* Penguin Books, Author's Note and p. 14.

[5]See "Small Woodlot Management," *North Carolina Insight,* Vol. 6, No. 1, June 1983, pp. 24-49.

[6]"Biotechnology Development: Legislative Research Commission," Report to the 1985 General Assembly of North Carolina, Dec. 13, 1984, p. 32 and appendix F.

[7]*Ibid,* pp. 22-23.

[8]*Commercial Biotechnology: An International Analysis,* Office of Technology Assessment, U.S. Congress, 1984, p. 26.

[9]In its report to the 1985 General Assembly, the Biotechnology Study Committee said that the N.C. Biotechnology Center "should prepare a cost-benefit analysis of its activities for FY 85-86 through FY 88-89 so that the economic benefit from the state's investment can be quantified" (p. 16).

School at North Carolina State University might work together to help bring the textile industry into a more competitive stance with Asian countries. Computer applications can be useful to many small businesses, and not just those in the computer field. Many of the efforts of the Technological Development Authority are channeled in this direction. The state's investment in microelectronics and high tech in general can affect far more than just training a university scientist or recruiting a semiconductor assembly operation.

Conclusion

If America is to compete in the international economy of the future, American high-tech businesses must take risks. But because the microelectronics era is still relatively young, even the strongest firms in the industry can, and often do, fall on hard times. In 1985, for example, the stock of GCA Corp., a semiconductor equipment maker, fell 70 percent. The current stresses on the electronics industry make such efforts as the MCNC an important resource for a beleaguered industry.

"There's lots of discussion going on as to how to pool resources to be more competitive with Japan, the major threat to the U.S. semiconductor industry," says Fair. "Joint programs like MCNC can take a look at problem areas that haven't been clarified yet and reduce some of the expense. Joint programs have an appeal to industries facing strong competition."

In addition to serving as a risk-free research base for companies, MCNC also strengthens university facilities and hence enhances the development of persons who will move into the private sector. This work with the universities, believe some analysts, may be the best strategy toward attracting the microelectronics industry.[10]

Helping to keep microelectronics jobs in this country and enhancing university training are noble goals. But these goals do not alleviate the need for carefully articulated, well-reasoned economic development strategies. Thus far, the debates over high-tech economic development policies have been more concerned with not missing out on the "second industrial revolution" than with employment dislocations, environmental hazards, or an analysis of precisely whom the high-tech era will benefit.

If the General Assembly continues to fund high-tech efforts and the Martin administration endorses this economic development strategy, the state needs much stronger technical and analytical planning capabilities to shape and coordinate long-range policy initiatives. Without such planning, the state will continue to rely on ad hoc, informal policy planning efforts and will delegate its responsibilities in this area to non-profit corporations.

Such discussions and scrutiny ultimately will benefit the public. If the high-tech field deserves to remain the flagship venture for state economic development, it may emerge from such scrutiny all the more deserving of state efforts—and will be less likely to lose its favored status when challenged by the newest fads in the field.

FOOTNOTES

[1]Ezra F. Vogel, *Comeback—Case by Case: Building the Resurgence of American Business,* Simon and Schuster, 1985, p. 258.

[2]*Ibid,* p. 260.

[3]Stuart Rosenfeld, "Sowing the Seeds for Growth—State Support for R&D," in the Southern Growth Policies Board's "Analysis of Emerging Issues" series, December 1985, pp. 8-9.

[4]Kirsten Nyrop, "North Carolina's Hopeful Quest for Slice of the High-Tech Pie," *North Carolina,* magazine of N.C. Citizens for Business and Industry, February 1984, pp. 14-24.

[5]For more on the beginnings of the MCNC, see the six-part section on microelectronics, especially "Easy Angling in Legislative Waters," in *N.C. Insight,* Vol. 4, No. 3, September 1981, pp. 18-22; and Dale Whittington, editor, *High Hopes for High Tech: Microelectronics Policy in North Carolina,* especially chapter 1, University of North Carolina Press, 1985.

[6]The MCNC Board of Directors includes the president of the Research Triangle Institute, one representative of state government, six citizens appointed by the governor, the president of MCNC, and the chancellors of the five universities involved (UNC-Chapel Hill, Duke University, North Carolina State University, North Carolina A&T State University, and UNC-Charlotte).

[7]Vogel, p. 260.

[8]Michael I. Luger, "The Economic Hope of the Microelectronics Industry—Promises and Policies," *N.C. Insight,* September 1981, pp. 27ff. See also Luger's "The States and High-Tech Development: The Case of North Carolina," Institute of Policy Sciences and Public Affairs, Duke University, September 1984; "Employment and Earnings in the Semiconductor and Electronics Industry: Implications for North Carolina," by Gregory B. Sampson in *High Hopes for High Tech, ibid.;* and "The N.C. Microelectronics Industry: Consequences for Local Labor Market and Implications for Job Training" by James Stein, a paper developed for the Department of Natural Resources and Community Development, 1982.

[9]See Monte Basgall, "High-Tech Hazard," a three-part series in *The News and Observer* of Raleigh, August 4-6, 1985, p. 1A; Joseph T. Hughes Jr., "A Healthy Future for North Carolina?" *N.C. Insight,* September 1981, pp. 33-38; and "Computers Can't Save North Carolina," *The Independent* of North Carolina, June 24, 1983, p. 1.

[10]See "University and Industry Cooperation in Microelectronics Research" by F. Dana Robinson in *High Hopes for High Tech, ibid.*

Jack Betts

Data Processing students train at Nash Technical College.

The Job Training Spectrum: From the Classroom to the Boardroom

by Jack Betts

Through a variety of programs and projects that cost state and federal taxpayers hundreds of millions of dollars each year, the state of North Carolina sponsors a dizzying array of educational and job training programs that bear on economic development in North Carolina. Nearly every state agency is somehow involved at least indirectly—from the state's kindergarten programs to the Department of Correction, from Cultural Resources to Administration. This article, however, examines the roles of those state agencies most directly involved in vocational education and job training. It focuses on the Department of Community Colleges, the Department of Labor, and the Department of Natural Resources and Community Development—all major participants in training the workers who will hold the jobs of tomorrow.

Nothing more graphically illustrates the point that economic development, education, and job training go hand-in-hand than the case of a 56-year-old Alamance County man who now lives and works in Raleigh. A dairy farmer's son who has tried his hand at several different professions, including military intelligence, farming, teaching, and state government before entering a new profession late in 1983, this veteran of the job market finds himself lacking a key skill much in demand as North Carolina's and the nation's economies continue to change. So he did what hundreds of thousands of others do when they need a new job skill: He decided to attend a special class at Wake Technical College south of Raleigh so he could learn how to operate computer terminals.

His name? Robert W. Scott, former governor of North Carolina. His job? President of the N.C. Department of Community Colleges. His salary? $73,000 a year. His job skills? Varied—and soon to include the ability to converse with a computer and to have access to the same information his staff does.

Bob Scott's case is hardly an isolated one. Instead, it is becoming more and more the norm as employers and workers discover that education and job training is a never-ending process of learning and training and retraining to meet the demands of new jobs and new responsibilities. Most North Carolina workers will never command Scott's salary or work their way up the corporate and public ladders to his heights—but with good public education and training programs, they have a chance to make a decent living and find their place on the economic ladder.

But do the state's programs for public education—including vocational education and community colleges—and state and federal job training programs provide what the state's workers and the state's employers need? How effective are these state programs? What role do they play in North Carolina's evolution from its somnolent Rip Van Winkle economy of the 19th Century to the transition economy of the late 20th Century?

State programs for economic development in North Carolina can be viewed as one lengthy continuum, and education and worker training programs occupy a healthy section of that continuum. It begins with the state's elementary and secondary schools and branches out into the 16-campus public university system and the 58-campus community college system. It also finds itself spread over a variety of state agencies, including the Commerce Department, the Labor Department, the Department of Natural Resources and Community Development, the Department of Public Instruction, and the Department of Community Colleges. And that's only the list of state agencies with *direct* responsibility for vocational education and job training.

The job is enormous, and the responsibility for programs is spread out all over the economic development spectrum. Yet nearly everyone concerned with economic development keeps pointing to one central, underlying problem: North Carolina still doesn't do a good enough job teaching its students to read and write so they can find and hold a good job.

In an interview with *Insight*, Bob Scott reviewed the statistics. About 1.5 million adults in North Carolina never finished high school. About 835,000 adults haven't finished the eighth grade, and about the same number can't read and write at a minimal, functional level. About a third of the state's school-age students will drop out before graduating. Only two other states—Kentucky and South Carolina—have worse records than North Carolina in adult literacy.

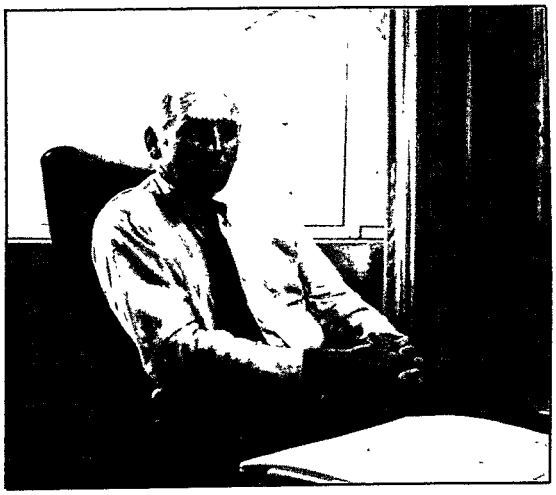
"This doesn't say very much for us, but it does say we've got a big economic development problem," says Scott. "There are that many people out there who cannot even fill out an application form. The chief executive officers of many companies are telling us that they want employees who, at a minimum, have basic literacy skills."

Scott's view is widely shared. Christopher Scott, president of the North Carolina AFL-CIO, puts it this way: "Job training programs are important, but what we *really* have to do is

Robert W. Scott, president, N.C. Department of Community Colleges.

Jack Betts is associate editor of North Carolina Insight.

Jack Betts



Harvey Haynes, president of Asheville-Buncombe Technical College.

buckle down with our public education system and make sure our kids can read and write."

