

Economic Development and Industrialization in N.C.

Which way now?

A N.C. Center for Public Policy Research Report

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Summary

This report by the North Carolina Center for Public Policy Research reviews recent developments and current characteristics of the North Carolina economy and considers the effects of state and federal programs and policies on ten counties in two planning regions. Although the study concentrates on the role of industrial development, especially manufacturing, it demonstrates the importance of non-manufacturing employment and national trends in the state's economic development.

The analysis of development in the ten counties of Regions K and L, as well as the review of state, regional, and national data, leads to several observations about the state's recent economic development and raises issues about the actual impact of state and local development policies. The study points out that:

- The rapid industrialization of North Carolina has resulted more from the sunbelt phenomenon and other national trends than from the actions of state government;
- The provision of adequate water and sewer services has been an essential factor in the state's economic development and industrial growth;
- Urban, urban fringe, and rural areas of the state have developed differently in the past and will continue to develop differently;
- The construction of interstate highways has had a profound impact on the location of industrial growth in North Carolina in the last decade;
- The current Balanced Growth Policy is an inadequate statewide development policy that offers little guidance for the management of urban growth while encouraging unrealistic expectations about industrial development in rural areas.

According to the report, the major economic development issues confronting the state involve the management of growth to maximize the benefits for all citizens, recognizing that some areas will develop rapidly, some slowly, and some very little, if at all. Specific recommendations and suggestions are offered to address some of these issues. Important areas of concern include the comprehensive management of water resources, the development of rural, urban, and inter-urban transportation alternatives, the creative assessment of economic development options available to regions and communities, and public accountability in the management of economic growth.

Although North Carolina is viewed as a predominantly rural state, it ranks eleventh nationally in the size of its industrial work force and eighth in the size of its manufacturing work force. A larger proportion of North Carolina industrial workers are employed in manufacturing than in any other state. During the decade following 1966, only Texas (which has twice as many people) and California (which has about four times as many people) gained more manufacturing jobs than did North Carolina.

From 1966 to 1976, per capita personal income in North Carolina grew by 240 percent compared to 190 percent for the United States as a whole. Yet North Carolina ranked 41st among the states in per capita income, and its average hourly manufacturing wage was the lowest in the nation.

The flow of industry into the state during the last decade has resulted primarily from the abundance of semi-skilled and unskilled labor in the state and the improved accessibility of many parts of the state to other regions, along with the nationwide movement of industry to dispersed urban and non-urban locations, particularly in areas (such as North Carolina)

Summary

with a moderate climate. The state's search for new industry, first formally announced by Governor Luther Hodges over 20 years ago, has continued as a feature of the development policies of succeeding administrations. The most recent expression of this emphasis is the Balanced Growth Policy of the Hunt administration. That policy also espouses concern for providing more diverse and better jobs where people live and for closing the income gap between North Carolina and the United States. Although some progress has been made toward these objectives during the Hunt administration, the state's influence on economic development is modest at best. While the Governor may profess a willingness to "move heaven and earth" to get a Phillip Morris plant in Cabarrus County, the fact is that neither the Governor nor the state can influence heaven, earth, or Phillip Morris very much.

In addition, inconsistencies exist among the objectives of the Balanced Growth Policy. The fastest way to increase per capita income in North Carolina is through providing enough low-wage jobs in rural areas to employ the surplus unskilled labor there. Low-wage jobs in North Carolina have traditionally been in the textile, apparel, and furniture industries. At the same time, the Balanced Growth Policy seeks the diversification of industry by attracting high-technology plants. Although a few such plants may locate in rural areas, the vast majority will select urban or urban fringe locations, where the skilled labor and the specialized services they require are accessible. Yet the rhetoric of "balanced growth" suggests to many that high-technology plants can spread to every corner of the state to provide "more and better jobs." A more useful policy would acknowledge that such is not the case. Many rural areas, for example, would be better served by improving the access of rural inhabitants to high-technology plants located in urban fringe areas, while focusing their own economies on agricultural production (and related industries) or on non-manufacturing, service-related industries. Urban fringe areas, which currently contain the most attractive sites for many high-technology manufacturing firms would benefit from increased public involvement in the selection and design of alternative development strategies, aimed at channeling industrial development to the most desirable locations. Urban places would benefit from a growth management policy which would enable them to meet the rapidly rising costs of and demands for specialized services, while preserving the dispersed growth pattern of North Carolina cities. Cities presently lack both adequate tools for managing growth and adequate expanding sources of revenue for effectively servicing growth. Currently, industrialization and annexation are the predominant means of increasing urban tax revenues. The efficient management of water resources is crucial for the future prosperity of all areas of the state, although the specific problems associated with water resource management differ in the major geographic divisions of the state.

This study calls for a statewide development policy that concentrates on the management of growth in all areas of the state, that recognizes the differing needs and capabilities of urban, urban fringe, and rural areas, and that encourages the greater involvement of local governments and their citizens in choices about how their communities are to grow.

Summary

The full text of the study recommendations begins on page 88. These recommendations, somewhat summarized, propose that the state:

- Adopt a “growth management” policy that recognizes and builds on the differing patterns of growth in different counties and regions in order to maximize the benefits of probable growth to all North Carolinians;
- Amend the General Statutes to *require* counties to accomplish multi-county economic development research and planning in accordance with certain specific criteria;
- Appropriate \$1 million to the counties to accomplish this research and planning with not less than five percent of each county’s allocation to be used in presenting the results to the public;
- Require citizen planning boards to approve county development plans by July 1, 1981, as a prerequisite for further local government participation in non-mandated state and federal economic development programs;
- Direct state agencies to periodically provide the information counties need for their research and planning tasks;
- Request the University of North Carolina to identify major urban, urban fringe, and rural growth problems and solutions to these problems and to distribute this information to all local governments and to appropriate state agencies by July 1, 1980;
- Request the private colleges and universities to develop ideas for economic growth in rural areas, other than through manufacturing, and to distribute this information to all local governments and to the appropriate state agencies by July 1, 1980;
- Request the Commissioner of Labor, the Secretary of the Department of Natural Resources and Community Development, and the President of the Department of Community Colleges to study ways to increase the technical job opportunities for low-income people, especially in rural areas, and to report the results to the Governor and to the General Assembly by January 15, 1980;
- To appropriate \$40,000 to the Board of Governors of the University of North Carolina for research on urban problems and solutions to these problems, with the requirement that the results be distributed to all local governments and to the appropriate state agencies by July 1, 1980;
- Establish a study commission to recommend to the Governor and the 1981 Session of the General Assembly changes in state law and appropriations to strengthen the state’s role in the management of water resources;
- Request the Governor’s Committee on Rural Public Transportation to recommend to the Governor by December 1, 1979, specific ways to encourage the development of energy-conserving transportation systems for rural workers to reach employment opportunities near urban areas.

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Which way now?

Economic Development and Industrialization in N.C.

A report by the North Carolina Center for Public Policy Research, Inc.

Written by Doris Mahaffey and Mercer M. Doty

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N.C. Center for Public Policy Research
P.O. Box 10886 • 700 W. Morgan Street
Raleigh, N.C. 27605 • (919) 833-1656

Doris Mahaffey is a PhD candidate in economics at the University of North Carolina at Chapel Hill. Mercer Doty is the Director of the N.C. Center for Public Policy Research.

Preface

The expansion of manufacturing has been an important feature of industrial development and economic growth in North Carolina in the twentieth century. The attraction of new industries is a major component of current state development policies.

This report examines the influence of national and regional trends on the development of the state in the last decade and considers the impact of state and federal policies and programs on the growth of industry and on economic development, particularly in the ten non-metropolitan counties of Regions K and L. The problems and possibilities of these counties are shared by many others located outside of the predominantly urban Piedmont Crescent and, in addition, have important implications for those located within the Piedmont Crescent. The successes and failures of the ten counties in attracting out-of-state industry as a means of achieving economic development generate concern about current state development policy and especially about the lack of public awareness of important economic choices. The major options available to the state and its communities and the probable outcomes, problems, or benefits of selecting any particular development strategy are rarely addressed.

If this report can broaden public understanding of some of the issues surrounding economic development, it will have achieved an important objective. It will be even more successful if it stimulates lively and informed debate about state development policy and about how communities and the state can benefit most from growth that will surely continue.

Although the authors are solely responsible for its content, this report would not have been possible without the support of the Rockefeller Brothers Fund. The study design and original drafts benefited greatly from review by Professor William H. Miernyk, Director of the Regional Research Institute, West Virginia University, and by Professor C. Donald Liner of the Institute of Government, the University of North Carolina at Chapel Hill. The assistance of Dr. Malcolm L. Williams was especially important in accomplishing the interviews for Chapter 7.

- Doris Mahaffey and Mercer Doty

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Chapter 1

Introduction

North Carolina is viewed by many of its citizens as a largely rural state, a largely agricultural state, and a state of small cities. All of these conceptions are true, but at the same time they may be misleading.

It is true that, in 1970, 56 percent of North Carolina's population lived in rural areas compared with 27 percent of the United States. It is also true that North Carolina has the second highest proportion of the population living outside of its major city (Charlotte) of all states in the Union. In 1972 North Carolina led the nation in value of crops and livestock consumed at home, and ranked number one in tobacco and sweet potato production, second in the nation in rural farm population, sixth in cash income from crops and livestock, and eleventh in all farm sales.

This is only a part of the story. North Carolina also has the eighth largest manufacturing work force in the nation, although it ranks eleventh in total population. A larger proportion of its industrial work force is employed in manufacturing than that of any other state. From 1966 to 1976 only Texas and California gained more jobs in manufacturing than did North Carolina.

North Carolina is the least unionized state in the nation---that is, a lower proportion of its non-agricultural workers are unionized than any other state---although in 1972 it was 28th in the U.S. in number of union members, with 139,000 industrial workers belonging to unions. Its production workers receive the lowest average hourly wage in the fifty states.

From 1960 to 1976 North Carolina per capita personal income increased by 240 percent, compared to 190 percent for the United States as a whole. Even so, North Carolina ranked only 41st in the nation in average per capita income---ahead of South Carolina, Alabama, Mississippi, Tennessee, Louisiana, Arkansas, North Dakota, New Mexico, and New Hampshire---with a per capita income level only 84 percent of the U.S. average. (See Appendices A-1 through A-5.)

Perhaps the fundamental change in the 1960s, in both North Carolina and in the nation, was the decline in the relative importance of agriculture in the economy---especially in terms of employment. In North Carolina the steady movement from an agrarian to an industrial based economy entered its final "phase" as the increased mechanization of agriculture led to the decline in the profitability of small farming operations. This was important throughout the United States. But, since North Carolina farms averaged only 84 acres per farm in 1960, compared to the national average of 296 acres, the effect was particularly pronounced here. Increased mechanization brought about a consolidation of

farms and a dislocation of disemployed farm laborers, who generally migrated out of the state or to urban areas within the state. This shift in population increased the available labor supply in urban areas and encouraged firms from industrial states to locate in southern cities. These firms were further enticed by the lower wages, lower land prices, and lower taxes found in the South compared to the North. The incoming northern firms usually paid higher wages than the typical southern firms which usually needed a higher proportion of low-skill workers in their production processes. Existing southern firms were less able to pay high wages than the new northern firms and could not compete as successfully for urban labor. Therefore, some of the southern firms moved to rural areas of the state to take advantage of the growing rural manufacturing work force as well as the lower average wages, lower land prices, and lower service costs in these areas.

The location of manufacturing firms in the rural areas---typically textiles, furniture, or apparel --- partially reduced the flow of disemployed agricultural workers to urban areas, since it permitted them to take jobs near their homes. At the same time the concentration and availability of employment opportunities in lower-skilled occupations in rural regions tended to reinforce the low level of educational attainment characteristic of these areas of North Carolina. Lack of opportunities for the more highly skilled or educated reduced incentives to complete high school, while inducing those who did to seek employment in larger cities or other states.

During the 1960s, more people moved out of North Carolina than into it. At the same time, the rate of increase of the population in larger North Carolina cities was much faster than the rate of population increase in U. S. cities as a whole. In the 1970s both these trends changed. Small cities in North Carolina, which had been losing population in the 1960s, began to grow (some quite rapidly), while the growth of larger cities slowed. Meanwhile, more people were moving into the state than out of it, largely following increased job opportunities.

The general movement of people from rural areas in the 1960s was an indication of the impact that major changes in the farm production process would have throughout the state.

The movement of people in the 1970s is consistent with a new type of economic system---the dispersed urban manufacturing system. Modern technology places many demands on the economy. It requires higher volumes of capital equipment per worker and usually more space for that equipment. It also needs room for transportation arteries and facilities to make the best use of more flexible transportation systems. For these reasons even more sophisticated industries have been moving to the suburbs and rural areas in the 1970s.

Since the 1930s, Americans have become increasingly convinced that government has a potent influence in the economy and that it can use this influence to improve the well-being of the nation or state. Consistent with this trend, state government has become more involved with the state economy, starting in North

Recent N. C. Economic
Development Policies

Carolina with Governor Luther Hodges who in the late 1950s announced a public policy in support of economic growth.

More recently, political concerns have become increasingly economic in nature, so that politicians have felt compelled to address economic issues in their campaigns and to act on them during their terms of office.

The demand for government services is thought by economists to be directly related to the level of income in the economic system. That is, as people's incomes rise, the amount of services they demand from their government increases. As has been noted, the per capita level of income in North Carolina increased dramatically in the 1960s, so that the demand for government services has also increased. Moreover, this increase was accompanied by broad changes in the economy---the decline in agriculture and the growth in manufacturing, for example---as well as by the major movements of people in the state. These changes generated political as well as economic concerns and established the political need for a state economic development policy.

In 1972, the Scott administration outlined the Statewide Development Policy. Its central theme was "problems rising largely out of the economic transformation of rural regions." The policy makers believed that North Carolinians wanted to retain the "small city character" of their state and avoid the congestion caused by the rapid urbanization of the industrial North. If the rapid growth of the 1960s continued, a decline in the quality of service provision and increased congestion seemed unavoidable. The objective of the Statewide Development Policy was to encourage the growth of small cities, so that population would not be overly concentrated in large cities.

The policy sought to minimize the movement of people in the state by providing jobs for people where they live. In order to do this, the Statewide Development Policy established a "Growth Center Policy" to set priorities for public investment. The designation of growth centers was based on the capacity of an urban area or "cluster" to attract a larger population base through expanded job opportunities and increased public services. This is what the policy makers meant by calling for the "creation of a network of smaller urban centers which, along with the major cities, can maintain a jobs-people-public services and environmental balance that supports a higher standard of living throughout the state."

Although mentioned in the Scott administration, diversification of the state economy took on new importance during the Holshouser administration. The thrust of the Holshouser economic development effort centered on strengthening the North Carolina economy by recruiting high-growth industries to the state, particularly the durable goods industries such as machinery, metals, transportation equipment, and instruments manufacture. The high-growth non-durable goods industries such as chemicals, plastics, and rubber were also encouraged.

The recession of 1974 and 1975 both demonstrated the need for further diversification and disrupted the strides in industrial diversification that had already been made. North Carolina was particularly hard hit by the recession for

several reasons. First, manufacturing employment is usually affected more adversely by recessions than other sectors of the economy (with the exception of construction), and North Carolina has a relatively high concentration of employment in manufacturing. (See Appendix A-6.) Employment in trades, services, and government does not fluctuate very much over business cycles, so areas (unlike North Carolina) which have a higher proportion of employment in these sectors are not as greatly affected by recessions.