The state has committed vast resources in recent years to improve the literacy rate and enhance the effectiveness of public schools. Annual testing and high school graduation competency tests have been instituted to monitor progress, but the final proof is not in yet. In the meantime, the public schools and community colleges, primarily, continue to offer literacy programs while at the same time providing basic vocational education.

High school vocational education programs offer courses designed to prepare students for jobs in certain trades and businesses, such as automotive mechanics, woodworking, and clerical and stenographical jobs. Thousands of high school graduates each year find jobs on the strength of having completed these courses, but many other thousands find that the demands of the job market require advanced training. And in most cases, they turn to their local community colleges and technical institutes for that training.

The Community College: More Than Just a School

Shortly after World War II, when thousands of veterans were flooding the job market, there was talk of finding a better way to retrain workers. But it was not until 1957 that several Industrial Education Centers were established to train workers for jobs. Set up as part of the public school system, they trained high school students during the day and adults at night. By 1963, these centers had been so successful that the General Assembly adopted the Community College Act to set up a series of campuses offering two-year college parallel, technical, vocational, and adult education programs.[1] The system's mission, redefined by the 1969 General Assembly, was "to be the offering of vocational and technical education and training" for adults.[2]

To that end, community colleges spend $177 million annually to prepare students for technical and trade jobs. More than 600,000 students are enrolled either full- or part-time at the 58 institutions, and the community college administration proudly points out that one of every five high school diplomas or equivalency certificates is earned through a community college. A number of community colleges offer college transfer courses, and some have been accused of aspiring to become liberal arts colleges. (Indeed, when Guilford Technical Institute got legislative permission in 1983 to change its name to Guilford Technical Community College, some legislative

wags predicted it wouldn't be long before the school would be back for permission to become Guilford Technical Community University.) But Scott estimates that no more than 7 percent of his department's budget is spent on college-transfer courses; the remainder is dedicated to skill training and economic development.

Asheville-Buncombe Technical College: The Hills Are Alive . . .

Consider the case of A-B Tech, as the school is known in western North Carolina. Situated on a hill overlooking the Biltmore Estate, A-B Tech was one of the original Industrial Education Centers. Throughout its life, it has focused on job training, not college transfer programs.

The school offers the usual fare of basic voc-ed courses and a few unique ones as well. Among them is a curriculum in hotel-motel management, and students work at A-B's own motel on campus, Mountain Tech Lodge, where state officials from the lowlands often stay when on business in western North Carolina.

A-B Tech President Harvey Haynes is a native of the region, and he remembers a day and time where there were few jobs to be had—and nothing in the way of job training. "When I was growing up in Western North Carolina, there were two jobs you could get," says Haynes. "You could become a teacher, or you could go to work at the American Enka plant." Haynes became a teacher, but now he finds that his duties go far beyond teaching and administering. Now he has

The N.C. Department of Commerce promotes the ability of the state's Community College system to train workers for specific jobs when they don't have the communications and technical skills they need. This advertisement ran in many national publications in recent years.

also become an integral part of the economic development effort in Buncombe County and other nearby counties in the mountains. "We're into it up to our ears," says Haynes.

The recruitment of one industry in particular illustrates the role a community college can play not only in educating potential workers, but also in helping bring in a new plant or employer. In 1982, a group of midwestern plant officials showed up in Asheville one day to look around for a new site. Haynes, as a member of the local economic development team, was summoned to tell this group—still unnamed—what A-B Tech could provide: training facilities, instructors, courses of instruction for an initial work force, and continuing education and specialized training—in-plant or on-campus—as the needs of the company progressed through the years.

Haynes promised much, but no more than he could deliver. He knew how competitive the marketplace for new plants could be. "The states in the Southeast will just about kill one another trying to get new industry. It's competitive, it's mean, and it's vicious," he says.

The early commitment paid off. The group of plant officials were from RCA's music division, and they sought a location to build a new plant for the company's entire cassette tape production. They chose a site on U.S. 19, a four-lane highway just a few miles north of Asheville, and built a $9 million plant. There, in three shifts each day, 275 workers produce up to 75 million cassette tapes each year. Former farmers, ex-millworkers, and newly graduated students—each trained at special sound-proof laboratories built at A-B Tech for the process—record scores of cassette tapes at once from huge master recordings shipped to the plant from studios in New York. On a given day, the plant's workers might be producing tapes of Dolly Parton, Whitney Houston, Juice Newton, The Judds, Lee Greenwood, or any of the other artists on RCA's label. In addition, the plant does contract cassette work, recording music for such companies as Reader's Digest's music division.

Ricky Baker loads "pancakes"—reels of cassette tape that ultimately will be cut into 40 individual cassettes—before duplicating from master tapes at RCA's Weaverville plant.

Jack Betts

And RCA is delighted with its new work force. Dave Pfeiffer, the plant's personnel director says, "These people are industrious, conscientious and independent. I learn something new from them every day."

In the past 17 years, A-B Tech has helped recruit 52 new plants to Buncombe County. But the problem, Haynes says, is that the county is also losing certain kinds of jobs, including textile jobs, "It's a struggle just to break even" on the number of jobs.

Haynes hopes to get ahead by introducing new curriculum offerings that will anticipate the continuing transition and produce workers ready for new high-tech jobs. One such offering, to begin in 1986, will be a tool design program. Few schools east of the Mississippi offer such a program, yet tool designers, draftsmen, and tool-and-die makers are in critically short supply in this country, particularly the Southeast. Haynes figures that A-B Tech can supply a hefty portion of these engineering technicians needed in this region for years to come. "Engineering personnel are more critical to the development of Western North Carolina than railroads were," says Haynes.

Training new workers is not A-B Tech's only goal. The area has lost hundreds of textile jobs in recent years, and Haynes is constantly on the lookout for ways to retrain them for new jobs. It's not easy. "We have concentrated on retraining for ex-textile workers," says Haynes. "The trouble is they often need a short-term course, because they have families and house payments and children to feed. They won't respond when we ask them to enter a two-year course, so we do what we can, such as giving them a basic electronics course in six weeks." That allows workers to learn the basics of a new skill, find a job fairly quickly, and get on with their careers.

Jack Betts

Ruth Clark checks master tapes before recording at RCA's Weaverville cassette tape plant.

Industrial Recruiting Is Not For Every Campus

Less than 100 miles to the east lies Western Piedmont Community College, set amid the green rolling hills of Burke County. There, Jim Richardson presides over a campus where 2,400 students pursue careers in nursing, law enforcement, computer operation, business technology, and the like. But unlike Asheville, where A-B Tech is an integral part of bringing in new industries, Western Piedmont does not get involved in industrial recruiting—because there isn't any. The county hasn't recruited a new manufacturing plant in years. Instead, Burke County—which also has lost textile jobs as well as some furniture manufacturing jobs—relies on Western Piedmont to train workers for existing plants that expand and to supply workers to new businesses in the area.

"In the last four years, we've started 18 new occupational programs," says Richardson. Western Piedmont, for example, just a few years ago had but one introductory course in data processing; now it has a two-year degree program that is as popular with students as it is with potential employers who are lining up to hire them. But every success has its price. Western Piedmont is paying a premium to get and maintain the advanced computer machinery to train its workers.

"Setting up so many new courses in high technology at one time is expensive," explains Richardson. "We are not meeting our equipment needs now because the maintenance and cost of state-of-the art equipment is just unreal." In the past couple of years, says Richardson, Western Piedmont has spent nearly $400,000 on up-to-date equipment. "The trouble is, within two or three years, that equipment will be out-of-date and we will have to replace that."

Western Piedmont, like A-B Tech, also tries to enroll workers whose jobs have been lost due to plant closings. But retraining these workers, says Richardson, is difficult, particularly the older ones who have held only one job before. Western has developed a program to get non-working adults into the job stream. The school's Human Resources Development Program aims at citizens who may be on welfare or are jobless, teaches them a basic skill, and "gets them off of welfare and into a job ,where they are paying taxes. It's an intensive program, and often these people are scared to death at first, but it's working," says Richardson.

High Tech in Tall Cotton

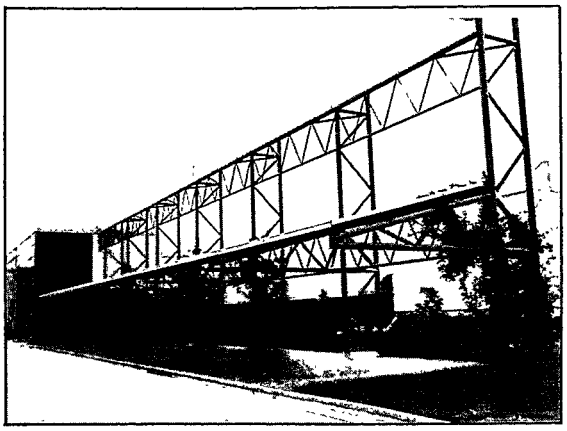
Down on the edge of the coastal plains, where tobacco and cotton fields once dominated the landscape, Nash Technical College finds itself serving as a bridge between the old and the new. With its more than 2,000 students—mostly female and mostly in their 20s, like most other technical institutions—Nash Tech fulfills dual roles of training workers for traditional vocations and for non-traditional ones as well. A case in point is the ultra-high-tech Consolidated Diesel plant on U.S. 301 near Rocky Mount. Henry Odom, Nash Tech's director of industry services who helped recruit Consolidated, says the company threw a new twist into the usual recruiting formula. Consolidated *did not want* trained diesel workers.

"Millwork ain't easy, millwork ain't hard, millwork it ain't nothing, but an awful boring job....

"So may I work the mills, just as long as I am able,
And never meet the man, whose name is on the label."

—"Millworker" by James Taylor

Jack Betts



Consolidated Diesel's modern, high-tech assembly plant in Edgecombe County, where production workers average $9.25 in hourly wages.