Secondly, the consumer non-durables industries such as textiles and apparel, which comprise almost 50 percent of the manufacturing employment in North Carolina, were particularly hard hit. Textiles experienced employment losses of greater than 18 percent of the work force and apparel lost in excess of 14 percent. Lumber and furniture, two other traditional industries comprising 15 percent of North Carolina employment, were also seriously depressed.

Thirdly, the fabricated metals and electrical and non-electrical machinery industries, which were among the industries involved in North Carolina's more successful diversification efforts, were also hard hit and furthermore, slow in recovering. Typically, these industries are very sensitive to business cycles, so that while they may be hurt by a recession they typically recover more quickly. This quick recovery did not happen in North Carolina.

The losses in textiles and apparel were notable because previous recessions had not affected these sectors as much as the durable goods sectors. The changes in American buying habits related to the decline in the textile and apparel industries emphasized the need to diversify the economy. At the same time, recovery in these industries was relatively rapid.

Overall, North Carolina's economy recovered more quickly than the economies of other states, with unemployment dropping below the national average in the fall of 1975 and remaining favorable thereafter. Per capita income, on the other hand, did not improve relative to that of the U.S., and this poor performance became the focal point of the next administration's economic development policy.

Governor Jim Hunt had campaigned for office with the promise of closing the "income gap" between North Carolina and the U.S. Still recognizing the strategic importance of issues raised by previous administrations (the need for industrial diversification in the state as a whole, as well as the need for increased employment opportunities in rural areas), the Hunt administration has tried to weave these objectives into its development policy. That policy is directed toward increasing the per capita income level of North Carolinians. The importance of industrial diversification is that drawing higher-wage and technology industry to the state is viewed as an essential device for increasing North Carolina's per capita income. The slogan "more and better jobs" catches this aspect of the development program. The importance of drawing economic opportunities to rural areas is underscored by higher unemployment rates in rural areas, lower income levels, and the fact that over 50 percent of North Carolina's population resides in those areas.

The Balanced Growth Policy

The Hunt administration had adopted the Balanced Growth Policy in order to bring these diverse concerns together into one economic development policy. The formulation of the Balanced Growth Policy has been the task of the State Goals and Policy Board, an executive advisory group established by Governor Scott and revived by Hunt. The findings of the Board's investigations concerning balanced growth and the concerns of the North Carolina public will be formulated into recommendations and submitted to the 1979 legislature for adoption. A preliminary draft has been outlined in *A Balanced Growth Policy for North Carolina: A Proposal for Public Discussion* (or *BGP*, 78), printed in June 1978.

The objectives of the Balanced Growth Policy are (1) to provide more and better jobs where people live, (2) to provide more and better services that people and industry need, (3) to maintain a clean environment, and (4) to keep agriculture a vital part of the economy.

A major point of the Board's report and the one most visibly espoused by the Hunt administration is the Jobs Location Policy. According to the report,

It is the policy of the state of North Carolina to encourage diversified job growth in different areas of the state, so that sufficient work opportunities at higher wage levels can exist where people live. (*BGP*, 78, p. iv.)

Essentially, what the Balanced Growth Policy attempts is simultaneously to direct the state's efforts to reduce dislocations in the economy due to the search for job opportunities, to strengthen the North Carolina economy through industrial diversification, and to close the income gap between North Carolina and the U.S. Achievement of any of these goals would be considered a major accomplishment for the administration. The attempt to put all three goals into one consistent package can only be marveled at as remarkable sleight-of-hand.

Indeed, two major controversies have resulted from the Balanced Growth Policy. The first involves the notion that the administration is really pushing two policies under one name, (i.e., the Balanced Growth Policy). In their current form, these "two policies" are not entirely compatible. There is, on one hand, a policy directed at raising North Carolina incomes to the national level. Industrial diversification is a major element of this policy, since higher-wage industries are thought by many to be the "key" to improving North Carolina's relative income standing. On the other hand, there is the attempt to locate job opportunities in rural areas. Diversification may or may not be consistent with this policy, but to require that rural industrialization be a means of diversifying the state economy will undermine not only diversification efforts but also rural industrialization efforts, and improve North Carolina's relative income standing only in the long run, at best.

The second controversy involves differing "positions" on the overall effectiveness of state policy in guiding or intervening in the state's economic development process. One view is that the state can do little to influence the developmental process. This is contrary to the current notion that not only can the state do something, it must do something.

An additional reservation concerns the misplaced focus of North Carolina development strategy rhetoric. Too much emphasis is placed on status rather than performance. The year-to-year ranking of the state in terms of per capita personal income, for example, may be misleading. From 1974 to 1975 North Carolina's per capita income fell from 38th to 41st in the nation, but much of this "decline" reflects the impact of drought on North Carolina agriculture over the prior two years. North Carolina has a relatively higher dependence on agriculture than many of the states which gained in comparison, and some of the agricultural states in the Midwest had very good years during the same period which improved their relative standing.

Performance has been an important consideration in the administration's appraisal of economic development, but much of the rhetoric surrounding the state's economy contains comparisons with other states that are of little value in selecting policy or in assessing results.

One side of the Balanced Growth Policy is the dispersion of new industry in rural and smaller urban areas of the state. The point of emphasis is the location of job opportunities in areas of greatest need.

The Controversies

Firms that typically locate in rural areas generally pay wages which are not as high as those in urban areas and which will not increase the level of wages in the state. However, the location of firms in rural areas will increase rural income due to lowered unemployment rates and the increased participation of the rural population in the labor force. As more jobs become available other people who had not previously considered working, such as women, or who had become discouraged in trying to find a job, such as minorities and young people, will find work. The types of jobs which will raise income levels by increasing employment rates are not often the same ones which will help diversify the economy. Increased employment rates are stimulated by the more traditional North Carolina industries, such as textiles and apparel, requiring little skill and relatively little machinery and capital investment per worker.

High-wage industries could be induced to locate in rural areas, but they would not have the employment creating effects that a more traditional firm would have in the rural area, nor would they pay wages as high as those paid by a similar firm in an urban area. They generally will not employ those that the traditional low-wage firms would employ: the discouraged worker, the housewife, or the teenager. Instead they will demand a higher-skilled worker who will often come from another higher-paying job, perhaps to get closer to home. Moreover, they will pay lower wages than the same job located in a more urban area since firms in rural areas face less competition for skilled and semi-skilled workers.

The other side of North Carolina's economic development policy emphasizes attracting a greater variety of industries to North Carolina to strengthen the economy and raise the income level. The administration wants to bring "more and higher-paying jobs" to the state. According to the Balanced Growth Policy,

it seeks "more and better jobs" for the rural areas with high unemployment and under-employment. However, the same policy statement (*BGP*, 1978) notes that the larger cities remain a principal attraction for industrial growth and that their vitality is a prerequisite for rural industrialization. In a sense, the growth of rural areas is dependent on the overall growth of the state, just as North Carolina in the 1960s was dependent on the overall growth of the United States. As *A Balanced Growth Policy for North Carolina* suggests,

To some extent, where jobs will locate depends upon total job growth in the state. If overall growth is slow, there will be fewer jobs to go around and the number of these jobs locating outside of the main economic centers may be too small to support the labor force. If overall job growth is stronger, larger numbers of additional jobs in small cities and rural areas is possible. Continued emphasis on state economic development therefore is important.

These considerations suggest a number of important questions about North Carolina development policy. Is it the policy of the state to take all the industry it can get in the hope that some of it will choose to locate in needy rural areas? If so, what tools does the state have to prevent over-industrialization of the urban areas and their fringes, and what can be done to lure appropriate industry to more rural locations? What are the other implications for this state of small towns?

Is the state's fascination with national rankings making it more difficult to select and follow a course of action that might produce somewhat less "growth" but more "balance"? Are small communities misled into expecting more than can be delivered by industrial development? And is the state the best custodian for rural development efforts, or is it time for these areas to recognize the reality that state employees, quite naturally, put the state first with its individual local governments somewhat farther down the list?

Since Luther Hodges' administration, industrial recruitment has been at the heart of the North Carolina economic development policy. For the current administration the selection of an appropriate industrial recruitment strategy would seem to be no less important. However, a major problem results from the fact that the most effective type of industrial recruiting for raising the statewide average wage is not necessarily the most effective for improving employment opportunities and raising income levels in needy areas of the state. The result seems to be a lot of scrambling to get industry and a lot of talk about the new plants that locate outside of the major urban centers. Press releases from the Governor's office regularly report the successes in both cases. This makes it possible to pursue the goal of raising the statewide average wage through more and more industrialization while appearing to be equally concerned about the development of needy rural areas.

Administration officials maintain that they are achieving balanced growth objectives. High-paying industries are locating in some rural areas. However, in a statement discussing North Carolina's economic development policy, Secretary of Commerce "Lauch" Faircloth confirmed that the administration is banking

on a current trend: "Industries themselves are showing more interest in smaller communities." The fact that those smaller communities receiving the most attention are conspicuously located within a 50-mile radius of a larger city seems to be overlooked.* Many areas outside the 50-mile radius do not consider the state's approach adequate, and industrial recruiters from some of these outlying areas have organized to encourage greater effort to get industrial prospects to their communities.

Many of these recruiters remember the "Governor's Award" program initiated during the administration of Governor Bob Scott. The awards were given to communities that prepared themselves for new industry by meeting certain criteria set by the state, such as establishing community development teams to welcome and assist industrial prospects. Unfortunately, a lot of towns that got awards expected industry to follow, but it often did not. The net result of the program was some success and a good deal of disappointment.

The "Governor's Award" experience raises a further question about the state's ability to direct economic growth. Some, such as Lynn Muchmore, the state planning officer in the Holshouser administration, argue that "the state can do little to affect economic development." Others are more optimistic. Certainly the Hunt administration's initiatives to harness federal programs to state development policies would seem likely to increase the influence of state government. On the other hand, this achievement also increases the need for clear and realistic state policies and raises the central question of what those policies are or ought to be.

It is to that question that the following chapters are devoted. They are the results of extensive study of the North Carolina economy undertaken during the last seven months. While major consideration was given to national, regional and statewide trends, the economic performance of two state multi-county planning regions was examined in detail. Particular attention was focused on industrial development, a major feature of state economic policy over the last twenty years. The more significant state and federal programs directly affecting these regions were also reviewed to determine the level of effort brought to bear in each case. As an added dimension, about forty interviews were conducted with individuals in the two regions to get their views about what has happened there with respect to development, and to identify the most influential factors affecting local growth. Finally, the data from all of these sources were analyzed to identify the most important implications for state policy.

* The work of Alfred W. Stuart and James W. Clay of the Department of Geography and Earth Sciences, University of North Carolina at Charlotte, published in a paper, "Balanced Growth Policy for North Carolina, *A Response*" is notable for this observation and for its analysis of problems associated with attempts to attract high-wage industry to rural areas of the state, for its conclusions with respect to the limitations of the balanced growth policy, and for its identification of development policy alternatives.

Chapter 2

Other Factors Affecting the N.C. Economy

The Sunbelt Phenomenon

The 1960s and early 1970s was a period of dynamic economic growth and transition in North Carolina. Widespread changes touched all aspects of life--where people lived, where they worked, and what type of work they did. In some respects, North Carolina was merely "catching up" with the United States. The growth of per capita income and the rapid urbanization of the state are examples of this.

In some respects, the changes affecting North Carolina are trends occurring nationwide, such as the suburbanization of economic activities and the dispersion of urban areas. And in other respects, changes occurring in North Carolina are carrying it further from the national mean. The continued growth of manufacturing is an example of this.

The mechanization of agriculture was an important impetus for many of these changes. An equally important factor in understanding these trends in North Carolina is the "sunbelt phenomenon" -- that is, the movement of people, income, and new jobs (predominantly in manufacturing) from the Northeast and the Midwest to the southern half of the United States. This trend actually began in the 1930s and increased in importance in the 1950s. It received widespread national attention in 1976 when the performance of northern states' economies seemed to be deteriorating and the economies of sunbelt states made impressive gains.

The sunbelt phenomenon originated, in part, with the mechanization of agriculture. Numerous small farms were consolidated and more capital-intensive methods of farming (that is, methods which use more machinery and less manpower) were instituted. Manufacturing firms moved south in greater numbers to take advantage of lower wage rates, land prices (in cities as well as rural areas), taxes, and construction costs.

Out-of-state industry at first located in urban areas, hiring the more highly skilled workers and raising labor and other costs in and around cities throughout the state. North Carolina industries then began to move from urban to rural areas, in order to hire displaced agricultural workers there and to take advantage of generally lower costs.

As job opportunities grew, more highly skilled workers from the Northeast and Midwest moved to North Carolina, as well as to the rest of the Sunbelt, attracted by the growing economy, relatively low taxes, and geographic amenities. Growth of income followed growth of industry and industrial employment, increasing the importance of the southern market--which further served to

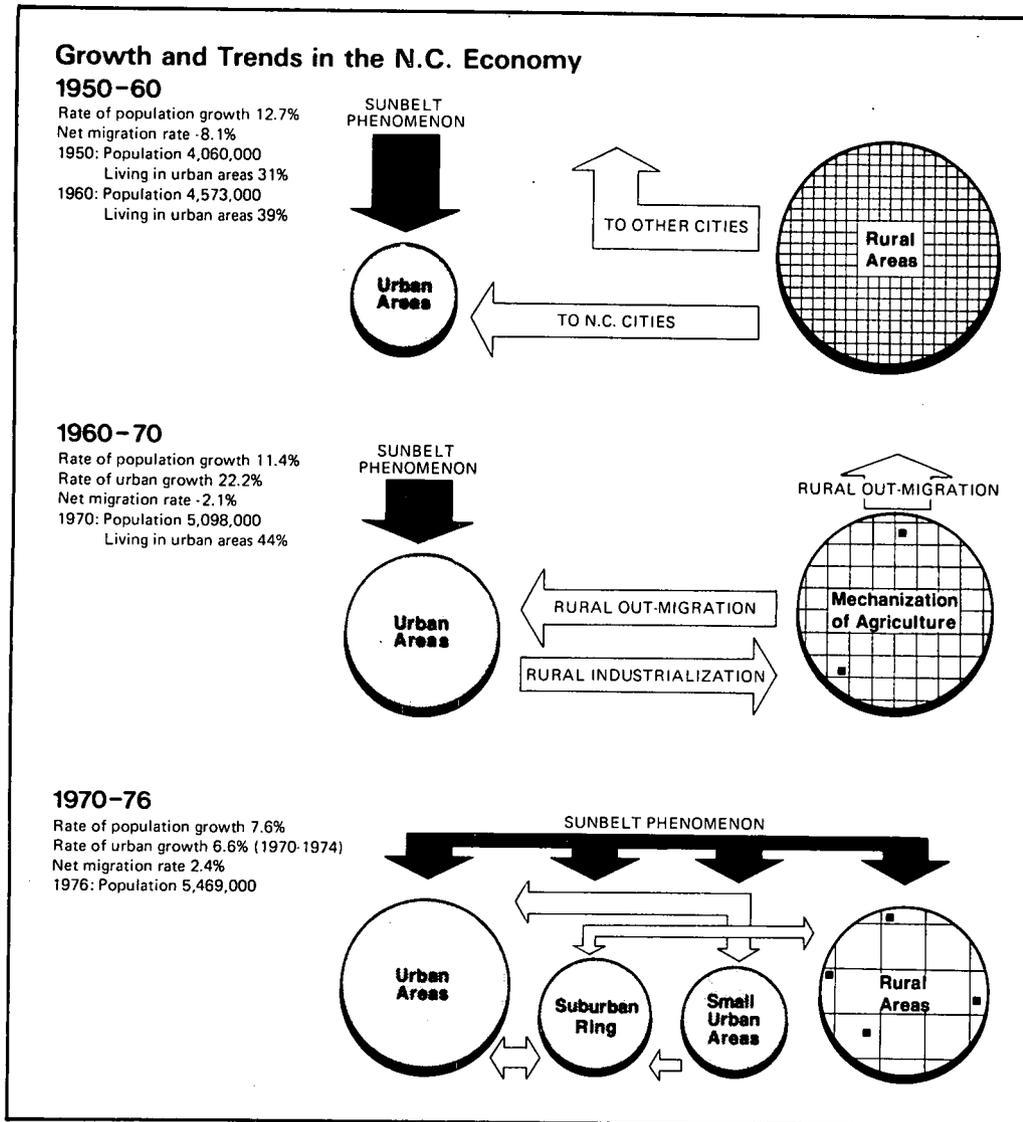


Figure 1.

draw industries' attention to the Sunbelt.