"They wanted to do a new theory of cross training, where everyone, including the plant manager and the secretaries, will know how to put that engine together. They didn't want journeymen diesel assemblers," says Odom. After looking at 145 different communities, Consolidated chose Rocky Mount, largely on the promises of Gov. James B. Hunt Jr. to move heaven and earth—almost literally. Some of the promises involved moving a group of families whose homes were too near the plant, and relocation of a sawmill. But one of the promises, and one which may have sold Consolidated on Rocky Mount, was to build a satellite campus of Nash Tech directly across the highway from the new plant. Now, 1,200 workers average $9.25 an hour assembling components for diesel engines—and many of them were trained across the street at the satellite campus of Nash Tech.

But even this modern, high-tech, high-wage plant has the same sort of problems typical of the state's work force at large: Its level of education was insufficient for the job at first. Odom relates the story of one plant worker who was promoted to a supervisory position—and who promptly quit because he felt he did not have enough education to handle the job. Nash Tech instructors took him under their wing in an intensive course that gave him the written and verbal skills, and the confidence, to do the job. Now the worker is back in the plant and proving to be one of Consolidated's best foremen, says Odom. But "plant managers are still pushing us to make sure that all their workers can read and write."

Odom and Reid Parrott, president of Nash Tech, are justifiably proud of the impact their institution has had on economic development in Nash and Edgecombe Counties. Plants there are on the cutting edge of modern technology. A new Bendix plant makes fuel control system parts for the Navy's F-15 and F-16 fighter jets; another company, Morrison-Knudsen, is fabricating parts for the rebuilding of New York's Holland Tunnel. But both Odom and Parrott—like their counterparts at A-B Tech and at Western Piedmont, say one of the keys to continued success in training workers for jobs is adequate equipment. "That is the big thing. We're going to need to keep up with changes in equipment because of changes in technology," says Parrott.

These case studies are indicative of the community college system's role statewide in recruiting industry and in training workers for those plants. But the system's general role in economic development is greater than that. Programs include:

- Small Business Assistance Centers at 20 of the campuses (for more, see article on small business, p. 53), at a cost of $600,000 annually.
- Cooperative Skills Training programs, which provide about $1.1 million for customized training programs to traditional industries through 19 campuses.
- The New and Expanding Industry program, also providing customized training to help new or expanding firms train workers and open new plants, at an annual cost of about $4.5 million.
- The N.C. Vocational Textile School in Belmont—the forerunner of the community college system—which was established in 1946 and provides skill training for the textile and apparel industries, at a cost of about $500,000 a year.
- The general Technical and Vocational Education program, through which the system provides the bulk of its training, at a cost of more than $177 million.
- And the system's college parallel course curriculum, enabling students to transfer to four-year colleges into baccalaureate degree programs, at a cost of about $14.4 million annually. This program also contributes to the state's economic development.

How Effective Are These Programs?

Yet, for all the millions spent, are these programs effective? That depends upon who's asked. For instance, the AFL-CIO's Christopher Scott is underwhelmed by the efficacy of the community colleges' efforts. "The community colleges, it seems to me, are not really doing a thorough job," he says. "I've not done a thorough study, but it seems there's a whole range of involvements by the community colleges that are not really appropriate to the job of vocational education." Scott referred to such program offerings as college transfer courses and hobby courses

(which now must be self-supporting and not financed by tax dollars), but he was also critical of the training some workers get. "It seems to me that the community colleges should be teaching workers a *skill,* not teaching them a *job.*"

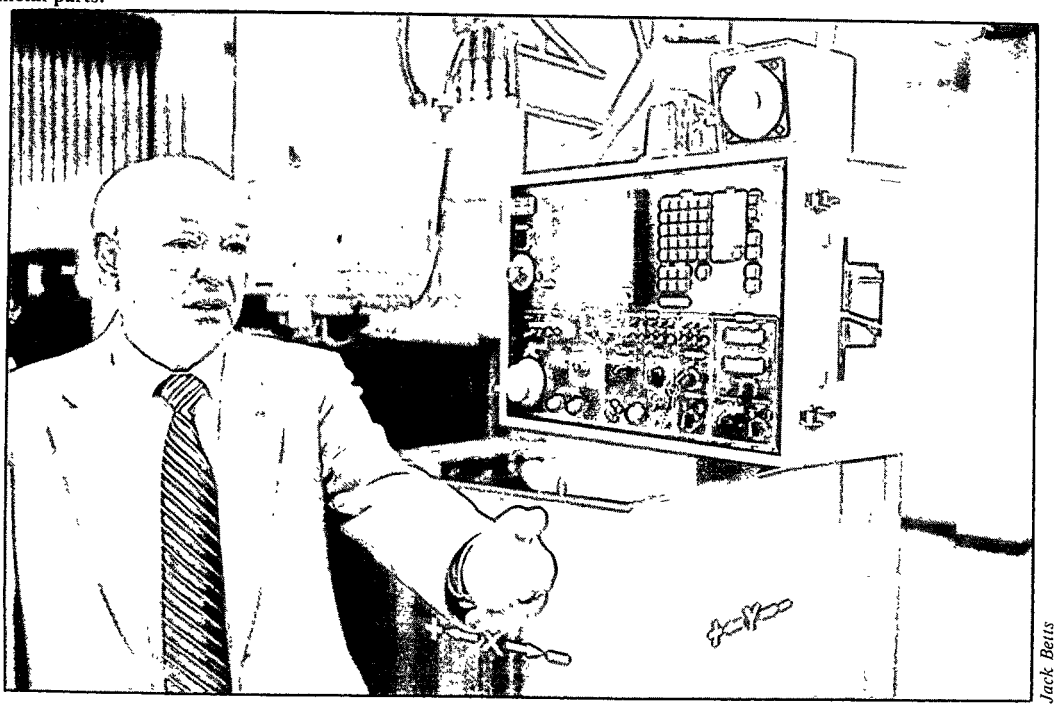
But the department itself believes it has done a good job of training its students for vocations and careers. Officials base their beliefs on such yardsticks as frequent follow-up surveys of both employers and former students, which generally have shown high employer satisfaction with their workers and high student satisfaction with their course of study. The most recent such surveys,[3] released in January and February 1986, found that 89.2 percent of the former students rated their courses of instruction as good or very good, and the employees' supervisors indicated consistently high marks for community college students who had entered their work forces.

However, the studies, conducted in 1985, also found that the community college students were making only $6.90 per hour in average wages. (By comparison, the state's average *manufacturing wage* is $7.32 an hour.) And students also said that the department's job placement system needed improvements.

State officials also point with pride to the passing rate of students on licensing examinations. Passing rates for nursing students from community colleges are usually as high or higher than the rates for students at four-year private and public colleges, says Dr. Vercie Hardee, coordinator of nursing occupation programs for the department. In 1985, for instance, nursing students from baccalaureate programs averaged an 84 percent passage rate, while students from associate degree programs at community colleges averaged a 92 percent passing rate. Similar statistics were recorded in 1984 (87 and 93 percent, respectively) and in 1983 (85 and 92 percent.) In addition, seven community college nursing programs in 1985 had perfect—100 percent—passing rates on state nursing examinations. Not one of the four-year college programs—public or private—had a passing rate higher than Atlantic Christian College's 94 percent; UNC-Chapel Hill had a 93 percent passing rate.

Still, the need for a critical assessment is obvious, and in 1985 the General Assembly directed that an independent consulting firm make a study of the system to determine how well it has functioned, what its successes and failures have been, and what changes ought to be made—particularly in regard to current methods of financing the system.[4] The results of that study, which is being conducted by the Research Triangle Institute, will be reported to the 1986 short session of the General Assembly when it convenes in June. That study might well echo what other community college studies have found, such as a 1977 study recommending that the system, after a decade-long expansion boom, should focus its attention on bettering the quality and efficiency of its courses of curriculum and general programs.[5] The RTI study may measure whether such improvements have occurred.

Henry Odom at Nash Technical College's satellite campus, with state-of-the-art milling machines for the precision fabricating of metal parts.



Jack Betts

Questions also remain whether the community colleges are preparing workers for the right kinds of jobs. For instance, computer and high-tech related job courses are popular with students, but a recent study by UNC-Charlotte economist John Connaughton found that there is a pressing need for more traditional occupational workers. Connaughton's research discovered an annual need for more than 10,000 trained food preparation workers, nearly 8,500 secretarial and clerical workers, and more than 1,500 skilled carpenters, among other job classifications.

"What this study seems to indicate is that our state is beginning to feel the backlash of our emphasis on high technology," says Scott. "In most of our institutions, enrollments are up in high-technology programs, but declining in traditional occupations programs. We can't all be computer programmers."

In February 1986, Scott launched a broadside at the state's vocational education program: "The educations that most of North Carolina's young people are getting today are simply not preparing them for the world of work." There may soon be "an inadequate number of individuals trained to repair our cars, type our letters, operate our bulldozers, or repair our office equipment," he added.

Scott proposed an initiative to increase enrollment in vocational education programs. To be called the "two plus two" plan, Scott said students interested in vocational or technical careers should be encouraged to begin learning the fundamentals in the last two years of high school and continue that training for up to two or more years in a community college.

The General Assembly recognized the strong link between education and job training in 1984, when it authorized up to $200,000 to match funds under the federal Job Training Partnership Act to augment state training programs.[6] Then, in 1985, the General Assembly sought to redefine state job training policy with passage of the North Carolina Employment and Training Act.[7] The act requires that "all federal, state and local government resources provided for employment and job training programs be coordinated to effect an efficient employment and training service delivery system."

Cutting the Job Training Pie

In order to implement that policy, the state agencies responsible for a piece of the economic development pie began meeting in late 1985 so that each agency would understand exactly what size slice of the pie every other agency had. This Economic Development Committee was to develop a proposal for integrating the state's existing job training programs into a cohesive economic development policy, and forward that plan to the General Assembly in the spring of 1986. The Joint Legislative Commission on Governmental Operations was given the task of reviewing the plan before its implementation.