Concurrently, advances in technology made industry less dependent on some of the traditional factors of supply, such as raw materials and intermediate goods, so that firms could more readily take advantage of the southern climate---economic and otherwise.

A turnaround in both the interstate and intrastate movement of people occurred in North Carolina in the late 1960s and early 1970s. From 1970 to 1976, North Carolina experienced net in-migration comprising 2.4 percent of the total population of 1970. This is a notable shift from the 2.1 percent net out-migration experienced by North Carolina in the ten years from 1960 to 1970, and the 8.1 percent net out-migration that occurred from 1950 to 1960.

During the same period, the growth of the larger urban areas slowed while the growth rate of rural and smaller urban areas increased. In the 1960s, the

rural and suburban counties grew at half the rate of the rest of the state, but in the 1970s rural, urban, and suburban counties in North Carolina all began growing at about the same rate. The activity behind these numbers was widespread clustering of people in smaller urban areas resulting in the development of suburban rings in counties near metropolitan areas.

This pattern of urbanization is accentuated by new technology which reinforces tendencies toward industrial and neighborhood dispersion. The expansion of highway and modern transportation systems has also contributed to the dispersion phenomenon, because of increased space requirements for parking lots, interchanges, and four-lane and divided highways, and because of reduced travel times between various, once-distant points now linked closely by modern transportation facilities. This dispersion of economic activity is a national trend, but the dispersed city phenomenon is a characteristic which is most pronounced in North Carolina.

The Right-to-Work Law in the N. C. Economy

One significant element of the legal climate of North Carolina, which is said by many to enhance industrial recruitment efforts in the state, is the existence of a right-to-work law. A right-to-work law makes a mandatory "union shop" illegal---that is, in right-to-work states, it is illegal to require workers in a unionized firm to join the union.

There are many beliefs regarding the impact of right-to-work laws on a state's economic well-being. Many people believe that right-to-work laws greatly reduce the extent of unionization in right-to-work states. Others maintain that the existence of a right-to-work law does not affect the level of unionization in a state but that the law is merely an expression of the political atmosphere of the state, signifying its antipathy to unionized labor.

Both proponents and opponents of the law maintain that its effect is to reduce the extent of unionization in right-to-work states. Proponents insist that non-compulsory unionization increases the productivity of the state's work force---less time is lost to strikes and other union activity, since the power of a strike is reduced if all workers at a plant are not required to take part in it. This, they say, is the reason why businesses are attracted to right-to-work states.

Opponents disagree, maintaining that corporations are attracted to right-to-work states by the low wage rates which result from low levels of unionization. They argue that the traditional explanations of North Carolina's poor earnings record---the predominance of low-wage industries and the low skill and productivity of the work force---cannot account for differences between the average wage rates of North Carolina workers and the average wage rates of workers in highly unionized states.

The alternative view---that unionization is not greatly affected by the existence of a right-to-work law---suggests that unionization is determined more or less by the level of income in the state, which in turn is determined by the prevailing type of industry and the level of skills of the labor force. The view that income level determines the level of unionization derives from the observation

that although unionization may create wage differentials between otherwise similar workers (the unionized compared to the non-unionized), there is little evidence that it can raise the level of labor's income as a whole. As income rises (for example, as the skill of the labor force increases or as the amount of equipment each workers uses increases), the public's demand for services increases. The services that unions provide, such as pension benefits and job security, are among those that are demanded at higher income levels.

An extension of this view is that while the level of unionization in a state is predominantly affected by level of income and type of industry, the existence of a right-to-work law acts as a signal that the state's political apparatus is not greatly influenced by unionism and is not likely to be affected in the near future. Hence, the law attracts the type of labor-oriented industry which is most likely to give a high priority to locating in a relatively secure, union-free environment. Because such firms are usually low-wage industries, the result is to reinforce the traditional industry mix and the low level of income, as well as the low level of unionization in the state.

The firms which have the most to gain from low levels of unionization tend to be those that compete with many other similar firms and employ relatively large numbers of low-skilled workers. Examples of manufacturing establishments fitting this description are textiles, apparel, and furniture.

The costs of unionization are increased for all parties by the fact that few consumers will be affected if production is stopped due to a strike. Consumers can easily buy from another firm. Wage increases cannot easily be passed on to consumers after such a strike for the same reason. Due to the large number of firms in a competitive industry, it will not be possible to organize the entire industry.

Employers in competitive industries will lose revenues during a strike which generally cannot be recouped when production proceeds again, whereas employers in less-competitive industries can often gain some of these lost revenues. Employers generally have enough savings to outlast workers, especially in areas where union support is not strong.

Even so, while the cost of a strike in a competitive industry may be higher to the workers than to the employer, the cost of union demands may be higher to the employer than the cost of a strike, since the wage bill is a relatively large part of the producer's cost. Any increases in wages will cost the employer more than similar increases in wages cost a firm in a less-competitive industry, which typically employs relatively fewer workers. At the same time, since a low level of skill is required by the more competitive industry, any worker who does not think he is getting paid enough can easily be replaced by someone who would be glad to get paid at all.

In contrast, strikes are generally effective in industries in less-competitive markets (those in which there are few firms producing a product), which manufacture more durable goods (e.g., automobiles) or goods needed in the production of many other articles (e.g., fabricated metals, rubber), and which employ

capital-intensive methods of production.* In the case of a strike, consumers and other industries are sufficiently affected to call for a quick settlement. The wage increase can be more easily passed on to consumers, since the firm already has some price-fixing power. Moreover, labor is a smaller percentage of the firm's cost, so that a given wage increase will not greatly reduce net income, even if the wage increase cannot be passed on. Consequently, these types of firms will not be greatly influenced by the existence of a right-to-work law in deciding the location of a new plant.

For firms in competitive industries, however, the fact that North Carolina is a right-to-work state may strongly influence their decision to locate here. Hence, the right-to-work law may reinforce the low level of unionization either directly or indirectly by attracting that mix of industry---low-wage, competitive, labor-intensive---which is most instrumental in maintaining the low-wage levels, low income levels, and, hence, low levels of unionization in the state.

The tables in Appendix A-6a demonstrate the relative importance of various types of manufacturing in North Carolina and the U.S. These tables show that textiles, furniture, and apparel alone accounted for almost two-thirds of the total manufacturing employment in North Carolina in 1963, and still accounted for about 63 percent in 1972. Industrial employment is distributed much more evenly throughout the U.S. with the four largest employers (transportation equipment, electrical and non-electrical machinery, and food production) accounting for only one-third of total employment in 1963 and 1972. Appendix A-7 which shows North Carolina manufacturing employment as a percent of total U.S. manufacturing employment indicates that North Carolina accounts for 24 percent of the total U.S. employment in textiles, 11.6 percent of total employment in furniture and almost 3 percent of total employment in apparel in 1960, and relative shares in all of these industries in total U.S. employment increased by 1970. Relative wage rates of production workers are given in Appendix A-8. Only in tobacco does North Carolina's average wage exceed the national average, and its three major industries are among the four lowest-paying industries in the country.

Another characteristic of North Carolina's labor force with a bearing on the economic development of the state and its regions is this state's high percentage of minorities, especially in some rural areas. This presents several problems. Blacks and American Indians consistently have higher unemployment rates and lower per capita income than whites. (See Appendix A-9 for the relative size of minority populations in the seventeen regions of the state.)

Other than direct discrimination in hiring and promoting minorities, "discrimination by place" has contributed to the lower level of well-being of blacks

* Capital-intensive methods of production are highly mechanized and therefore employ relatively few workers with high skills. Labor-intensive methods of production rely more on manpower than on machinery and typically employ greater numbers of low-skill workers.

and other minority groups. One reason given for this is that

[p]ast and present discrimination against blacks in the provision of manpower services and health, and education, and other human resources investments has created a labor force that may really be less productive, and marginal firms in particular cannot afford experiments based on social concern.*

For example, most of the blacks displaced by the mechanization of agriculture in the South between 1950 and 1969 had less than four years of schooling. An additional explanation for place discrimination is that blacks are thought to be more susceptible to unionization drives, so a non-union firm will avoid locating in a predominantly black area.

The relatively disadvantaged economic position of blacks and American Indians in North Carolina is not likely to be rapidly improved by an economic development policy based on industrial recruitment. Additional attention must be paid to this form of "imbalance," which exists along both racial and geographic lines. Until this problem is solved, the goals of the current North Carolina development policy will be difficult to achieve.

In 1970, state government consisted of over two hundred separate agencies, boards and commissions. Coordination was very difficult, if it occurred at all, and the ability of the governor to execute his program was limited. Recognizing these and other problems, Governor Bob Scott supported a constitutional amendment calling for government reorganization which was passed by the people in the fall of 1970, and he then set about the reorganization of state government into twenty-five or fewer major agencies. A blue-ribbon committee appointed by the Governor wrestled with the major problems, but several of these required the attention of Governor Scott himself. Perhaps the most difficult of these and the one on which he spent the most time was the question of where to place the principal environmental agency, the Department of Water and Air Resources, and the agency primarily responsible for economic development, the Department of Conservation and Development.

Reorganization of
Industrial Recruitment

Officials of the Department of Conservation and Development wanted that department to remain a separate agency. Although the Governor's Committee on State Government Reorganization recommended that the environmental and development functions be lodged in separate departments, Governor Scott chose to put them in a single Department of Natural and Economic Resources. According to Scott, his main reason for doing this was to provide for the resolution of conflict between those two activities at the department level rather than in the governor's office.

* Hansen, N.M., *The Future of Non-metropolitan America*, (Lexington, Mass., D.C. Heath and Co., 1973), p. 64.

During Jim Hunt's campaign for governor, he made clear his intention, if elected, to move travel, tourism, and industrial recruiting from the Department of Natural and Economic Resources to the Department of Commerce, which, under the 1971 reorganization, had become the home of various regulatory agencies such as the Banking Commission. With Hunt's support, this move was accomplished by legislation enacted during the 1977 General Assembly.

At a press conference on September 7, 1977, Hunt said he expected this expansion of the Department of Commerce to be an important step in his goal of moving the state from 49th to 46th place in manufacturing wages. At the time, however, some state government officials expressed concern about the effect of the legislation on the coordination of development and environmental activities. In fact, the Department of Commerce now relies on a consultant for much of its advice in the environmental area. Before the 1977 change, there was a close working relationship between developers and environmentalists within the single Department of Natural and Economic Resources. Nevertheless, officials within the expanded Department of Commerce insist that the coordination is not suffering.

North Carolina and the South

From 1970 to 1975, population in the fifteen states comprising the South (see Appendix A-4) grew by 8.6 percent compared to the 4.8 percent growth in population experienced by the United States as a whole. At the same time, personal income in the South increased by 63 percent compared to the national increase of 54 percent, and non-agricultural employment grew by 16 percent in the South and by 7.5 percent in the U. S.

This dynamic growth is one aspect of the "sunbelt phenomenon"---that is, the movement of people and economic activity to the southern and southwestern states to take advantage of the growing economic opportunities in these areas. In one respect, the phenomenon is simply a matter of the North and the South growing more alike---"sharing the national wealth more equally," as one writer said. Industry is drawn to the South by lower costs: lower wages, lower taxes, and lower cost of land and services. People are drawn to the region by increasing economic opportunities and the growing number of jobs.

Much of the growth in the South is in manufacturing, a sector which is losing employment nationwide. As manufacturing becomes more concentrated in the southern economy, the slow growth of this sector may diminish the overall growth of the South. Such may, in fact, be the case in North Carolina where the state's economy has recently shown signs of slower overall growth than the economies of other southern states.

Although North Carolina has benefited greatly from the sunbelt phenomenon, its economic development in the late 1960s and early 1970s has been markedly different from that of other southern states. One of the reasons for this divergence may be the relative importance of different segments of the economy. North Carolina has a much higher dependence on manufacturing than other southern states. (See Appendix A-6.) It is more like the industrial North in

this respect, although the content of its manufacturing differs greatly.

While the growth of industrial employment between 1970 and 1976 in North Carolina was faster than the national rate of growth, it was much slower than the rate of growth of non-agricultural employment in the South. (See Appendix A-5.) The only sectors which grew faster in North Carolina than in the U.S. or the South as a whole were manufacturing and public utilities/communications, sectors which were growing slowly in the South and declining nationwide.

The fastest growing sector in the South was services. From 1970 to 1976, employment in services increased by 32 percent in the fifteen state area. In North Carolina, employment in services grew by only 24.5 percent, only slightly faster than the growth rate in the U.S. of 23.4 percent. The next fastest growing sectors in the South were government employment and employment in financial institutions. In North Carolina, employment growth in these sectors was less than, but close to, the southern average. Employment in wholesale and retail trade, however, grew by about 22 percent in the South compared to approximately 15 percent in North Carolina and 14 percent in the U.S.

The growth of manufacturing in North Carolina was, in part, due to recruitment efforts directed toward bringing more manufacturing industry to the state. This strategy was dictated in part by the state government's desire to diversify the manufacturing sector of the North Carolina economy, which was heavily concentrated in the production of consumer non-durables, and also by the eminent suitability of the geography of North Carolina for a variety of manufacturing enterprises. The numerous small cities, the transportation network, and the composition of the work force in this state are some of the factors which have contributed to its manufacturing "suitability."

The large rural population in North Carolina is a major factor in the relatively fast growth rate of employment in utilities in this state and in the relatively slow growth of services, retail trade, government, and finance compared to the rest of the South. Employment in the latter four sectors increase as city size increases, and North Carolina has no major metropolitan area comparable to Miami, Houston, Dallas, or Atlanta which have greatly contributed to the rise of services, trade, and finance in their respective states and in the South. On the other hand, rural industrialization, the "clustering" of population in rural areas, and the rapid growth of personal incomes in North Carolina have led to the extension of utilities and communications networks in rural areas of the state. This extension has created employment in the communications and utilities industries in North Carolina, as well as the South, at a time when that sector is becoming increasingly capital-intensive nationwide.

Economic performance in the individual states in the South in the early 1970s has been strongly associated with population growth. (See Appendices A-4 and A-4a.) States with high net in-migration rates, such as Florida, Texas, and South Carolina, generally had the best economic growth record---especially in terms of industrial employment growth.

While North Carolina experienced more in-migration than out-migration

in the 1970s, its net in-migration rate was less than that of many other southern states. Concomitantly, income and employment overall grew less fast. While North Carolina's economic performance was impressive compared to the U.S., its growth was sluggish relative to the states in the South. The major reasons for this relatively unimpressive performance were the structure of industry in North Carolina and the small size of its cities. Small city size has been found to attract manufacturing employment in the South, but smaller cities do not encourage the growth of services as much as larger cities.

North Carolina employment is heavily concentrated in manufacturing, which is declining in importance as an employer in the U.S. because production processes here are becoming ever more capital-intensive. Moreover, employment in manufacturing in North Carolina is concentrated in consumer non-durables (such as textiles, apparel, food, and tobacco), which are among the slow growing manufacturing branches of the national economy. Manufacturing is, furthermore, very sensitive to cyclical economic conditions, so that employment in manufacturing grows in spurts and is less stable than employment in the service sectors. For all of these reasons, the economic interests of the state may not be best served by further increasing the state's dependence on manufacturing.

Chapter 3

Seventeen Planning Regions and How They Grew

In 1969, in response to the federal government's commitment to regional concerns expressed in the Intergovernmental Cooperation Act of 1968, the North Carolina General Assembly charged the North Carolina Department of Administration with the development of "a system of multi-county regional planning districts to cover the entire state." In May 1970, seventeen such districts were delineated by executive order of Governor Scott. (See Figure 2.) Concurrently, the reorganization of state government discussed in the last chapter was undertaken, in part to facilitate state planning and development efforts.

A Statewide Development Policy, formulated by the Scott administration in 1972, enumerated growth centers for each of the multi-county regions, although the seventeen regions were initially designated primarily for the purposes of planning and coordination. In adapting the growth center approach to the Balanced Growth Policy of Governor Hunt's administration, the State Goals and Policy Board opted to consider each of the multi-county regions as an economic entity, acknowledging that the extent to which each region can actually function as an economic unit may vary.

The regions investigated by the Center were selected on the basis of their recent economic performance and their representativeness as rural regions. Two non-urban regions were selected in order to focus on recent trends in North Carolina's basically rural economy, recent national economic trends, and major North Carolina economic development policy decisions made by state and local officials over the last decade.

In the 1960s, the overall economic performance of the highly urbanized regions was much better than that of the more rural, less densely populated regions. The urban regions include Regions B and E in the Mountains, Regions F, G, and J in the Piedmont, and Regions O and M in the Coastal Plain. (See Figure 3 and Appendices A-9 and A-10.) In the 1970s, the performance of the rural multi-county regions improved relative to that of the urban regions, a trend which may support the contention of the state administration that North Carolina is becoming a more economically balanced state. Relative rates of growth in population, employment, and per capita income for the seventeen regions in the 1960s and 1970s are given in Appendices A-11, A-12, and A-13.*

From 1960 to 1970, only those regions which were highly urbanized experi-

* The Department of Administration report, *Balanced Growth Trends in Population and Employment*, presents a fairly clear picture of population, employment, and income growth in the seventeen regions in the 1960s and 1970s.

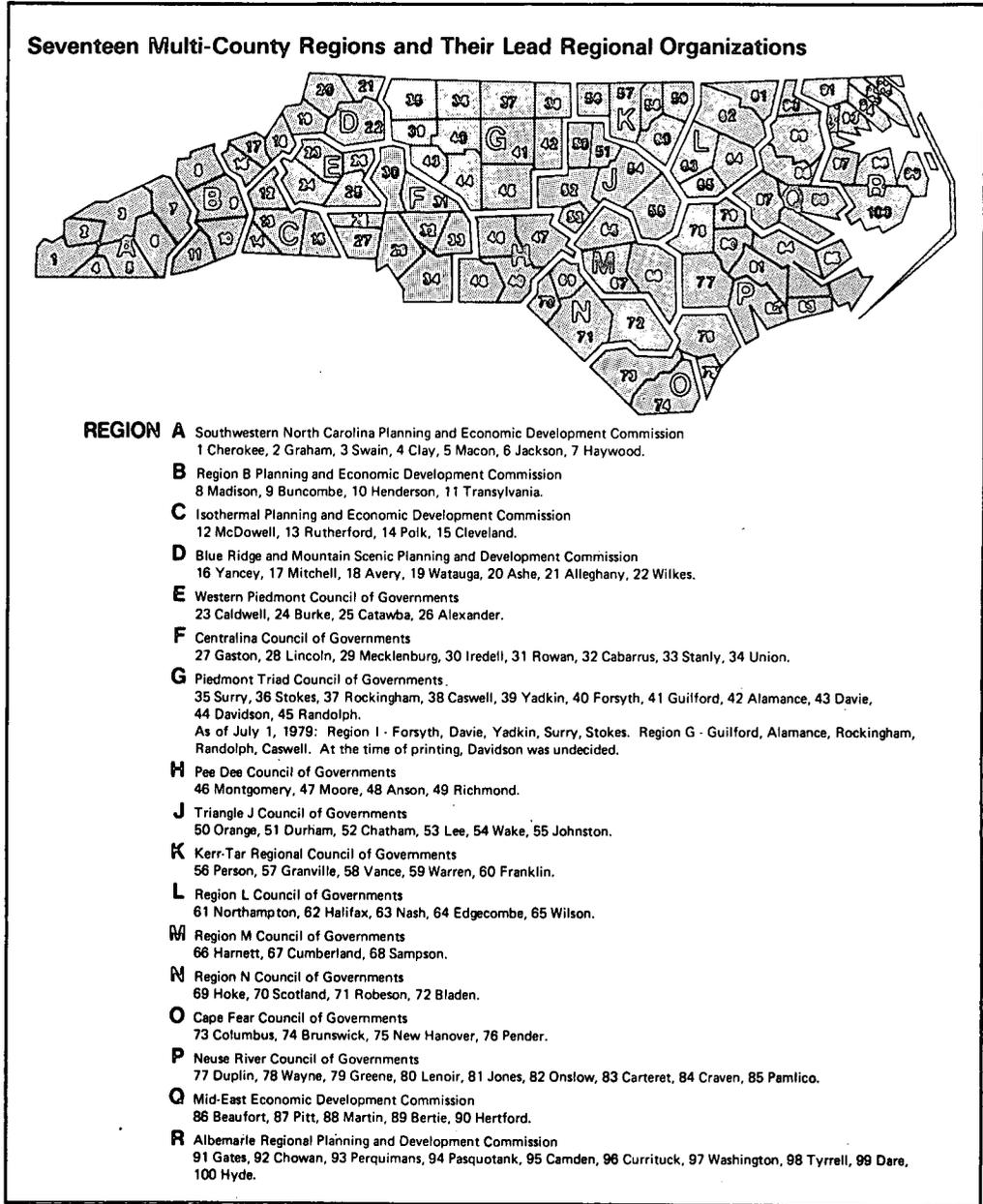


Figure 2.

enced net in-migration. Substantial out-migration occurred in non-urban regions, and Regions K, L, N, Q, and R (all of which are in the Coastal Plain) actually declined in total population. In the 1970s, the population movement shifted, and population in the non-urban, non-piedmont areas of the state began to grow faster than the state average.

Growth in total employment in North Carolina generally followed population trends in the state's multi-county regions during the 1960s. Urban regions with the fastest growing populations---that is, Regions M, J, F, and E---also experienced the greatest employment growth rates. Employment growth in the other urban regions and in the mountain regions was slower but close to the state

average, while employment in the Coastal Plain regions grew at the slowest rate of all.

Of course, the Coastal Plain regions had a much higher dependence on agriculture at this time than did the Piedmont or Mountain regions. (See Appendix A-14.) Taking into account the non-agricultural employment growth, for this time period, the economic performance of the Coastal Plain regions improved considerably. This "apparent" improvement in non-agricultural employment growth compared to total employment growth occurred because much of the increase in industrial (non-agricultural) employment involved farm workers displaced by the mechanization of agriculture. This trend was most pronounced in the eastern part of the state during the 1960s.

The growth in manufacturing employment in the Coastal Plain regions from 1960 to 1970 was even more telling, and high growth rates---especially in Regions K and N---were indicative of the employment shift from farm to factory. During this period, Regions K and N also had the largest percentage decreases in farm employment of all regions in the state. Unemployed farm workers found jobs in growing numbers in nearby manufacturing firms, which were being drawn to rural eastern North Carolina by the increasing availability of large numbers of unskilled workers.

But the impressive "apparent" gains in manufacturing employment in some of the Coastal Plain regions, such as K and N, between 1960 and 1970 were misleading. In 1970, official North Carolina calculations attributed an individual's "employment" to place of residence, whereas employment figures in 1960 had been based on an individual's place of work. Part of the increase in employment in Regions K and N reflected the fact that many people in these areas worked outside the region where they lived, and the number of people employed in these regions appeared to grow much faster than it actually did when industrial employment figures were recalculated according to place of residence.

In addition to the impact of the transition from agriculture, Region P's impressive growth rate was due, in part, to the upgrading of the Morehead City port facilities and in part to the increased importance of military activity at Camp LeJeune in the 1960s. The performances of Region O (with the port at Wilmington) and Region M (with the military base at Fort Bragg) reflected these considerations also, demonstrating the importance of defense activities to many parts of eastern North Carolina.

In the 1970s, growth rates of total employment, like the population growth rates, were much more comparable in the seventeen regions than they were in the 1960s. The fastest growing regions were J, Q, M, and D. The slowest growing were the urban regions of E and F. Relatively higher growth rates of non-agricultural employment in the rural or Coastal Plain regions reflected the continuing rural industrialization, the movement out of agriculture, and the increasing participation rates of women and underemployed farm laborers in the work force. The growth of manufacturing employment was especially pronounced in the eastern half of the state.

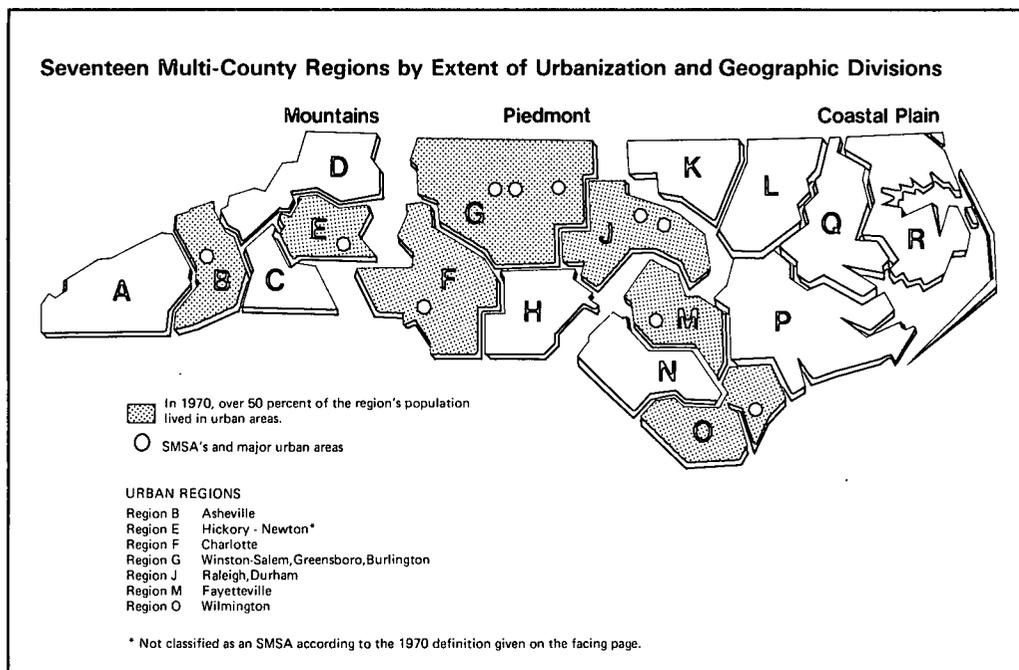


Figure 3.

If the growth rate of employment is divided between pre-recession and post-recession, the picture shifts somewhat. The initial impact of the recession was milder in the Coastal Plain, which lost only 6,000 jobs (net) in 1974 and 1975, compared to the state's loss of 75,000 jobs. The Mountain region was hardest hit. The high reliance in the western part of the state on furniture manufacturing, which suffered greatly during the recession, contributed to the substantial decreases in manufacturing employment experienced in the Mountain regions. (See Appendix A-12.) Except for Region B, however, the Mountain regions rebounded quickly. Employment losses during the recession reflected a temporary decrease in consumer demands, not a lasting shift in their demands or changes in the methods of production.

After the recession, Regions A, H, D, and R gained substantially in relative non-agricultural employment growth rates, while the growth of the urban regions (B, E, F, G, and J) and some of the Coastal Plain regions (K, L, M, N, and O) slowed. This shift in relative growth rates was largely due to the lingering impact of the recession on the types of industry---particularly manufacturing---in the urban and Coastal Plain regions. In the period from 1969 to 1974, the Coastal Plain regions had greatly increased their proportion of employment in higher technology industries, just as the urban regions had done in the 1960s. (See *Balanced Growth Trends in Population and Employment*.) These industries did not recover as quickly from the recession as the equally hard hit traditional industries in the state, especially furniture and apparel, which had been locating more generally in the mountain and rural piedmont areas than in the eastern part of the state. Moreover, consumer demand had shifted away from synthetic textiles, especially polyesters, the manufacture of which had become an important employer in eastern North Carolina between 1968 and 1974.

Dynamic growth in per capita personal income in some of the regions during the last decade and a half has greatly altered the relative positions of the regions with respect to their per capita personal incomes. In the 1960s the performance of the regions appeared to be influenced greatly by the presence or absence of an SMSA* in the region. (See Figure 3 and Appendix A-13.) In 1970, the relative ranking of a region in terms of per capita personal income could be largely explained by the proximity of the region to a metropolitan area and the size of the SMSA. Income and wages were generally higher in urban areas because of the greater competition among employers for labor and because of the more highly skilled and more highly educated labor located in and around urban areas. At the same time, living costs were higher in metropolitan areas.

Another important difference existed with respect to per capita personal income among the geographic areas of the state in the 1960s. Per capita income was highest in the Piedmont, followed by the Mountains, and was lowest in the Coastal Plain. In 1966, for example, per capita income was highest in Regions F, G, J, E, and B (in descending order), all of which except B are in the Piedmont Crescent. It was lowest in N, R, K, L, and Q (in ascending order), which are all in the Coastal Plain. (See Figure 3.) Per capita income generally grew faster in the Mountain and Piedmont regions in the early part of the 1960s but began growing faster in the Coastal Plain in the latter half of the decade. This trend was maintained after 1970 and, by 1974, the Coastal Plain regions had greatly improved their rankings at the expense of the Mountain regions.