The purview of the interagency committee extended beyond community colleges. It also included major responsibilities in job training by the N.C. Department of Labor, which administers apprenticeship and pre-apprenticeship programs, and the N.C. Department of Natural Resources and Community Development's Division of Employment and Training, which administers the federal Job Training Partnership Act (JTPA).[8]

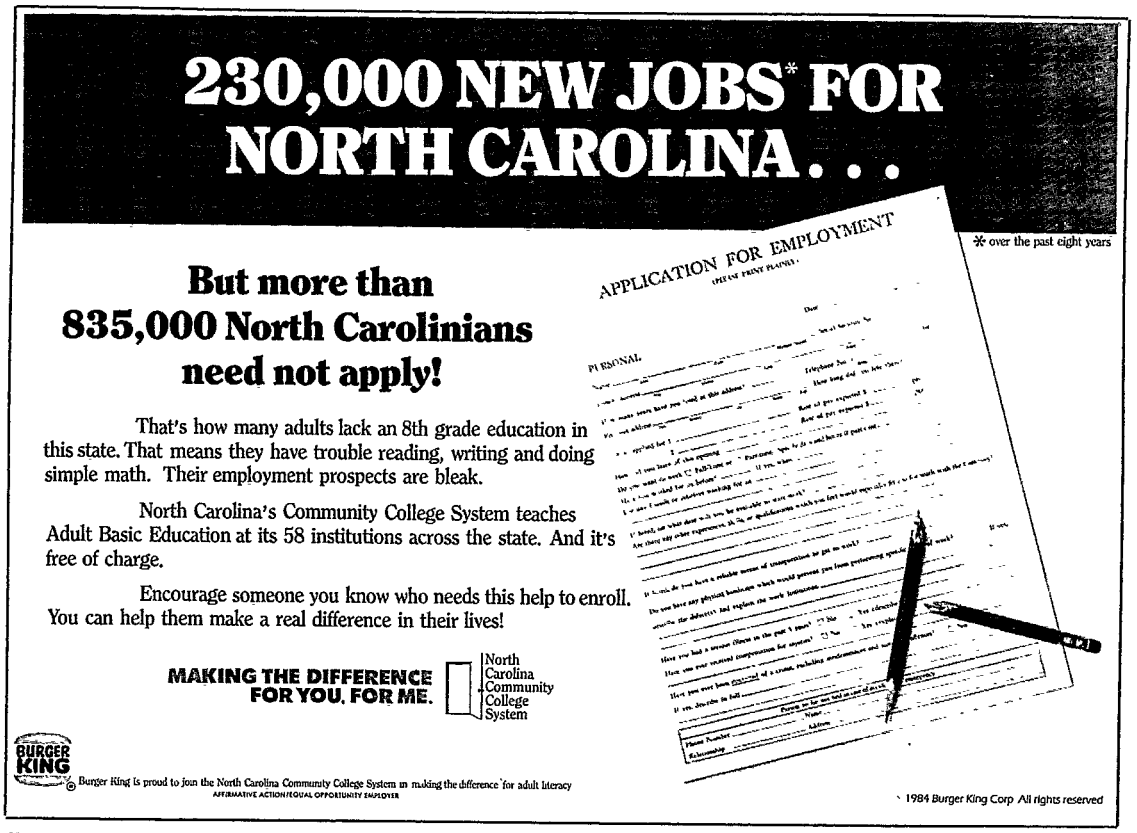
The Labor Department, for instance, has oversight for four separate programs in pre-apprenticeship training funded by the JTPA. They include:

- The Pre-Apprenticeship training program, which subsidizes training for economically deprived workers and which helps them prepare for entry into trade training programs. The aim of the program is to encourage the poorest of unskilled and unemployed citizens to enter a job training program.
- On-The-Job training, in which an employer willing to take on a disadvantaged, unskilled worker for a predetermined period can get reimbursed for up to 50 percent of the wages the worker earns while in apprenticeship.
- On-The-Job Institutional, a subsidiary of apprenticeship training which requires the worker to also spend a certain amount of time in the classroom training in the fundamentals of the occupation.
- And special job training projects, called Demonstration Projects, which can be specially tailored to the needs of the job market and the potential worker.

These pre-apprenticeship programs, which help train about 1,000 workers annually, should not be confused with the Labor Department's regular apprenticeship programs. These programs are not financed by the JTPA, but rather are paid for by private industries willing to take on apprentices. The Labor Department's sole role in apprenticeship training is to certify the programs of each employer.

The state Department of Labor, says Pre-Apprenticeship Director Joe Jenkins, "seeks to predict growth industries and growth occupations. One advantage we have over academic institutions is that we can gear up in a hurry and be ready with an apprenticeship program long before a school can develop a curriculum."

Jenkins says the department has had good success training workers for high-wage jobs in



The N.C. Community College System engages in cooperative campaigns with private businesses to encourage those who haven't completed high school to return to the classroom. This placemat was used by Burger King to stimulate interest in adult literacy programs.

such occupations as elevator mechanics, and says future good-paying jobs lie in such trades as heating and air conditioning installation and service. Those trades, he said, make it possible "for those who don't want to go to work for a big company to make a pretty good living and have a pretty good business for themselves."

For all the department's successes, there are not that many workers in the apprenticeship program—about 3,000 in 1985. One reason may be the state AFL-CIO's lack of enthusiasm for Labor's apprenticeship programs. The labor unions, disenchanted with the Department of Labor on a variety of subjects, oppose Labor Commissioner John Brook's efforts to speed up apprenticeship training by shortening the period of training. Christopher Scott, one of the leading critics of Labor's programs, says not enough time is being spent any more to train master tradesmen. "The whole approach to apprenticeship training ought to be to put in time and work with a master craftsman, not just to learn how to jump through the hoops," says Scott.

Jenkins, however, points out that as the state's economy and labor market demands have changed, the structure of training programs also have had to change, including training workers to be proficient at a job, though perhaps not to be experts. For instance, the Labor Department is gearing up to train workers for jobs involving fiber optics, a training program designed to place workers in jobs where they can continue to learn as time goes by. "We can't do it (train workers) for as long as it might take to produce a craftsman, but we can get them well on their way," says Jenkins.

Two other agencies also handle certain portions of job training programs funded by the Job Training Partnership Act. They are the Employment Security Commission, an agency of the state Department of Commerce, and the Employment and Training Division of the Department of Natural Resources and Community Development. In all, $62.4 million comes to North Carolina for job training under the JTPA, and the money is disbursed through a variety of agencies, institutions, and contractors.

The Employment Security Commission, for instance, coordinates a dislocated workers program, placing workers whose jobs have been lost in industry transition into job training programs aimed at starting them on a new career. But the bulk of JTPA money is administered from NRCD's Employment and Training Division, which contracts with Private Industry Councils throughout the state to operate job training

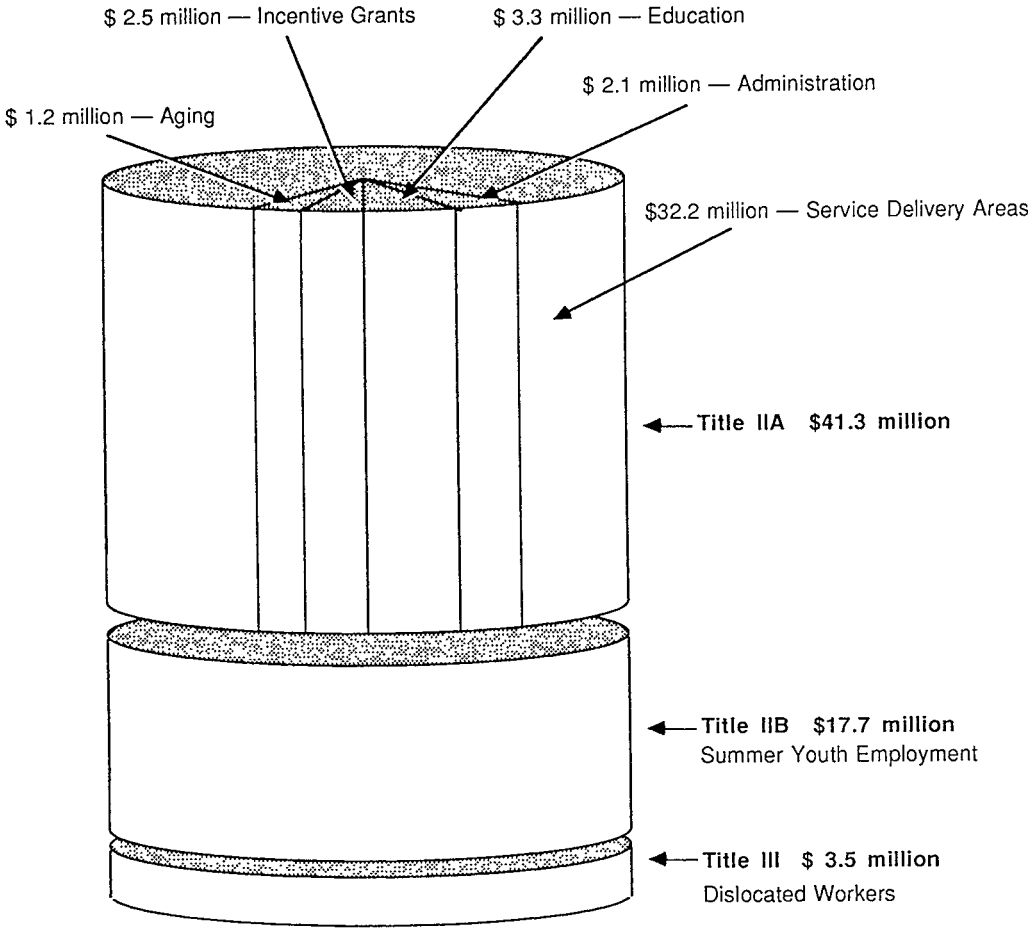
programs. There are 11 urban Service Delivery Areas. In addition, areas comprising 82 of the state's counties outside the 11 service delivery areas are dispensed funds through the Rural Service Delivery Area, supervised by the Rural Private Industry Council.

The JTPA—which replaced the old Comprehensive Employment and Training Act Program (CETA) in 1982—was designed to place more emphasis on private industry involvement in, and responsibility for, training workers. The Service Delivery Areas can provide or contract for such services as job search assistance, job counseling, remedial education, basic skills training, on-the-job training, and advanced career planning. The JTPA's chief aim is to train individuals to perform jobs, but the act itself is often looked upon in North Carolina as a strategy for economic development. "We have not given proper attention to models in other states that accomplish both objectives," says Sanford Shugart, a vice president of the Department of Community Colleges.