The difference in per capita personal income between urban and non-urban areas also began to dissolve in the 1970s, as per capita income in non-metropolitan regions (those without an SMSA) began to grow quickly, particularly in the less urbanized coastal regions. The relative improvement in per capita income in the non-metropolitan Coastal Plain regions from 1962 to 1974 was largely due to the increased participation of male and female laborers in the non-agricultural work force and to the higher profitability of mechanized agriculture in this time period. (The higher rate of growth in income in Region D in the Mountains was also partially due to increased farm incomes.) The urban regions in the Piedmont and the Mountains maintained their relative positions with the highest per capita income levels in the state, which were still less than the national average; but in general, their income growth rates were the lowest in the state.

A recent study by the Research Triangle Institute found major differences in the source of relative per capita income gains in the 1960s and early 1970s in different geographic areas of the state. The study linked per capita income gains in metropolitan regions with increasing wage rates, while in the non-metropolitan regions, per capita income gains were found to be more significantly

*SMSA stands for Standard Metropolitan Statistical Area. It includes those counties containing a central city with a population of 50,000 or more and any adjacent counties which are economically or socially linked to the central city. Each county within a SMSA is considered a metropolitan county. Metropolitan multi-county regions are those which are predominantly comprised of metropolitan counties.

correlated with increasing industrial employment.

More recently, the increase in the number of new high-wage jobs in the Coastal Plain regions is thought to have contributed to the improved economic performance of those regions. The impact of "high-wage" firms locating in the rural eastern part of the state has diminished their overall impact on North Carolina's per capita income level because such firms in rural areas will not pay wages as high as those they would pay in urban areas. The results of more so-called "high-wage" industry locating in non-metropolitan Coastal Plain regions may be reflected in the statement that

Since 1970, the mix of jobs in each class of indices (i.e., high wage/high growth, low wage/low growth) has on the average *paid less than existing North Carolina jobs* [in the same categories], but because jobs overall were in the high wage/fast growth and high wage/slow growth categories, the average wages for all manufacturing continues to increase. ("Critical Analysis of A Balanced Growth Policy.")

In general, while size (in terms of area, population, and number of counties included in the region) seemed unrelated to the initial economic status of regions (with the exception of the regions in the Piedmont Crescent), the smaller regions performed relatively poorly over time, with some slipping in their ranking with respect to per capita income levels. The smallest region, R, did improve its relative position but this shift was probably due to its strong attraction as a resort area.

The larger regions apparently possess some economies of scale as they tended to improve their relative income levels. These economies of scale reflect, in part, the dynamics taken into account when regions were drawn to begin with. An attempt was made to contain major retail trade areas within a particular district and to minimize the economic dependence of one region on another. Larger districts were naturally part of larger retail trade and service areas, containing more important commercial centers with greater growth potential.

The Selection of Two Regions

The varying rates of growth in income and employment in the multi-county regions during the 1960s and 1970s were caused by a combination of factors. The different types of industry in each region influenced the growth of income and determined the impact of the recession there. Metropolitan areas experienced much greater population and total employment growth than rural areas in the 1960s, a trend which continued but slowed in the 1970s. The geographic location of a region and its relative accessibility to a metropolitan area were, and still are, important for overall economic performance.

The accessibility of a region and the extent of urbanization in a region are not easily affected by government policy. The belief that state and local policies can influence the type of industry attracted to a given area is the basis of North Carolina's industrial recruitment strategy. The view that industrial recruitment efforts may override the importance of less manipulable factors, such as location and city size, moreover, provides the link between the North Carolina Balanced Growth Policy and the state's industrial recruitment strategy.

A fundamental question arises as to the realism of these views in the context of North Carolina's economic development experience. In order to shed light on this question, two multi-county regions were selected for detailed study. The issues involved in the investigation of the relative impact of industrial recruitment on economic development in the two regions included determinations about what had happened in terms of industrial development in each of the regions and about what actions (e.g. specific projects or industrial recruitment efforts) or immutable factors (e.g. the location or geography of the regions) led to these developments. In the absence of any changes in federal, state, or local development policies in the near future, such as more stringent environmental or zoning standards or repeal of the right-to-work law, what was the expected future of industrial development in the regions, and what actions might be taken (programs, projects, or regulations) to either reinforce or alter these future trends? To answer these and other questions, an analysis was undertaken of one representative region which had done relatively well in the late 1960s and the 1970s and of a similar region which had done relatively less well in the same time period. The overall object of this analysis was to determine the impact of industrial recruitment on the development of each region. Recent economic trends---including the transition from agriculture, the dispersion of urban areas, and the suburbanization of economic activity---and the North Carolina economic development policy with its emphasis on balanced growth were given particular consideration in the selection of regions. As a result, attention was directed toward the non-metropolitan regions (those not containing an SMSA) and toward the Coastal Plain area.

Much contention surrounds the feasibility of any economic development plan based on industrialization in non-metropolitan regions. Problems with such plans include the initial narrowness of any rural economic base, low wages due to the natural monopoly position of rural employers, the unavailability of specialized services, and the low level of skill of the population and the available work force. In the context of North Carolina economic development, such a plan may lead to a state-wide equalization of economic opportunities but might also contribute to a widening wage gap between North Carolina and the rest of the United States and increase the vulnerability of the state economy to cyclical economic recessions. Noting the importance of rural industrialization to the current state economic development policy and the contemporary trend in the U. S. toward more dispersed patterns of living and industrial location, an investigation of the relative impact of state and local industrial development efforts in non-metropolitan areas is essential for appraising the feasibility of the North Carolina Balanced Growth Policy.

The dynamic growth of the Coastal Plain regions in the early 1970s served to focus attention on that area. Per capita income in both the Mountain and the Coastal Plain regions was lower than the state average, but until the 1970s it was consistently lower in the Coastal Plain. The Coastal Plain, already more urban than the Mountain region, but less urban than the Piedmont, experienced a higher rate of urbanization in the 1960s than either of the other regions. Cover-

ing over one-half the land area of North Carolina, the Coastal Plain comprises a larger proportion of the state than the similarly underdeveloped Mountain region which includes only 23 percent of the state land area. In 1973, the Coastal Plain was the home of 41 percent of the population of North Carolina and generated 39 percent of the state's personal income, compared to the 13 percent of the state's population who lived in the Mountains and generated 12 percent of the state's personal income.

The Coastal Plain has been the focal point of the state's transition from agriculture to diversified industry, and in the late 1960s and early 1970s, it experienced extensive industrial development, particularly in high-wage and high-technology industries. As the fastest growing area in North Carolina, the Coastal Plain is currently illustrative of the major changes occurring in the state. The movement from agriculture to manufacturing and from a rural economy to a dispersed urban system in eastern North Carolina highlights the trends in the overall North Carolina economy.

Consequently, Regions K and L, two non-metropolitan regions located in the Coastal Plain, were selected for detailed analysis during this study. Regions K and L are contiguous, a factor which minimizes the possible influence of varying geographic conditions, and their respective economies have been undergoing similar changes in terms of per capita personal income growth, population movement and the transition from agriculture to industry. But, while Region L has been growing faster than the state, according to most economic indicators, Region K has generally been growing slower. It is clear that North Carolina's economic development policy has not been implemented with equal success in these two similar areas, and for this reason, an investigation of the factors contributing to these local differences raises broad questions about the state's overall development policy.

Chapter 4

Focusing on Regions K and L

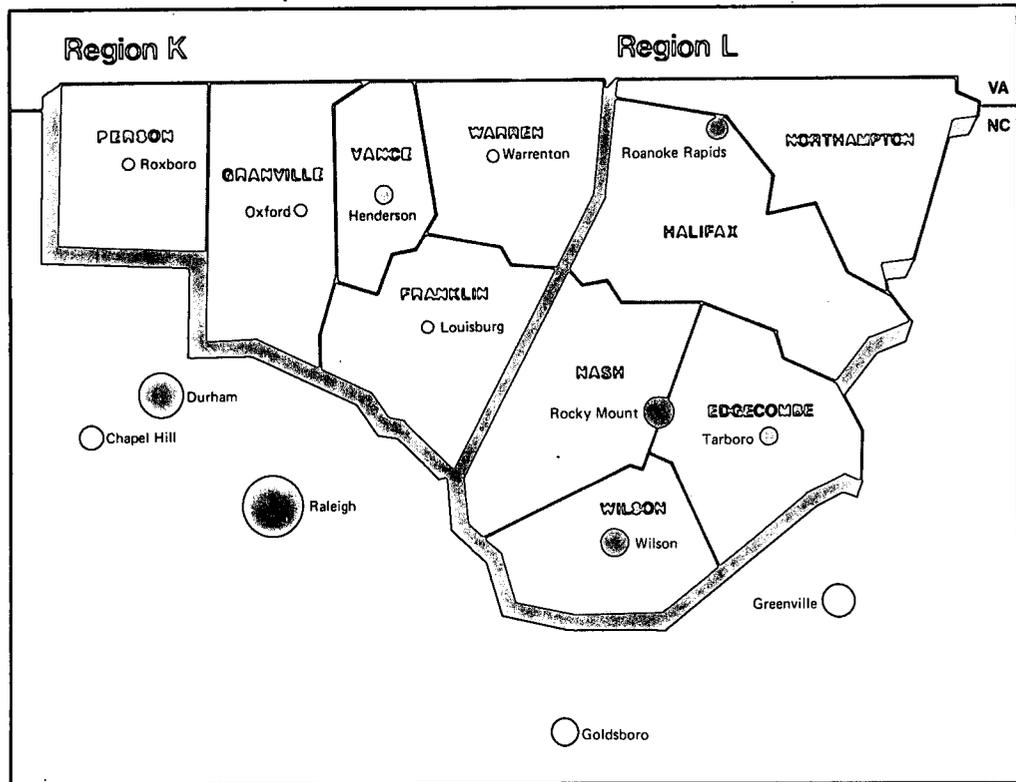
Comparisons

Geographically, Regions K and L are in many ways alike. Each consists of five counties: Franklin, Granville, Person, Vance, and Warren in Region K and Edgecombe, Halifax, Nash, Northampton, and Wilson in Region L. Both regions border Virginia on the north---Region L with Northampton County and Region K with all but Franklin County---and both are located in the transitory region of the state between the inner Coastal Plain and the eastern edge of the Piedmont Crescent. The fall line does run through the western half of Region L, technically classifying part of Region L and all of Region K in the Piedmont; but in many ways, the two regions are more comparable to the other Coastal Plain regions, and are generally treated as such.

The two regions have the highest proportion of blacks in the population in the state. In 1970, 42.7 percent of the population of K was black and 43.4 percent of L was black. Indians comprise less than 1 percent of the population in each region. Minorities predominate in Warren (K) and Northampton (L) Counties. In 1976, 66 percent of the population in Warren was non-white as was 59 percent of the population of Northampton. Person County in Region K with 21 percent of the population non-white in 1976 and Nash County in Region L with a non-white population of 33 percent of the total have the lowest minority populations in their respective regions.

Agriculture is an important part of the local economy in both regions, although since 1960, manufacturing has become increasingly important. In 1960, for example, 33 percent of total employment in K and 27 percent of total employment in L were in agriculture and related occupations, while approximately 21 percent of total employment in each region was in manufacturing. By 1970, 11.5 percent of employment in each region was in agriculture, while 35 percent of total employment in K and 28.5 percent of total employment in L was engaged in manufacturing. At the same time, only 38.8 percent of the population of Region L and 28.8 percent of the population of Region K lived in urban areas. One county in each region---Warren County in K and Northampton County in L---was still considered entirely rural.

The two regions are not entirely similar, however. Region L is substantially larger than Region K, both in area and population (increasing the potential supply of recruitable labor, the potential number of industrial sites, and the potential acreage in farms), and L is also the more densely populated of the two. In 1975, Region L had 96.2 persons per square mile compared to 65.8 persons per square mile in Region K.



In addition, in 1975, Region L contained four urban areas with populations over 10,000. These were Rocky Mount, straddling Nash and Edgecombe Counties; Wilson; Roanoke Rapids in Halifax County; and Tarboro in Edgecombe County. Rocky Mount and Wilson each had populations exceeding 25,000 (though less than 50,000 which would give them metropolitan status). Henderson in Vance County was the only city in Region K with a population of more than 10,000. The unique communities of Butner in Granville County---an unincorporated, largely state-supported community---and Soul City in Warren County---an experimental “planned” community based on black enterprise---have drawn attention to the region, as well as public and private funds, even in the absence of larger traditional urban areas.

In addition to differences in region and city size, Regions K and L differ in economic and geographic orientation. The economy of Region L is more interconnected and more closely linked with the national economy than that of Region K. This greater economic cohesiveness is reflected in the commuting patterns of the region and by the relatively high level of retail sales per capita in most of the counties in the region, particularly Nash County. The region’s links with the national economy contribute to its relatively high level of per capita expenditures by travelers in two of the counties in the region---Wilson and Nash County. The economy of Region K is much more tightly connected with the Raleigh-Durham area on the other hand, and commuting patterns there as well as the low level of per capita retail sales, reflect the economic dependence on outside urban centers. (See Figures 4 and 5.)

The system of highways both within a region and connecting the region with other areas is a primary determinant of its economic and geographic orientation. The relative sizes of the cities located within the region as well as the size and importance of outside cities closely connected to the region by various transportation networks are additional determinants of regional orientation. Any region's system of roads and cities has a profound impact on the basic economic issues which it faces. These issues include where the residents of the region work, where they spend their money, where the people employed in the region live, and where the dollars spent in the region come from. The important aspects of these questions are the extent to which the dollars spent outside the region by residents is balanced against dollars spent inside the region by non-residents, and the extent to which the number of jobs in the region equals the number of working residents. The relative balance or imbalance of these measures indicates the relative dependence or self-sufficiency of the region.

If, for example, the residents of Region K spend more money outside the region than non-residents spend within it, the region will experience an "outflow" of money and will exhibit a "deficit." A "surplus" region is one in which non-residents spend more money than residents divert by outside expenditures. The money spent need not be in retail sales; it can be for financial or other services. Retail sales are, however, a sensitive indicator of the economic vitality of a region. Areas likely to generate a high level of retail sales for the size and income level of the resident population include large metropolitan areas which supply more specialized goods and services to a larger region, in addition to the daily goods and services needed by its residents (e.g. Charlotte); smaller cities which act as trade centers for a surrounding rural population (e.g. Rocky Mount); and moderately populated counties which contain major outdoor recreational attractions called "destination-recreation" areas, such as Dare County.

A similar relationship between surplus and deficit regions exists with respect to the job opportunities in each region for residents and non-residents. If a region has more jobs than it has working residents, regardless of where the people live who work there, the region has a surplus of jobs.* Some residents of "deficit" regions, on the other hand, must either commute or move to another area. The major concern of deficit regions is not that so many of its residents commute, although extensive commuting can reinforce a deficit relationship in retail sales if most of the residents do much of their shopping where they work. The problem is that many commuters will eventually be induced to move if jobs or other incentives to remain in the region are not provided, consequently draining the region of human as well as financial resources. An even greater problem with extensive dependence on commuting in poorer regions is that many of the residents most in need of jobs often are not able to commute because they have no car. As the more highly skilled and more advantaged residents commute and

* The provision of jobs to non-residents often has the same beneficial effect on a region's economy as exporting a commodity, particularly if the in-commuters buy goods and services where they work.