Shugart says a variety of responses exist that could be used to tie JTPA to economic development programs. One such area is making sure that JTPA programs provide training for documented occupational needs. Commerce's Employment Security Commission "has made great strides in doing that the last couple of years," Shugart says.

But two other problems exist with JTPA, he adds. One is that the JTPA was set up to emphasize short-term training programs. The effect is

Figure 1. Job Training Partnership Act Funding By Title and Program, FY 1985-86



Source: Employment and Training Division, N.C. Department of Natural Resources and Community Development.
Cake Chart Art by Carol Majors

that workers often do not get enough training, and often wind up back in unemployment lines. If JTPA were amended by Congress to provide incentives for longer-term training, the ultimate impact on economic development would be better because workers would be more highly skilled.

The second, Shugart says, is that most disadvantaged JTPA trainees cannot afford to enroll in long-term training programs because, unlike recipients under the old CETA, they do not receive stipends while in training. "We need to find a new mechanism to provide stipends so these trainees can have some income while in a longer-term training program of six months up to two years," says Shugart. "The emphasis ought to be on gaining skills that are now marketable and that will remain marketable over the long term."

The unknown factor in job training programs sponsored by the federal government in recent years has been this question: Will funds be cut? And the answer for JTPA, just as it was for CETA a few years ago, is yes. Because of the congressional budget cuts mandated under the Gramm-Rudman-Hollings Act passed in late 1985, NRCD officials are bracing for a huge cut in the amount of JTPA funds available. James Ross, director of the Employment and Training Division, estimates there will be a cut of up to 25 percent in North Carolina's JTPA allocations, at least partly because the state's unemployment level is already low.

In the current fiscal year, North Carolina is receiving $62.4 million under JTPA. The lion's share of that is for Title IIA funds amounting to $41.3 million, including $32.2 million for training economically disadvantaged youth and adults; $2.1 million for administration at the state level; $1.2 million for training older adults; $3.3 million for community colleges and public school educational training programs; and $2.5 million for incentive grants and technical assistance to Service Delivery Areas (see Figure 1). In addition, Title IIB provides another $17.7 million for summer youth employment and training programs, and Title III of JTPA provides nearly $3.5 million for training assistance to dislocated workers whose jobs have been lost.

The Employment and Training Division of NRCD supervises the dispersal of the JTPA funds to scores of contractors and subcontractors who work with local Councils of Government, Lead Regional Organizations, Community Colleges, Chambers of Commerce, and private industries to train those who have neither jobs nor skills to perform a job. For instance, the Durham Private Industry Council last year worked with Research Triangle Park industries such as Northern Telecom, Sperry-Rand, Mitsubishi, and General Electric Semiconductor, and with Durham Technical Institute and the Durham Chamber of Commerce to train 15 students in electronics manufacturing.

The students—some of them dislocated workers who lost their jobs when plants closed, and others who began the course unskilled and jobless—were recruited by the Commerce Department's Employment Security Commission and trained at Durham Technical Institute, a part of the community college system. Their courses were paid for by JTPA funds, administered by the Department of Natural Resources and Community Development. But much of the work was performed by private industry—the Durham Chamber of Commerce and the Research Triangle companies. The students spent 180 hours in the classroom, the equivalent of six months' on-the-job training, and were certified to hold permanent jobs at good wages. Most found work right away.

In 1985, 52,102 people enrolled in JTPA training programs in North Carolina (15,507 of them in summer youth employment programs), according to the Division of Employment and Training at NRCD. Of those enrolled, 68 percent—or about 35,700 persons—actually found jobs, the division said.

When the Gramm-Rudman-Hollings Act takes money out of the federal budget for financing JTPA programs in North Carolina, the number of such success stories will decline. That brings up yet another difficult policy question for the N.C. General Assembly to address, perhaps as early as the 1987 regular session. At this critical juncture in the state's economic transition, can North Carolina afford to make up millions of dollars in lost job training funds? And conversely, can North Carolina afford *not* to commit such resources to train workers for the jobs they will need if North Carolina is to prosper?

FOOTNOTES

[1]Chapter 448 of the 1963 Session Laws, sec. 23.

[2]Chapter 562 (HB 359) of the 1969 Session Laws, sec. 1.

[3]"Follow-up Study of 1982-83 Students," N.C. Department of Community Colleges, January 9, 1986, and "Follow-up Study of Employers Hiring 1982-83 Graduates," N.C. Department of Community Colleges, February 13, 1986.

[4]Chapter 479 (SB 1) of the 1985 Session Laws, sec. 66. See also Chapter 757 (SB 182), sec. 31.

[5]"Total Education: The Duty of the State," A Report of The Commission on Goals for the N.C. Community College System, N.C. State Board of Education, March, 1977.

[6]Chapter 1034 (HB 80) of the 1983 Session Laws (2nd Session 1984), sec. 18.

[7]Chapter 543 (HB 1333) of the 1985 Session Laws.

[8]Job Training Partnership Act, P.L. 97-300, October 13, 1982.

Selected Resources

Many valuable resources appear in the footnotes to the articles in this issue of North Carolina Insight. *Other background references include the books, reports, pamphlets, and organizations listed below.*

General Resources

"America's Changing Economic Landscape," by James Fallows, *The Atlantic,* Vol. 255, No. 3, March 1985, pp. 47-68. A stimulating discussion of the national economy in transition, with mention of many national studies including the 1980 President's Commission for a National Agenda for the Eighties.

Business: North Carolina magazine, published monthly by Shaw Communications, Charlotte, N.C. See especially the May 1985 issue with a special section on "North Carolina's Economy."

Employment Security Commission publications, especially the annual book-length report, "North Carolina Labor Force Estimates," and the monthly newsletter, "State Labor Summary."

"Follow-up Study of 1982-83 Students," N.C. Department of Community Colleges, Jan. 9, 1986, and "Follow-up Study of Employers Hiring 1982-83 Graduates," N.C. Department of Community Colleges, Feb. 13, 1986.

"Forecast," quarterly report of the University of North Carolina at Charlotte and First Union National Bank.

The Future of North Carolina—Goals and Recommendations for the Year 2000, Report of the Commission on the Future of North Carolina, 1983. See especially the section on the economy.

"Industrial Recruitment and the Path of North Carolina's Economic Development to the Year 2000," N.C. Department of Labor, April 1982. This report was presented to the Commission on the Future of North Carolina (the "2000 Commission").

MDC Inc. publications, especially the forthcoming report on "The Economic Future of the Rural South: State Roles in An Era of Structural Change." MDC, based in Chapel Hill, N.C., works with employment policies as they concern increased productivity.

N.C. Department of Agriculture publications, especially the annual "North Carolina Agricultural Statistics," by N.C. Crop and Livestock Reporting Service.

N.C. Department of Commerce publications, especially the annual "Economic Development Report," the economic indicator series (including announced jobs), and "North Carolina Business Climate."

"N.C. Economic Information," 1985 Edition, Wachovia Bank & Trust Co., Winston-Salem, N.C., August 1985.

North Carolina magazine, published monthly by the N.C. Citizens for Business and Industry.

"Sixth Annual Study of General Manufacturing Climate of the 48 Contiguous States of America," June 1985, Alexander Grant & Co., Accountants and Management Consultants, 39th Floor, Prudential Plaza, Chicago, Ill. 60601.

Southern Growth Policies Board publications, including its "Analysis of Emerging Issues" and "Strategic Indicators" series, along with special reports such as "After the Factory: Changing Employment Patterns in the Rural South" by Stuart Rosenfeld and Edward Bergman, January 1986.

"State Policy Reports," published by State Policy Research Inc., 7706 Lookout Court, Alexandria, Va. 22306. A number of these issues contain useful resources including especially the April, May, and November 1985 issues on economic development, high technology, and taxes.

"Studies in State Development Policy," a nine-volume series edited by Michael Barker, Council of State Planning Agencies (now part of the National Governors' Association), 1979. Titles range from *State Taxation and Economic Development* to *Venture Capital and Urban Development.* Excellent bibliographies.

Foreign Trade

Directory of Foreign Manufacturers in the United States, Third Edition, published by the Business Publications Division, College of Business Administration, Georgia State College, Atlanta, Ga., 1985.

"Exports from North Carolina in Millions of Dollars, 1984," compiled by International and Domestic Marketing Office, N.C. Department of Agriculture.

"Export Trading Companies: Possible Structures, Small Business Response, Public Sector Roles," National Association of State Development Agencies, November, 1982.

"North Carolina 2000: The International Imperative," position paper, N.C. State University at Raleigh, International Trade Center, Nov. 16, 1981.

"State Roles in Foreign Trade," *State Legislatures* magazine, published by National Conference of State Legislatures, Denver, Col., April 1985.

High Technology

Commercial Biotechnology: An International Analysis, Office of Technology Assessment, U.S. Congress, 1984. Single most comprehensive report on biotechnology, covering scientific, industrial, and policy issues.

High Hopes for High Tech: Microelectronics Policy in North Carolina, edited by Dale Whittington, the University of North Carolina Press, 1985. A valuable 12-chapter reader, providing both overview and in-depth analysis.

New Challenges for a New Era—Progress Through Innovation, Education, and Research in North Carolina, a four-volume report of the Governor's Task Force on Science and Technology, 1984. The reports look at economic development strategies in a broad framework, focusing on education and long-term vision as well as technological issues.

Small Business

"Facts About Small Business In North Carolina," Small Business Development Division, N.C. Department of Commerce, October 1985.

"President's Report on the State of Small Business," published by U.S. Small Business Administration, U.S. Department of Commerce, March 1984.

"State, Local and Private Sector Small Business Initiatives," a report of the Committee on Small Business, U.S. House of Representatives, Ninety-Eighth Congress, Second Session, by U.S. Government Printing Office, Sept. 18, 1984, Report No. HR 98-1036.