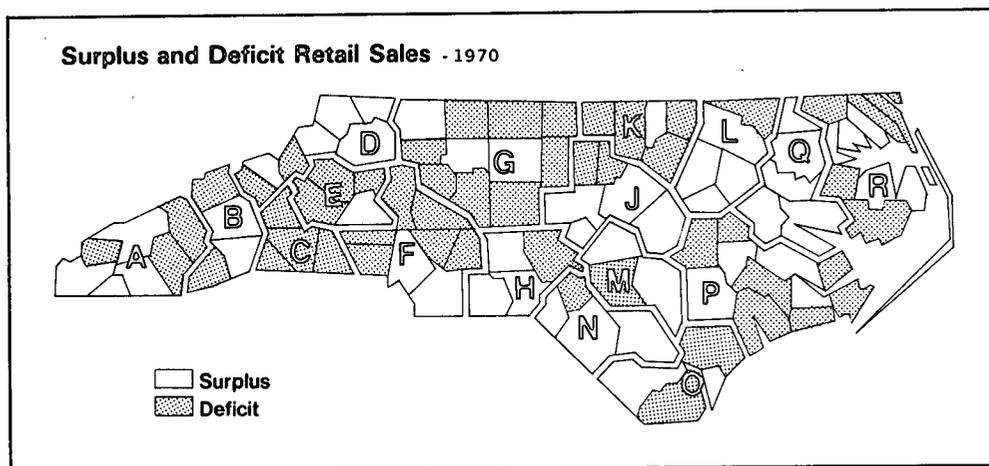


Figure 4.

eventually move out of the region, the proportion of poorer residents increases.

Metropolitan areas are most likely to generate both a high level of retail sales per capita and a surplus of employment opportunities over the number of working residents. Consequently, the accessibility of a non-metropolitan region to such an area will increase the chances of a deficit relationship in terms of jobs and retail sales that favors the metropolitan region. The quality of the transportation system has an especially large impact on commuting patterns between regions. The importance of job opportunities in one county to residents of another county depends primarily on the time required to reach the place of employment, the distance to be traveled, and the conditions of the roads. As the quality of the highway system connecting a region with a larger urban region improves, the number of commuters to the urban center will increase. In addition, as the quality of roads connecting the region with a metropolitan trade center improves, the quantity of shopping excursions undertaken to the center will also increase while the relative economic importance of the items bought there decreases. More money is spent outside the county of residence on items that might be purchased in the home county, reinforcing a deficit relationship.

Such surplus and deficit relationships provide the bases for the fundamental contrast between the economic orientations of Regions K and L. The transportation links between each region and near-by metropolitan areas, Raleigh-Durham for Region K and the Richmond, Virginia-Tidewater area as well as the rest of the nation for Region L, are essential determinants of their respective economic orientations. Interstates in both regions, I-95 in Region L and I-85 in Region K, are the most important routes, but the orientation they give each region is markedly different.

Interstate 95---the major north-south freeway for eastern seaboard states---passes through four of the five counties in Region L. In 1970, three of these four counties, Halifax, Wilson, and Nash, had surplus retail sales of over 25 million dollars. Wilson and Nash Counties also received expenditures from travelers in excess of 200 dollars per capita, notably higher than expenditures received

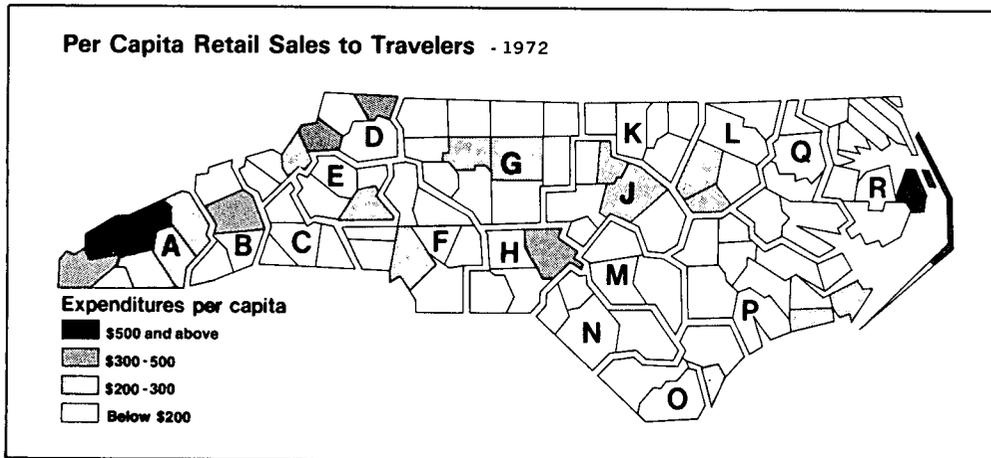


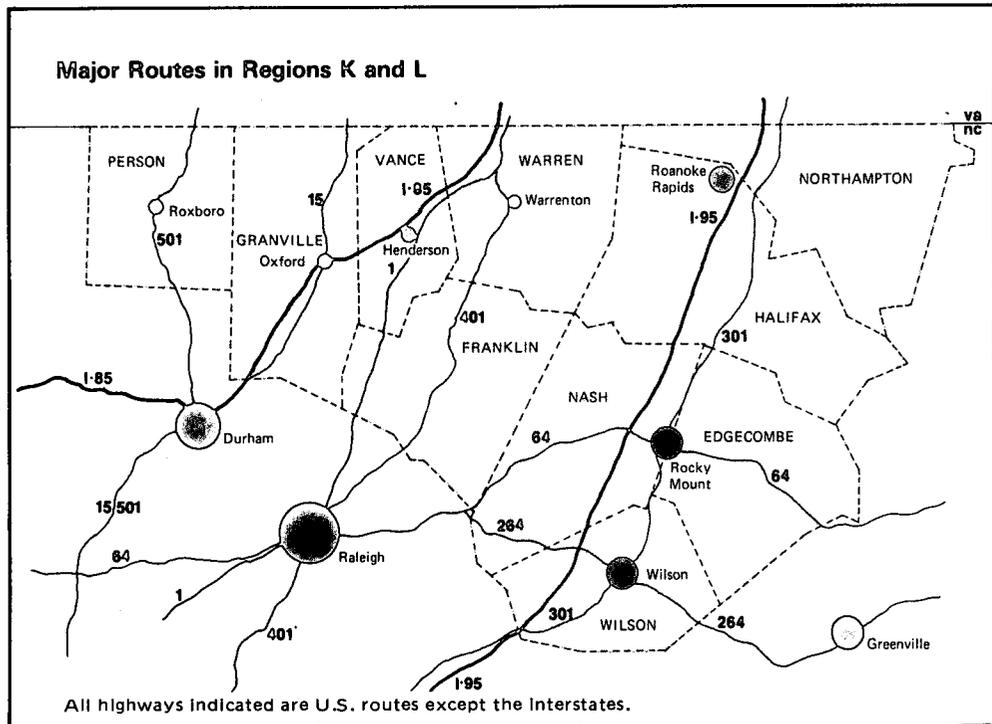
Figure 5.

from travelers in most counties in North Carolina, although not as high as those counties having destination-recreation areas. (See Figure 5.)* These expenditures were linked with the large volume of interstate traffic passing through the region and with the increased importance of the region's own commercial centers---particularly the tobacco markets in Wilson and Rocky Mount---that the interstate assures. The region has benefited further from its convenient location along the interstate at a point approximately equidistant between New York and Florida and from the ability of local developers to capitalize on this location. Since the only major routes between Region L and the Piedmont Crescent are the recently improved U.S. 64 and U.S. 264, the region has been encouraged to rely on its own urban centers for specialized services, trade, and employment opportunities. In the *Overall Economic Development Program of 1977*, the Region L Council of Governments notes that

the proximity of Region L to the Raleigh/Research Triangle Area and the Norfolk/Greater Norfolk-Tidewater Area is such that the economic influence of both areas is present, yet the region is 'not dominated by the inevitable influences of either area.' The governmental influence of Raleigh as the state capital is ever present---as it would be in any geographic location of North Carolina. *Otherwise, Region L is not 'carved up' by the myriad of complicated influences which surround a metropolitan area.* (Emphasis added.)

Region K, conversely, has received more than its share of influence from the state capital. Without cities the size of Rocky Mount and Wilson, it has depended much more heavily on Raleigh for its services and jobs. For that matter, all of the cities in the region are linked more closely to the Raleigh-Durham area than are those in Region L. Interstate 85 cuts through three counties of Region K, con-

* Those regions receiving a large amount of the tourist's dollar per capita in 1972---i.e., Regions R, D, and H, containing the destination-recreation areas of the Outer Banks, Blowing Rock and the skiing resorts, and Pinehurst---also had the highest percentage increases in per capita income for their respective regions between 1966 and 1974, in addition to the largest gains in non-agricultural employment since the recession. (See Appendices A-12 and A-13.)



necting them directly with Durham, the Research Triangle Area, and the rest of the Piedmont Crescent. U.S. routes 1, 401, and 501 provide additional linkages between the region and the Raleigh-Durham area. But this easy access to specialized services that the highway network provides has been a mixed blessing to the region: facilitating out-migration and commuting, depleting the region of economic resources (retail sales and financial services), and diminishing the region's autonomy.

In contrast to most of the counties in Region L (but similar to most of the counties located close to the Piedmont Crescent), all counties in Region K (except Vance) exhibited a deficit in retail sales in 1970 compared to the expected level of such sales for the size and income levels of their populations. (See Figure 4.) The size and accessibility of Raleigh and Durham, along with the large variety of goods and services available in a metropolitan area, attracts residents of outlying regions to these areas for major shopping excursions and other business transactions. The relative size of the urban centers in Region L, as well as their importance as agricultural trade centers, has contributed to the vitality of the counties in that region.

Of the total number of employed residents of Region K in 1970, nearly five percent commuted to jobs in Raleigh or Durham (one-fourth of the total number of commuters living within the region) while less than one percent of the employed residents of Region L found jobs in Raleigh or Durham. In Franklin County (K) alone, the number of commuters to Wake County increased from 840 in 1960 to 2,277 in 1970. These figures reflect the extensive highway improvement

undertaken in Region K in the 1960s, as well as the increase in number of residents of Franklin County looking for non-agricultural work due to the consolidation of farms and the mechanization of agriculture.

In general, residents commuting outside the region comprised a much larger proportion of the working population in Region K than in Region L in both 1960 and 1970. (See Appendix A-16.) In 1970 roughly three residents of Region K were commuting out of the region for jobs for each individual who was commuting into the region for work, while five people were commuting out for every two people commuting between counties within the region. In Region L at this time the number of out-commuters was larger than the number of in-commuters, and the region had more jobs than it had working residents. However, a much higher proportion of the total population of Region L was commuting within the region.

In 1960 and in 1970, all counties in Region K except Vance had more workers commuting out than in. (In 1970 Vance County was also the only county in Region K with surplus retail sales.) In 1960, two counties in Region L had more in-commuters than out-commuters, a situation that prevailed in three counties by 1970 (the same three counties located along I-95 which had surplus retail sales in 1970). Wilson County had by then joined Nash County and Halifax County in having more jobs than employed residents. However, Halifax County had dropped from 875 net incoming commuters in 1960 to only 147 in 1970. Nash County, on the other hand, had increased its figure from 1,553 to 2,706 in the same period.

The total amount of traveling reflected by these commuting figures for Region L was greatly inflated by the fact that some of the major cities in the region are located either on or near the border of two counties. Rocky Mount, for instance, is located in both Nash and Edgecombe counties, while Roanoke Rapids is located very near the border between Halifax and Northampton counties. In 1970, 5.6 percent of the employed residents of Region L alone (or almost one-third of those commuting anywhere) commuted between Nash County and Edgecombe County, in order to work in Rocky Mount.

In the 1960s, both Regions K and L were characterized by slow employment growth and absolute declines in population, as were most of the non-metropolitan regions of North Carolina. (See Appendix A-11.) This population decline actually began in the 1950s in Region K--in part due to the flooding of Kerr Reservoir in Vance and Warren counties. The greatest declines were in Warren County with a 34.8 percent decrease in population between 1950 and 1970 and in Northampton County with a decline of 15.5 percent between 1950 and 1970. These were the most rural counties in the regions. Consequently, with the mechanization of agriculture, they offered the fewest employment opportunities.

In the 1970s, population in all the counties in the two regions began to grow again except in Granville and Northampton counties, which still registered declines between 1970 and 1976. (See Appendix A-15.) During this period, more and

Population, Employment,
and Income

more people throughout the U.S. were moving to smaller urban areas, especially those on well-paved highways within a reasonable distance from a metropolitan area. Most of the cities and urban areas in both Regions K and L fit this description.

Between 1970 and 1976, the fastest growing city in the ten-county area was Roxboro, which increased in population by 48 percent. Person County's population increased by only 3.4 percent during this period, so that much of Roxboro's growth was evidently due to migration from rural areas. The second fastest growing city was Rocky Mount which grew by about fifteen percent between 1970 and 1976. The Nash County side of Rocky Mount grew much faster than the rest of the city, increasing at a rate of twenty-one percent compared to eight percent on the Edgecombe County side. The slowest growing cities in the ten counties between 1970 and 1976 were Oxford (with a population increase of only 1.1 percent) and Henderson (with a population increase of 2.8 percent). Both are located in Region K. (See Appendix A-15.)

The fastest growing town in these regions---as well as in the state of North Carolina---between 1970 and 1976 was Garysburg located in Northampton County just across the Halifax County line from Roanoke Rapids. It grew from a population of 231 in 1970 to 1,510 in 1976 to become the largest town in Northampton County. But such rapid growth, as well as major employment gains in that county in the 1970s, did not halt the continuing population decline in Northampton County in the 1970s.

Total employment in both regions grew slowly in the 1960s. Between 1960 and 1970, the number of people employed in Region K increased by 4.7 percent, while the number employed in Region L grew by 5.7 percent. (See Appendix A-16.) Employment in North Carolina as a whole increased by 17.4 percent during this period. The number of employed residents during the same period increased by 10.5 percent in Region K and by 5.4 percent in Region L, indicating that Region K benefited greatly from increased employment opportunities in surrounding areas and that Region L was "exporting jobs" to non-residents. Between 1960 and 1970, the number of people commuting outside of Region K for jobs increased by 86 percent to comprise 14.2 percent of the total regional employed labor force. The number of workers commuting into the region increased by 68.7 percent but still accounted for only one-third as many in-commuters as out-commuters. The number of out-commuters from Region L also increased by approximately 74.3 percent, while the number of in-commuters increased by 85.8 percent.

The apparent slow growth in total employment in the 1960s masked some dynamic changes which were taking place in the economies of Regions K and L. These changes included a sharp decline in the number of people employed in agriculture (a decrease of 61.5 percent in Region K and 55.8 percent in Region L, see Appendix A-14); substantial out-migration and population losses (see Appendices A-11 and A-15); large increases in non-agricultural employment --- especially manufacturing --- in and around the regions (see Appendices A-12 and A-18); and,

particularly in Region K, increased accessibility to urban areas with greater job opportunities.

Between 1960 and 1970, the number of people in Regions K and L who were employed outside of their home counties increased considerably, particularly in Franklin and Warren counties in Region K. (See Appendix A-17.) The total number of people employed in these two counties also declined, as did the total number employed in Northampton and Halifax counties in Region L. The proportion of out-commuters to total working county residents was particularly high in Franklin, Warren, and Northampton counties in 1970, comprising, respectively, 34.5, 31.5, and 32 percent of the total employment in each of the counties.

These figures are representative of the state-wide decline in economic opportunities in rural areas in the 1960s brought on by the mechanization of agriculture. People were forced to look for work in urban areas where job possibilities were greater. Extensive commuting resulted, which has generally been linked with subsequent population losses, as commuters eventually moved closer to their jobs. Indeed, Franklin, Warren, and Northampton counties all experienced heavy out-migration and substantial population declines in the 1960s. (See Appendix A-15.) However, Franklin and Warren were the only two counties in Region K to experience net in-migration between 1970 and 1976. Particularly in Warren County, where the growth in employment in no way warranted such in-migration, these trends suggest that, in the 1970s, a greater reliance on extensive commuting has become a fact of life in those rural areas in North Carolina that are near larger urban centers.

By 1970, employment in agriculture comprised only about 11.5 percent of total employment in the two regions. It continued to decline throughout the 1970s, so that by 1977 agricultural employment had decreased by an additional 20 percent from its 1970 level in each of the regions. Total employment growth in Region L, although lower than the state-wide average, was greater than total employment growth in Region K, due to a much higher growth in non-agricultural employment, during this period. (See Appendix A-12.) In contrast to their relative performances in the 1960s, non-agricultural employment (calculated by place of residence) increased by 27 percent in Region L between 1970 and 1977, compared to the state average of 22.5 percent, but increased by only 20.6 percent in Region K.

The greatest gain in industrial employment opportunities in Region L in the 1970s was in Nash County, where the number of jobs increased by 39.6 percent from 1970 to 1977. Residents of Edgecombe County benefited the most from growing industrial employment. The number of Edgecombe County residents employed in non-agricultural fields increased by 37.8 percent between 1970 and 1977. Increased employment during this period in the financial sector (including banking and finance, insurance, and real estate) in Nash County accompanied the emergence of Rocky Mount as an urban center. (See Appendix A-18.)

In Region K, non-agricultural employment opportunities, as well as the number of people employed in non-agricultural jobs, grew fastest in Franklin

County in the 1970s. The establishment in Person County in the 1960s and early 1970s of a large electrical generating plant greatly benefited Region K. Employment in public utilities, transportation, and communication increased by 240 percent in Person County between 1970 and 1977.

Manufacturing employment in both regions continued to grow faster than the state average, especially in the early 1970s. Between 1970 and 1974, the number of people employed in manufacturing increased by 31.8 percent in Region L and by 21.2 percent in Region K, compared to the state increase of 10.7 percent. Manufacturing gains were greatest in Edgecombe County, where firms increased employment by 52 percent from 1970 to 1974.

Much of the growth in manufacturing employment in the regions was related to the expansion of production of synthetic textiles in the area. Subsequently, both regions lost a lot of jobs during the recession of 1974-75---especially in major textile operations, many of which were forced to reduce production and employment because of shifts in consumer demand.

Trends in income growth in the two regions generally followed trends in employment. From 1962 to 1970, per capita personal income* grew much faster in Region K than in Region L. The largest gains occurred in Person County in Region K and Edgecombe County in Region L, and the smallest increases were recorded in Halifax and Northampton counties. Income generated by place of work grew slightly faster in Region L during this period. However, income in the three fastest growing counties in Region K---Granville, Person, and Vance---grew faster than in the three fastest growing counties in Region L---Nash, Wilson, and Edgecombe. Income generated in Warren County actually fell during this period.

In the 1970s, per capita personal income, as well as personal income by work place, grew faster in Region L than in Region K. (See Appendix A-18.) The fastest growing county in terms of per capita personal income at this time was Northampton, while the slowest growing counties were Warren and Person. Personal income by place of work grew fastest in Nash and Wilson counties and slowest in Warren and Halifax counties.

Income gains for the whole period between 1962 and 1976 were highest in Region L. The increase in per capita personal income was largest in Wilson, followed by Edgecombe, Northampton, and Granville counties. Growth in personal income by place of work was highest in Nash County, while Edgecombe and Granville counties also registered large increases. The slowest growing counties were Warren (K) and Halifax (L).

In 1962, two counties---Wilson (L) and Vance (K)---had per capita incomes higher than the state average. (These were also the two most urban counties in the ten-county area.) In 1970, the per capita income of none of the counties in Regions K and L had per capita incomes greater than the North Carolina average, but, by 1976, the per capita incomes of Wilson (L) and Edgecombe (L) counties (also the two most urban counties in the two regions in 1976) had surpassed

* Per capita personal income is defined as total income earned by *residents* of an area divided by the population of the area.

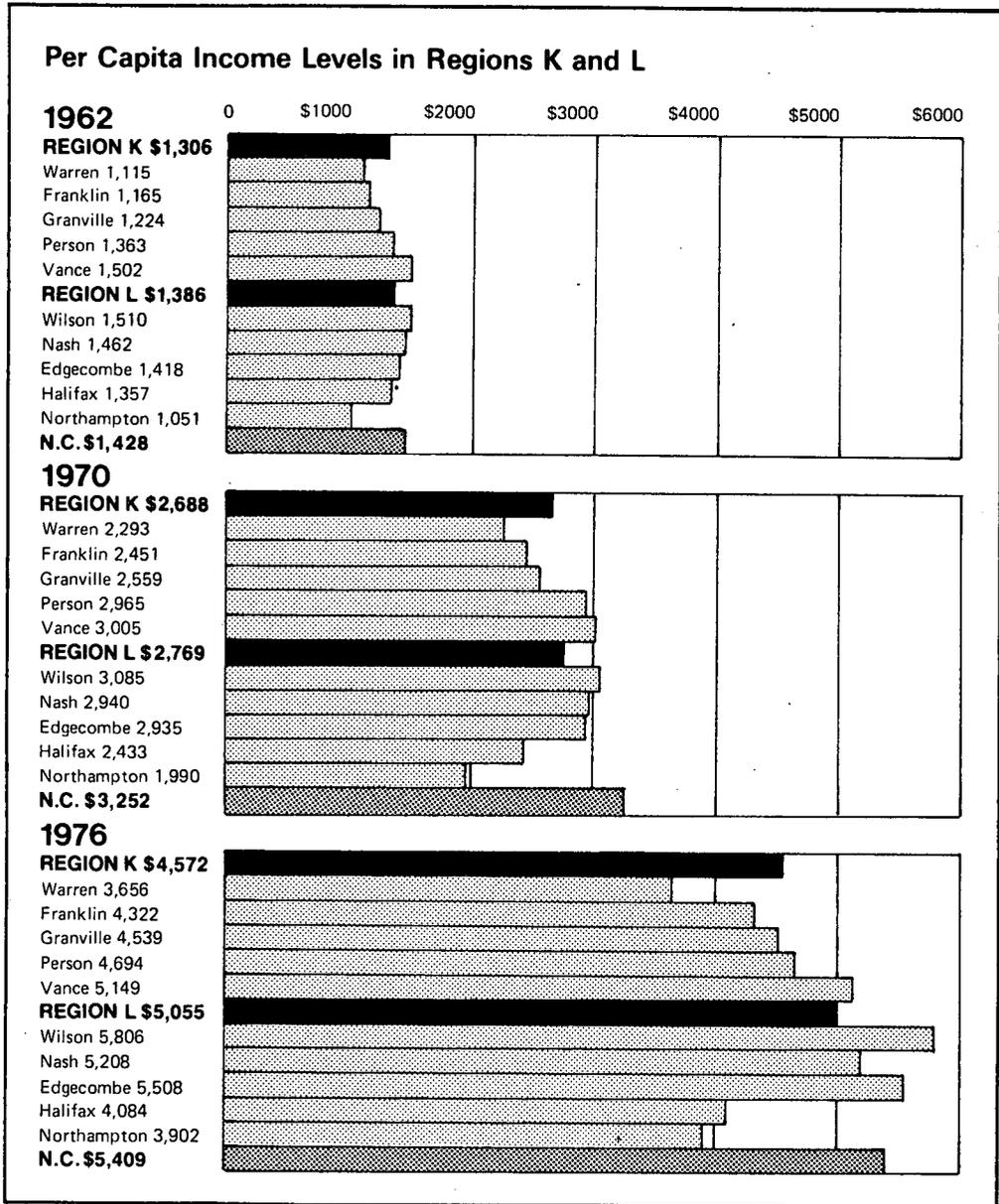


Figure 6.

the state average. (See Figure 6.)

Farm income fluctuated greatly during the early 1970s in both regions as well as in North Carolina as a whole. It reached a low point in 1971, grew rapidly between 1971 and 1973, and declined again between 1973 and 1975. Overall, between 1971 and 1976, farm income grew twice as fast in Region L as in Region K. In 1976, farm income in Region L was \$121,257,000, an increase of 90 percent over the \$63,880,000 of 1971; while farm income in Region K in 1976 was \$53,682,000, an increase of only 46 percent over the \$36,800,000 of 1971. The largest relative gains in farm income in the 1970s were in Wilson County with an increase of 125 percent and in Edgecombe County with an increase of 153 percent. In Region K, farm income grew fastest in Franklin County with a 102

percent increase between 1971 and 1976.

In 1962, 25.6 percent of personal income in Region K was attributable to farm income compared to 19.9 percent in Region L. In 1970, farm income accounted for only 12.6 percent of per capita personal income in K and 11.4 percent of that in L. The proportion of per capita personal income resulting from farm income continued to fall, but by much more in Region K than in Region L, so that in 1976, 10.3 percent of per capita income in Region L was contributed by farms compared to only 8.6 percent of per capita income in K. Farm income was most important in Northampton County at this time, where it was responsible for 18.4 percent of per capita personal income.

Region L's relative success with agriculture was due, in part, to the fact that it had more and higher quality land in farms than Region K where a higher proportion of land was in pasture and, therefore, was less profitable per acre. While tobacco was the major crop for both regions, Region L earned a much higher income from its tobacco production, even though only Wilson, Nash, and Edgecombe counties continued to specialize in this commodity. Northampton and Halifax counties had concentrated instead on peanut production and in recent years, were ranked one and two in the state in income from that crop. Moreover, farmers in Region L had cut back production of corn and cotton, two other traditional crops in the area, while increasing their crop of soybeans, which was becoming an important and profitable commodity for export as a world-wide protein source.

In addition to income generated by farming, income from manufacturing, construction, finance, and trade also grew faster in Region L in the early 1970s, while income from employment in public utilities, government, and services grew relatively faster in Region K.

Manufacturing income fluctuated in the 1970s in the two regions, largely because of the severe impact of the recession. Between 1969 and 1974, manufacturing income grew fastest in Edgecombe (L), Nash (L), and Granville (K) counties. Income gains in these counties were largely connected with the increase in synthetic textile and apparel manufacture. Between 1974 and 1976, income from manufacturing grew fastest in Wilson County, where the high growth rate can be linked to the increased employment in rubber manufacture. In 1975, manufacturing income in Nash, Halifax, and Edgecombe counties in Region L and Granville and Franklin counties in Region K actually declined from its 1974 level. These were the five counties in the two regions which had over 25 percent of their 1974 manufacturing employment in the textile sector.

Nash County registered impressive gains in income from financial services and retail trade (particularly between 1971 and 1974), resulting, in part, from interstate traffic on U.S. 301 through the county and reflecting, once again, the growing status of Rocky Mount as an urban center. Wilson County also benefited greatly from the presence of U.S. 301, as income from both wholesale and retail trade grew relatively rapidly in the 1970s---especially wholesale trade between 1971 and 1974 and retail trade between 1974 and 1976. The sensitivity

of retail sales to the economic well-being of an area is demonstrated by the relative growth rates of retail sales in Wilson and Nash counties in the 1970s. These sales reflected the high rate of growth in manufacturing income in Nash County in the pre-recession period and the relatively higher growth rate in manufacturing income in Wilson County since the recession.

Income in the public utilities sector grew dramatically in Person County (K) in the 1970s, increasing by 159 percent between 1975 and 1976 alone. Nash (L) and Granville (K) counties also registered large increases in income in that sector. Income from construction activity in the 1970s grew fastest in Granville (K), Northampton (L), Nash (L), and Franklin (K) counties, while income from the services sector grew fastest in Vance (K), Wilson (L), Nash (L), and Warren (K) counties. For the most part, these increases in income reflected large increases in employment in the same activities in the respective counties, although in Vance County employment in the services sector declined between 1970 and 1976. Rural electrification in Person and Granville counties in the 1970s also contributed to the growth of income in the public utilities sector in those counties.

Income from government employment grew faster in Nash (L), Granville (K), Edgecombe (L), and Vance (K) counties. The large increase in income in Granville's government sector resulted from increases in federal government employment, while increases in the other counties resulted from growth in state and local government employment.

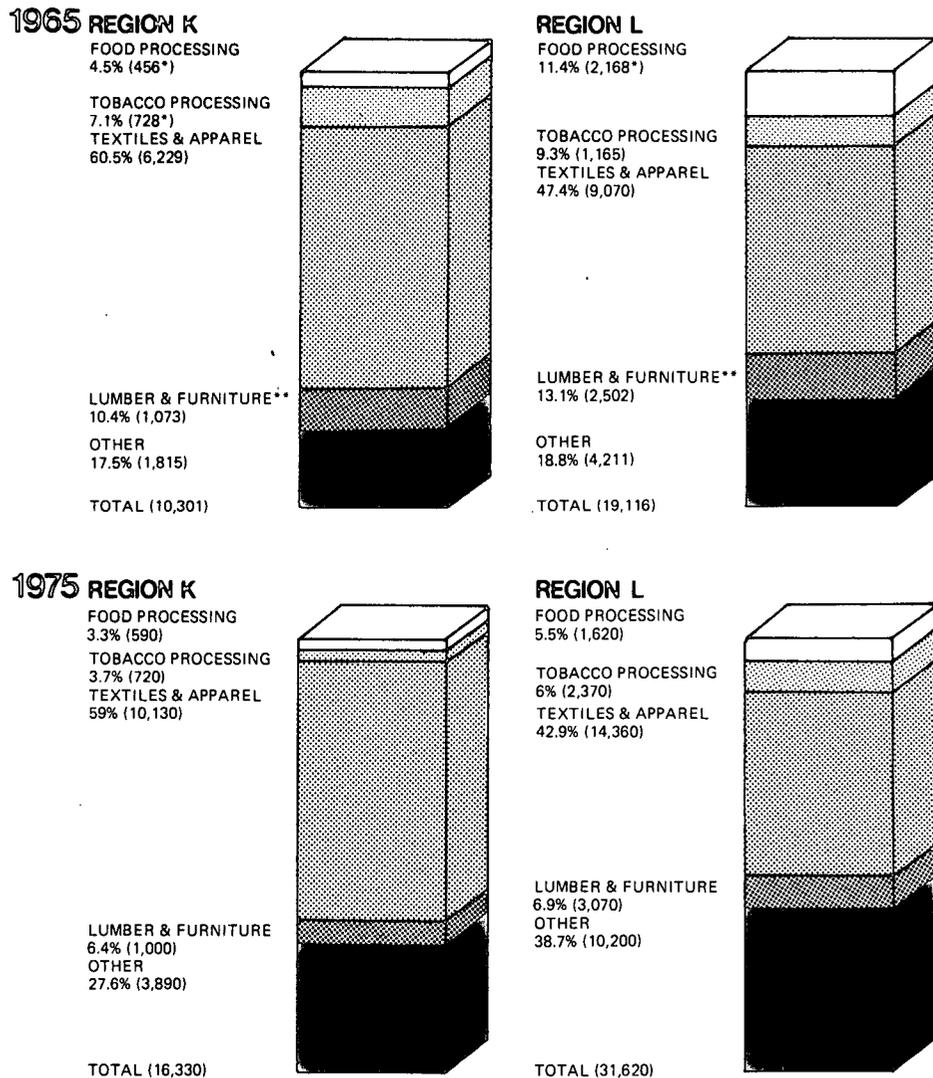
The economies of Regions K and L differ in relative size and orientation but are similar in industrial composition. Until the 1960s, agriculture was the largest employer in both regions, and in 1977 agricultural employment still accounted for a larger proportion of the work force in each region than in the state as a whole. Since the 1960s, the manufacturing sector has replaced agriculture as the largest employer in the regions. In nine of the ten counties, manufacturing employment accounts for a greater percentage of total employment than any other economic sector. In Granville County the government sector is the largest employer, mainly because of the state-run community of Butner.