Giving Birth to a New Political Issue

This regular Insight *feature focuses on how the judicial system affects public policy. This column examines a recent N.C. Supreme Court decision.*

By Katherine White

Does North Carolina's judicial system allow medical malpractice claims? Unquestionably—unless, that is, the case involves "wrongful birth" and "wrongful life." In those cases alone, says a bare majority of the N.C. Supreme Court, the answer is a flat no. The state's present laws and judicial rules, they say, do not address new medical technology that can predict, for instance, whether a child would be born retarded, and whether a mother should have that information so she can make an informed decision whether to bear the child or have an abortion.

The Court—in a narrowly split, 4-3 decision—says it is up to the General Assembly to decide what the legal position, and the public policy, of the state will be. But because of the Court's own divergent views on the matter, and because the Court has shunted the issue to the General Assembly, the prospect is that a complex medical issue may be decided in the crucible of the political arena.

In effect, the justices, in their December 10, 1985 decision in *Azzolino v. Dingfelder*,[1] are protecting doctors and other health care providers from medical malpractice claims stemming from the failure to provide accurate genetic counseling to pregnant women. The decision runs counter to the court opinions in other states where the subject has come up.[2] (The decision could be appealed to the U.S. Supreme Court before the issue reaches the legislature. A petition for judicial review was filed in the N.C. Supreme Court's office on January 19, 1986, but was turned down by the justices on February 18.) And the decision has been criticized both by the justices' legal colleagues and by legal-medical experts. They believe the Court's inaction established social policy that carries with it untenable results—namely, that doctors will be free from malpractice claims when they fail to give genetic counseling and a child with a condition such as Down's Syndrome is later born.

The Court's decision focused on whether such a child or his parents can seek money for the cost of the child's care from a doctor who could have used a relatively common medical test called amniocentesis to determine the child's health before birth. Jane Azzolino, a Chatham County mother, sought amniocentesis during early pregnancy. She was 36 years old at the time and expressed concern that her age placed her at high risk for delivering a child with Down's Syndrome, which bears an abnormal chromosome that gives the child distinct physical characteristics and causes slight-to-severe mental retardation. Older mothers have statistically higher chances of delivering Down's Syndrome babies.

Katherine White is a lawyer who covers state government for The Charlotte Observer.

According to Mrs. Azzolino's lawsuit, her doctor and a nurse practitioner told her that amniocentesis was not necessary because she fell one year short of the age when the mother's age heightens the risk for having a handicapped child. Michael, now 7, was born in 1979 with Down's Syndrome. Mrs. Azzolino sued, but her case was thrown out of Chatham County Superior Court in 1983. In November 1984, the N.C. Court of Appeals reversed that decision, stating that Mrs. Azzolino did have the right to sue for damages for "wrongful birth" *and* that Michael had the right to sue for damages for "wrongful life." More than a year later, however, the N.C. Supreme Court reversed the Court of Appeals and sided with the Superior Court.

In the majority opinion, four justices assumed for the purposes of their analysis that the doctor was guilty of negligence when he did not perform the test. But negligence alone is not enough to sustain a cause of action. In such lawsuits, the courts require an *injury* to be caused by the negligence. "Life, even life with severe defects, cannot be an injury in the legal sense," wrote Associate Justice Burley B. Mitchell Jr. for a majority that included Chief Justice Joseph Branch and Associate Justices Rhoda Billings and Louis Meyer. Relying on language from a New York Court of Appeals dissent, the Court said, "A cause of action brought on behalf of an infant seeking recovery for wrongful life demands a calculation of damages dependent upon a comparison between the Hobson's choice of life in an impaired state and non-existence. This comparison the law is not equipped to make."[3]

Mitchell wrote that only the General Assembly "can provide an appropriate forum for a full and open debate of all the issues arising from the related theories of 'wrongful' birth [the parents' cause of action] and 'wrongful' life [the child's action]. Unlike courts of law, the General Assembly can address all of the issues at one time and do so without being required to attempt to squeeze its results into the mold of conventional tort concepts which clearly do not fit."

Yet the majority opinion also encroaches into social policy by declaring its fear that doctors might ultimately "take the 'safe' course by recommending abortion . . . We do not wish to create a claim for relief which will encourage such results." The majority opinion illustrated its point with this story:

> A clinical instructor asks his students to advise an expectant mother on the fate of a fetus whose father has chronic syphillis. Early siblings were born with a collection of defects such as deafness, blindness, and retardation. The usual response of the students is, "Abort!" The teacher then calmly replies: "Congratulations, you have just aborted Beethoven."

Not only that, Mitchell wrote, but the possibility also existed that if the Court recognized such claims, the state's judicial system would be liable to a flood of fraudulent claims: "The wrongful birth claim will almost always hinge upon testimony given by the parents after the birth concerning their desire prior to the birth to terminate the fetus should it be defective. The temptation will be great for parents, if not to invent such a prior desire to abort, to at least deny the possibility that they might have changed their minds and allowed the child to be born even if they had known of the defects it would suffer."

In dissent, Associate Justice James Exum said the majority went too far and, in effect, made the case center on the emotional pro-life and abortion issues.[4] The injury to Mr. and Mrs. Azzolino was not Michael's life but, rather, Mrs. Azzolino's inability to make an informed decision on whether to abort the afflicted fetus. By not providing her with adequate information, health professionals prevented her from choosing the kind of family she would have, a choice that is legally protected and a choice that, when interfered with, gives rise to a legal remedy, such as support and maintenance for the child.

If the Court had limited its decision to whether Mrs. Azzolino was given the information necessary to make an informed decision, Exum said, the case would become one of simple, traditional medical malpractice for which the state has laws to redress.

Associate Justice Harry Martin, in a separate dissent, also cast the issue as simple medical malpractice, saying "the doctor's negligent genetic counseling and treatment . . . deprive[d] them [the Azzolinos] of the ability to make an informed decision on whether to abort the fetus."

By putting the issue before the General Assembly as one of public policy and not of traditional legal principles, the Court may well get the "full and open debate" for which Justice Mitchell hoped. It also will open the debate to considerations that do not directly address whether doctors and other health care professionals owe prospective parents genetic counseling when circumstances warrant. Pro-life and pro-choice advocates will again debate abortion. The medical profession, now complaining of higher insurance costs and rising medical malpractice claims, and those who would hold doctors accountable for each action they take, may inject economic arguments into the debate.

(continued, page 102)

Drawing Ethical Lines Is A Demanding Art Form

This regular Insight *feature examines the legislative process as it affects public policy. This column reviews the age-old question of conflicts of interests.*

by Chuck Alston

"When a legislator must act on a legislative matter as to which he has an economic interest, personal, family or client, he shall consider whether his judgment will be substantially influenced by the interest, and consider the need for his particular contribution, such as special knowledge of the subject matter, to the effective functioning of the legislature. If after considering these factors the legislator concludes that an actual economic interest does exist which would impair his independence of judgment, then he shall not take any action to further the economic interest, and shall ask that he be excused, if necessary, by the presiding officer in accordance with the rules of the respective body. If the legislator has a material doubt as to whether he should act, he may submit the matter to the Legislative Ethics Committee for an advisory opinion . . . " —NCGS 120-88.

This passage, adopted in 1975, contains a lot of words which, when read closely, offer little guidance to a legislator facing a potential conflict of interests. Yet, in a citizen-legislature, such conflicts arise regularly. How, then, can a legislator know what to do when his own interest may conflict with the public interest?

Bankers, doctors, real estate agents, funeral directors, insurance salesmen, merchants, contractors, educators, manufacturers, restaurant owners and pharmacists comprise the legislature. Normal legislative sessions usually consider bills affecting most, if not all, of these vocations.

This inevitable clash of selfish interests and the public good gives rise to uncomfortable questions. Should the teacher vote on the state budget? The budget usually raises teachers' salaries. Should the banker vote on interest rates? Those rates determine how much profit he will make. Should lawyers in the legislature be allowed to draft changes in the criminal code? They have the legal knowledge and expertise that other legislators lack, but won't such changes affect their livelihoods? And how about insurance agents who sponsor bills on insurance regulation or rates? The list is endless.

The ethics issue is by no means new.[1] But it gained visibility in the 1985 session in the case of former state Sen. John Jordan (D-Alamance), who resigned his office after pleading guilty to charges of bribery and extortion. Jordan stood accused of using his office to further his own interests in a business dispute over a hydroelectric power project. The Legislative Ethics Committee, after a month-long investigation, referred the matter to the Attorney General's Office for possible prosecution. A local prosecutor took the case to the grand jury, which issued the indictment that led to Jordan's guilty plea and resignation from office.

If there was a beneficial aspect to Jordan's case, it lay in renewing interest in legislative ethics. Before the 1985 session ended, there was enough interest to warrant an interim committee—the Legislative Ethics and Lobbying Committee—to study ethical issues confronting lawmakers and report to the 1986 short session of the General Assembly, which will convene in June.

The committee went to work tackling such issues as:

- Should business partners of legislators be permitted to lobby?
- Should limits be placed on the gifts, meals,

Chuck Alston is a former Raleigh correspondent and now a business writer for the Greensboro News & Record.

and other gratuities that legislators receive from lobbyists?

- Should legislators sell tickets for fundraising events to lobbyists?
- Are additional rules needed to guide the proceedings of the Legislative Ethics Committee when it is forced to investigate a member?

The odds are good that when the committee concludes its work, the vagaries of G.S. 120-88 will remain as the sole statutory guidelines for legislators struggling to draw the line between their own interests and legislation. And that's business as usual.

"I don't know of any states that draw those kind of rules," says Terry Sullivan, director of the legislature's General Research staff and the ethics committee's counsel. "Every ethics committee meeting I've ever attended, the question comes up: How do you draw the line? And within 90 seconds, the example of the school teacher or the banker is given and the committee moves on to something else," Sullivan says.

The school teacher is the obvious example. But the entanglements also can pass with little notice, as happened in 1985. Consider these two examples: Several legislators who are retired federal employees voted on a bill allowing more of their retirement income to be exempt from state taxes. A legislator who is an executive of an oil wholesaler pushed legislation to change the relationship between oil companies, oil jobbers and gas stations—a result that would have accrued to his employer's own interests.

Some legislators seem unaware that their actions constitute a potential or real conflict of interests. Syndicated columnists Richard Cohen and Jules Witcover tell the story of a Maryland legislator, a tavern keeper who also sold liquor for off-premises consumption.[2] He sponsored legislation prohibiting the discount sale of liquor—a bill that would have hurt his competitors who ran package stores. When asked about the conflict of interests posed by sponsoring a bill that would harm his competitors and line his own pockets, the lawmaker-tavern keeper replied, "How does that conflict with *my* interests?"

When a legislator's independence of judgment is threatened, North Carolina law advises the member to refrain from voting. But members of the N.C. General Assembly don't often excuse themselves from voting. In the 1985 session, which ran from February 5 to July 17—or nearly six months—the 120 House members sought only 28 such excuses. Nearly half the excuses came from three members: Reps. George Miller (D-Durham), Tim McDowell (D-Alamance), now a state Senator appointed to fill the remainder of Jordan's unexpired term, and Frank (Trip) Sizemore (R-Guilford). The 50-member Senate had but 14 such requests. In one case, Sen. Ollie Harris (D-Cleveland), a Kings Mountain funeral home operator, asked the Senate to void his vote for an amendment that permitted only funeral licensees to reopen graves. The Senate acceded to Harris' request.

Sizemore, a freshman House member who is a Greensboro lawyer, requested five such excuses. He read the ethics law carefully and found it wanting. "I wasn't sure how the standards applied," he says. "Where I could, I exercised caution."

McDowell works for Elon College, a private college that receives state aid for North Carolina students. Twice he excused himself from voting on bills that affected all private colleges "just so there wouldn't be any question," he says. Still, it would have been difficult to prove that McDowell would have benefited personally from either of the bills. "It's hard to determine, really," says McDowell. "When you have a citizen-legislature, I don't know how you can have guidelines. If we had specific guidelines, you'd have a zero-zero vote on the budget, and especially on taxes."

For every McDowell or Sizemore exercising an abundance of caution, there is a situation in which one legislator-insurance agent excuses himself while nine others don't. While one response to such situations would be to bar lawmakers from participating in issues where they have a direct economic interest, it's clear that such a response would not be workable—or even desirable.

Voters, after all, send their representatives to Raleigh to vote, not to watch from the sidelines. Legislators have the dual responsibility to represent their constituents as best they can, in addition to comporting themselves in an honorable fashion while debating and making the laws that govern all the state's citizens.

Most other states, like North Carolina, have some sort of "generalized moral code of ethics for legislators to live up to," says Ed Feigenbaum, who coordinates a biennial survey of state ethics laws for the Council of State Governments. Other states have more extensive ethics laws governing the conduct of public officials generally, but North Carolina's disclosure requirements "stack up pretty well" with those of other states.

The law, for all its murkiness, does speak to all legislators who have a potential conflict and who must weigh the benefit of their special knowledge against the detriment of their special interests. And it does apply across the board, no matter what a legislator's occupation is. Critics who question the banker's role in interest rate legislation often overlook a teacher's involvement in drawing up a merit pay scale, but they

(continued, page 102)

IN THE LEGISLATURE

(continued from page 101)

both constitute the same sort of conflict of interests. Few would expect lawyers or businessmen to exempt themselves from the coming debate over liability insurance or personal injury and malpractice lawsuits. Moreover, should the legislative debate proceed without the benefit of their expertise and knowledge in such matters? Hardly.

The law, by requiring legislators to *disclose* their business interests in annual reports, provides a means for voters to decide when special knowledge becomes special interest. Perhaps a vigilant press and an informed electorate remains the best check on unethical conduct. Voters can always turn out miscreants who abuse their legislative power. And in cases of criminal misconduct, the grand jury awaits.

FOOTNOTES

[1]See "Campaign Financing, Ethics Act & Open Meetings—Conflicting Interests for Citizen Legislators," *North Carolina Insight,* Vol. 3, No. 4, Fall 1980, pp. 30 to 34.

[2]"A Heartbeat Away," by Richard M. Cohen and Jules Witcover, Bantam Books, 1974, p. 40.

IN THE COURTS

(continued from page 99)

No one would argue that such collateral issues should not be a part of the legislative process. They obviously are appropriate questions for legislative debate. But they also have the potential—unlike most court decision-making—to bypass the legal questions involved and proceed directly to questions of social policy. Unless the U.S. Supreme Court intercedes first, the General Assembly may have its hands full in keeping this complicated and controversial debate on the legislative track.

FOOTNOTES

[1]*Azzolino v. Dingfelder,* ___ N.C. ___ (1985), filed Dec. 10, 1985.

[2]See generally, Annotation, 83 A.L.R. 3d 15 (1978 & Supp. 1985).

[3]*Becker v. Schwartz,* 46 N.Y. 2d 401, 412, 386 N.E. 2d 807, 812 (1978).

[4]Although the majority emphasized the result had no bearing on a woman's right to abortion, the legal arguments presented by the American Civil Liberties Union, the N.C. Academy of Trial Lawyers, the N.C. Right to Life Education and Legal Defense Fund, and the Azzolinos raised the abortion issue.

Letters to the Editor

Vol. 7, No. 3
Insurance

At a General Accounting Office meeting at the Radisson Hotel last fall, I took a copy of the February 1985 *North Carolina Insight* and read the articles on insurance in North Carolina. The portion on auto insurance is certainly the best study and analysis I have read to date. There were areas that I did not completely agree with, but overall who could not say that the system needs some major modifications?

John G. Riley
Riley-Clay-Turner
Insurance, Inc.
Raleigh

Vol. 8, No. 2
Credit Insurance

I would like to commend the Center for its November 1985 report on the provision of credit insurance in North Carolina. It provides policy-makers with the best analysis I have seen regarding an issue on which the interests of consumers have too long been neglected.

The concept of reducing creditor risk through loan or installment sales insurance is a good one —particularly for low-income people who stand to be most hurt by a default. However, what is basically a good idea becomes a ripoff when ordinary market conditions do not operate to protect the consumer. Certainly the seller of insurance is entitled to a fair profit, just as the purchaser is entitled to a good product at a fair price. The question is at what point the return to the consumer is unreasonably low. Your timely article makes it clear that in North Carolina, the credit insurance consumer gets less for the dollar than in any other state.

Donald M. Saunders, Director
N.C. Legal Services
Resource Center
Raleigh

Vol. 8, No. 1
Policy and the Aging

I really enjoyed the September 1985 Issue of *Insight*. It really helped me in my work as an administrator of an Area Agency on Aging. I found the section on future implications most helpful in making a recent presentation on long-term care of the elderly to county commissioners in Brunswick, Columbus, and Pender counties.

Linda Bedo
AAA Administrator
Cape Fear Council of Governments
Wilmington

The Center for Public Policy Research has once again done a laudable job of presenting a series of complicated issues in a comprehensive manner. The September 1985 issue of *Insight* should be very helpful to anyone interested in the public policy issues related to the elderly in North Carolina. Bob Conn faced a difficult task in presenting the pertinent policy questions related to long-term health care. I think he did better than most who have attempted this lately.

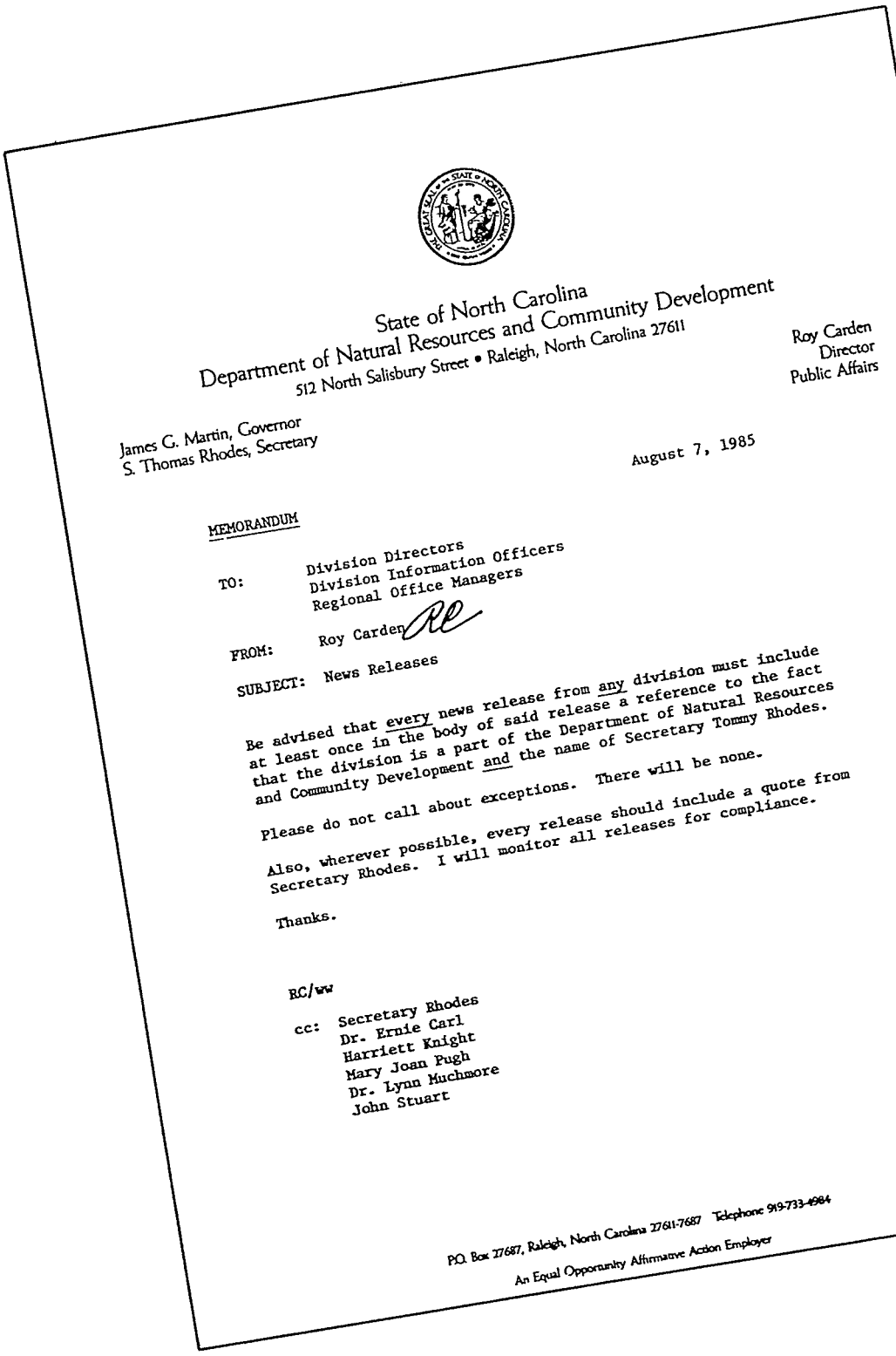
The Center continues to produce valuable information for our policy makers. The North Carolina Health Care Facilities Association will continue to support your efforts.

J. Craig Souza
Executive Vice President
N.C. Health Care Facilities Association
Raleigh

The aging policy issue of *Insight* is an excellent resource. The material is well-written and carefully documented. It should be on the reading list of every institutional administrator. It also should be read carefully by [United Methodist Church] annual conference leaders as well.

J. W. Carroll
Executive Director
United Methodist Senior Services of Mississippi
Tupelo, Mississippi

MEMORABLE MEMO



State of North Carolina
Department of Natural Resources and Community Development
512 North Salisbury Street • Raleigh, North Carolina 27611

Roy Carden
Director
Public Affairs

James G. Martin, Governor
S. Thomas Rhodes, Secretary

August 7, 1985

MEMORANDUM

TO: Division Directors
Division Information Officers
Regional Office Managers

FROM: Roy Carden RC

SUBJECT: News Releases

Be advised that every news release from any division must include at least once in the body of said release a reference to the fact that the division is a part of the Department of Natural Resources and Community Development and the name of Secretary Tommy Rhodes.

Please do not call about exceptions. There will be none.

Also, wherever possible, every release should include a quote from Secretary Rhodes. I will monitor all releases for compliance.

Thanks.

RC/ww

cc: Secretary Rhodes
Dr. Ernie Carl
Harriett Knight
Mary Joan Pugh
Dr. Lynn Muchmore
John Stuart

P.O. Box 27687, Raleigh, North Carolina 27611-7687 Telephone 919-733-4984
An Equal Opportunity Affirmative Action Employer

We offer these two candidates for Memorable Memo for your inspection without commentary other than to note that the writer of the memo on the left is no longer in charge of monitoring news releases for compliance, and that the writer of the one on the right obviously is a free spirit—a rara avis *in the birdhouse of government. Meanwhile, if you've seen any noteworthy candidates for Memorable Memo flapping around the office lately, wing a copy to us. Anonymity guaranteed.*

State of North Carolina
Department of Natural Resources and Community Development
512 North Salisbury Street • Raleigh, North Carolina 27611

James G. Martin, Governor
S. Thomas Rhodes, Secretary

Don Follmer
Director
Public Affairs

MEMORANDUM

TO: Division Information Officers

December 12, 1985

FROM: Don Follmer

SUBJECT: Change in Schedule of PIO Meeting

Due to a normal amount of bureaucratic shucking and jiving, the Public Information Officer's meeting will be changed from 2 p.m. to 9 a.m., Tuesday, December 17, in the 14th floor conference room.

Although the entire fate of Western Civilization will be decided at that time, absences, as usual, will be excused. Please let us know if you can't attend.

Thank you for your close attention to this important state document.

DF/ww

cc: Public Affairs staff

P.O. Box 27687, Raleigh, North Carolina 27611-7687 Telephone 919-733-4984
An Equal Opportunity Affirmative Action Employer

Contributors to the N.C. Center for Public Policy Research

The North Carolina Center for Public Policy Research wishes to express appreciation to the foundations and corporations supporting the Center's efforts. Their help makes it possible for the Center to produce high-quality research on important public policy issues facing the state.

Major funding for the North Carolina Center is provided by:

THE MARY REYNOLDS BABCOCK FOUNDATION
THE Z. SMITH REYNOLDS FOUNDATION
THE KATE B. REYNOLDS HEALTH CARE TRUST
and
THE HENRY J. KAISER FAMILY FOUNDATION

Corporate and Individual support for the Center is provided by:

PATRONS

Burlington Industries
Josephus Daniels Charitable Foundation
Philip Morris, USA
Greensboro News & Record
AT&T Technologies
Carolina Power & Light Company
NCNB Corporation
First Citizens Bank and Trust
Glaxo, Inc.
Knight Publishing Company
R. J. Reynolds Industries
Southern Bell
Unifi, Inc.
Universal Leaf Tobacco Company
Weaver Foundation
Branch Banking and Trust Company
Burroughs Wellcome Company
Carolina Telephone & Telegraph Co.
Davidson & Jones Co.
Hardee's Food Systems
Harper Corporation of America
Kaiser Foundation Health Plan for North Carolina
Lowe's Charitable and Educational Foundation
Nucor Corporation
Rose's Stores
Southern National Bank
Stedman Corporation
Wachovia Bank and Trust Company
Walsh Corporation
Ernst & Whinney
Focus Group
HKB Associates
Theo. Davis Sons, Inc.

SUPPORTING CORPORATIONS

Alphanumeric Systems, Inc.
Aluminum Company of America
Astro Inc.
Champion International
Ciba-Geigy Corporation
Walter DeVries and Associates
Epley Associates, Inc.
Fayetteville Publishing Company
First Union Corporation
IBM Corporation
Kroger Company
North Carolina Power Company
George Smedes Poyner Foundation
Northwestern Bank
Piedmont Aviation Inc.
Piedmont Natural Gas Company
TRW Inc.

CORPORATE MEMBERS

BarclaysAmerican/Foundation
Blue Bell Foundation
Cameron Brown Company
Capitol Broadcasting Company
Carolina Telephone and Telegraph Company
Celanese Fibers Operations
Coastal Lumber Company
Cooper Group
The Daily Reflector of Greenville
E. I. duPont de Nemours & Company
First Federal Savings & Loan Association
General Electric
Gilbarco, Inc.
Hanes Hosiery Inc.
Integon Corporation
Northern Telecom
North State Gas Service, Inc.
Olin Corporation
Peoples Bank and Trust Company
Planters National Bank
Revels Printing Company
Sellers Manufacturing Company
Durwood Stephenson & Associates
Texasgulf Inc.
Troxler Electronics Laboratories, Inc.
Union Carbide
Weyerhaeuser Company

NORTH CAROLINA INSIGHT

Advertising Rates

North Carolina Insight, the quarterly journal of the N.C. Center for Public Policy Research, reaches the state's top policymakers, elected officials, corporate leaders, academicians and journalists—and so do *Insight* advertisers' messages. To make sure your message reaches the right audience, advertise in *North Carolina Insight!*

Rates:

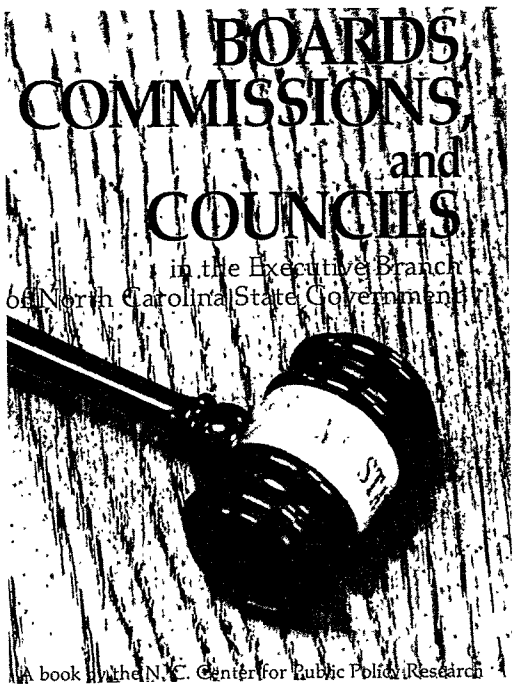
1/4 Page:	$ 75
1/2 Page:	$150
Full Page:	$300
Inside Back:	$500

Ad Sizes:

- 1/4 Page Vertical: 17 picas wide by 26 picas high.
- 1/4 Page Horizontal: 35 picas by 12½ picas.
- 1/2 Page Vertical: 17 picas by 54 picas.
- 1/2 Page Horizontal: 35 picas by 26 picas.
- Full Page: 35 picas by 54 picas

Discounts: Standard 15 percent allowed to recognized advertising agencies. A 25 percent discount allowed for four consecutive ads of same size.

Production Information: Black and white ads only. Camera ready copy required. *Insight* is printed sheet-fed offset and saddle-stitched. Maximum 133 line screen for halftones. All copy subject to publisher's approval. Net payment due 30 days from invoice.



Still Hot . . .

and ready to boil over in the June short session of the General Assembly, proposals to reduce the number of state boards, commissions, and councils in the executive branch will be on the front legislative burner.

It's not too late to read all about it, and why the subject of separation of powers is creating such a ruckus between the legislative and executive branches of government. As Governor Martin's legal counsel put it in January, "I don't think the legislative branch has the power to reach over and make appointments in the executive branch any more than the executive branch has the right to reach over in the legislative branch and make appointments. The Constitution calls for them to be separate."

If you're interested in knowing how many such commissions there are, what they do, and whether some should be eliminated, order your copy of *Boards, Commissions, and Councils in the Executive Branch of N.C. State Government* now, for $15 each, plus $2 postage and handling. Call the Center at 919-832-2839, or write us at Box 430, Raleigh, N.C. 27602.

N.C. Center for Public Policy Research
P.O. Box 430
Raleigh, North Carolina 27602

Nonprofit Org.
U.S. POSTAGE
PAID
Raleigh, N.C.
Permit No. 1121