As late as 1965, the predominant manufacturing occupations in the area were in textiles and apparel, food and tobacco processing, and lumber---all of which are traditional low-wage industries. (See Figure 7.) Tobacco, in general, is not considered a low-wage industry in North Carolina because of the importance of cigarette manufacture; however, in Regions K and L, tobacco manufacture involves stemming and redrying operations, which typically pay low wages. (See Appendix A-19, which shows relative average wage rates for some of the major industries in each of the counties and in the state.)

While the economies of the two regions are similar, differences in the industrial base between the individual counties, even within one region, are often striking. For example, in 1965, Person County in Region K had only one apparel firm and three textile firms, while Granville County, also in Region K, had three apparel and six textile firms. At this time, Person County had, in addition, one

Industrial Development

Employment in Selected Manufacturing Industries, 1965 and 1975



* Excludes Northampton and/or Warren counties due to disclosure problems.

**Predominately lumber; furniture in Nash and Franklin counties included due to disclosure problems.

Figure 7.

chemical and one rubber manufacturer, two firms in stone, clay and glass, one primary metal and two fabricated metals manufacturers, and one electronics and one transportation equipment manufacturing company. At the same time, Granville County had two equipment manufacturers---one in electrical and one in non-electrical. (See Appendix A-20.) Granville's economic base, typical of a young industrial economy, was much more highly dependent on textiles and apparel; while Person's economy was more diversified, a characteristic of an older industrial economy. A similar comparison may be made between Nash and

Wilson counties in Region L. Although both economies were diversified, Nash County had a much higher dependence on textile and apparel manufacture in 1965. The economy of Northampton County is unlike that of any other in Region L or K. With no textile operations and only one apparel firm in 1965, the base was weighted heavily by chemical and coffin-producing industries. These and other differences in the industrial compositions of the counties had great impact on industrial development in the late 1960s and early 1970s.

Industrial developers have been very active in recruiting new industries to both Regions K and L since the late 1960s. During this period, the rapid growth and decline of the polyester industry made a large impact on the area. Textile employment in Nash County alone fell by 26 percent between 1974 and 1975, while apparel employment in Granville County fell by 37 percent. This situation in the textile and apparel industries greatly heightened the impact of the 1974-75 recession, which was still being felt in 1978 in the reduced levels of manufacturing employment in most of the area's counties. The experience has since made area developers wary of depending so heavily on textiles and apparel for their industrial base. Concern about the low wages traditionally paid by these industries has amplified this wariness. (However, in at least four counties in the regions, the average wage paid by local textile firms is higher than the overall average wage. See Appendix A-19.) Development efforts in the regions and counties since 1974 have aimed at diversifying the economies and regaining the 1973-74 employment levels.

While additional textile and apparel firms have continued to locate in Regions K and L during the past several years, an even higher number of firms in other industrial branches---rubber, chemicals, fabricated metals, electrical equipment, and transportation equipment---have begun to locate there. (See Figure 8.) According to the State Goals and Policy Board report, *Balanced Growth Trends in Population and Employment*, both regions have been gaining a large proportion of the high-wage industry locating in the state. However, many of these new firms are supports for traditional low-wage industries in the areas, a relationship which reduces the average wage paid by these supporting firms relative to the average wage paid by other firms in the same "high-wage" industry. For example, several chemical manufacturers produce fertilizers, and a majority of transportation equipment manufacturers make mobile homes.

In the 1960s and 1970s, Regions K and L experienced similar trends in industrial expansion in terms of investment per firm and investment per capita. (See Appendix A-21.) In the early 1960s, firms in Region K invested more heavily in expansions per capita than did firms in Region L; but by the 1970s, expansion activities in Region L surpassed those in Region K on a per capita basis. Overall investment per capita in Region L was much higher, since the location of new firms brought a relatively higher rate of investment in L until 1975-76.

From 1968 through the first six months of 1978, 54 new plants were induced to locate in Region K compared to 88 new plants in Region L. In the first half of the period (1968 to 1972), exactly twice as many firms located in L as in K,

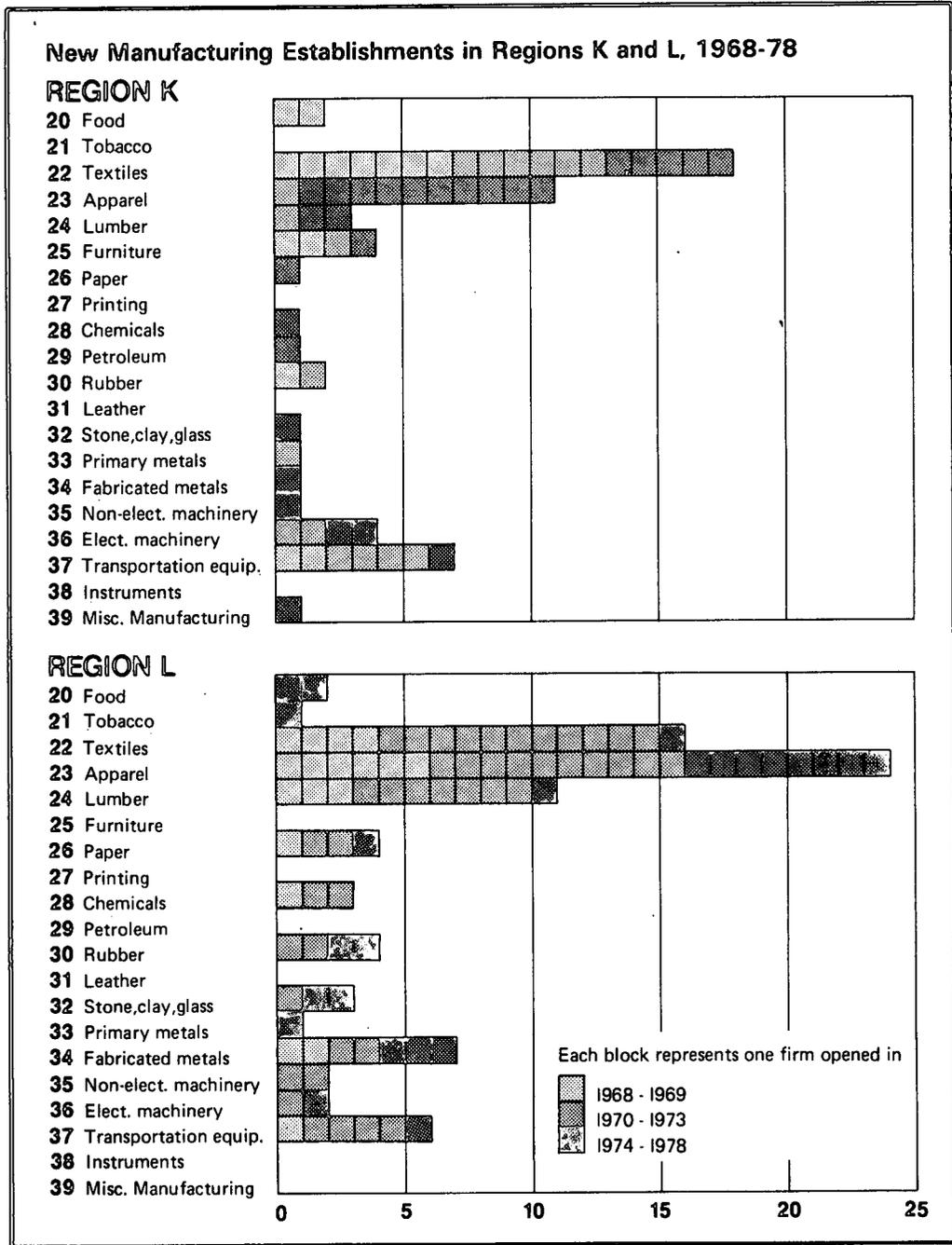


Figure 8.

but in the second half of the decade, Region K received four-fifths as many new firms as Region L. Nash County alone accounted for approximately three-fifths the number of new firms locating in Region L in the first period and almost one-half the number in the second period. In Region K, Granville was the most favored county for new firms, receiving over 30 percent of the total number of new firms locating in that region during the decade.

In the first half of the 1968-78 period, investment per new establishment in K was smaller than in the second half, but employment per new firm was

greater. The figures suggest that Region K began first attracting more labor-intensive industry---typical of a rural area---but then attracted more capital-intensive firms in the latter period. This shift could be an indication of the success of "balanced growth" in inducing higher-technology firms to locate in rural areas. On the other hand, it could have been a result of the redefinition of the area, in spite of its low population density, from a rural area to an extension of the Raleigh-Durham urban complex.

Investment per new employee by new firms in Region L was smaller during 1968-78 than the comparable figure for Region K, indicating that, on the average, new firms in Region L were more labor-intensive than those in Region K. About twice as many jobs were created by investment by new firms in Region L as in Region K, although total investment was only one and two-thirds times greater in L. Investment per employee in the two regions, however, was lowest in Vance County in Region K and highest in Wilson County in Region L in this period. The high figure for Wilson reflects the large impact in that county of the location of the Firestone plant, which invested an average of \$46,000 for each new employee. (See Appendix A-22.)

Expansion of existing firms created more jobs in Region K (and particularly in Vance County) between 1968 and 1978 than did the location of new firms, although total investment in new firms was greater than investment in expansion. The average investment per employee in plant expansions was less than the average in new plant locations, indicating that expanding firms were, on the whole, more labor-intensive than new firms.

In Region L, the opposite situation was true. More money was invested in expansion activity, but expansion activity accounted for only two-thirds the number of jobs that new locations did. Expansions were more capital-intensive than new industry locations, costing an average of \$35,000 per new employee, compared to the \$24,000 spent per new employee in new locations in Region L.

The investment pattern in Region L is more similar to that in the rest of the state. Firms initially locating in North Carolina have tended to be more labor-intensive (although with the attraction of more high-wage industry, this tendency has been changing), while much of the expansion activity has been directed toward modernization of the manufacturing process---a much more capital-intensive venture.

In Region K, however, the capital or labor intensity of investment depended much more on its location than on its type---i.e., new plant or expansion. The extent to which total investment in each county was capital or labor-intensive seemed to be related to the amount of existing industry. The industrial base of the counties in Region K was small enough so that growing industries in those counties could exert a powerful influence on further industrial activity there. For example, in one town, an established firm has expanded its own operations by renting newly-vacated buildings, thus denying new outside firms the opportunity to bid on them. Such actions may be considered anti-growth because the lack of an available building for new industrial locations often discourages new

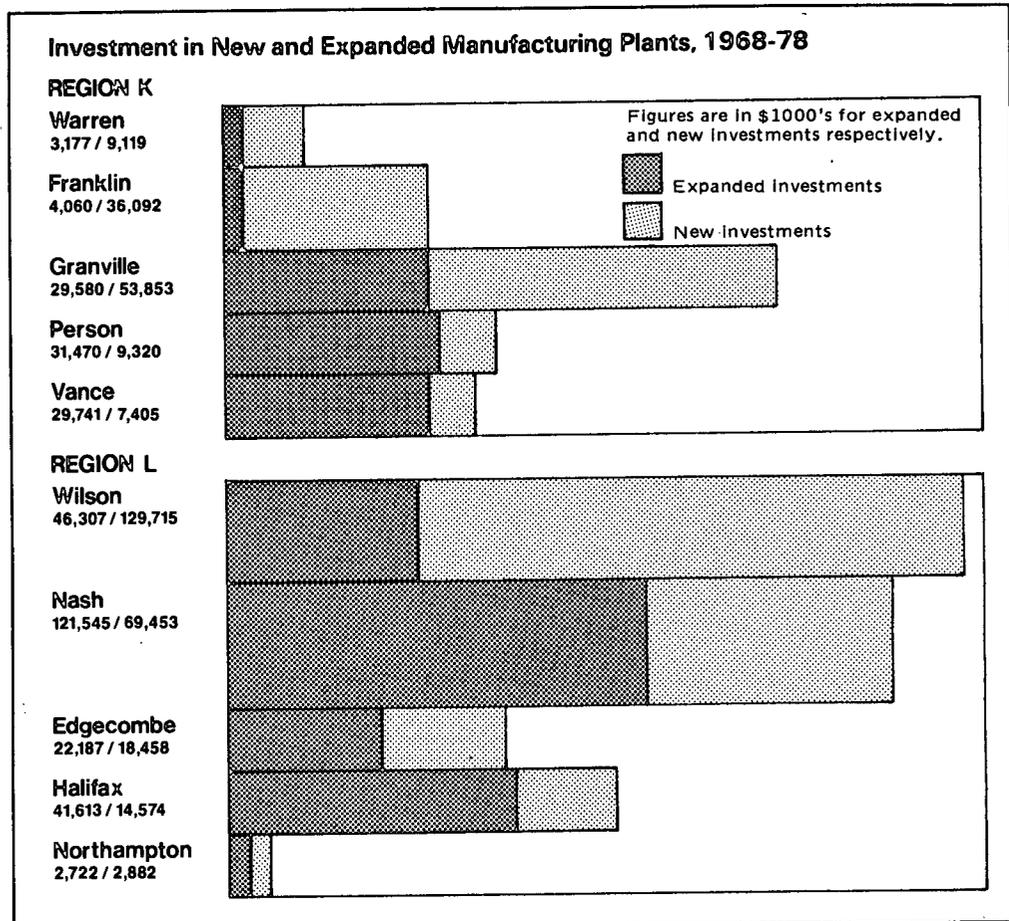


Figure 9.

industry. Meanwhile, the absence of outside competition for available sites in the community also tends to keep construction and service costs low for the firms already located there.

The low capital-intensity figures for both new and expanded plant investments, particularly in Vance County, reflected a conservative approach toward additional industrial development, which has succeeded chiefly in attracting largely labor-intensive firms in apparel and mobile home fabrication and in maintaining the existing industrial composition. This strategy has, nevertheless, substantially increased employment in the region.

Investment activities in Franklin and Granville counties were more capital-intensive and were comprised of a much higher ratio of new to expanded plant investment, relative to that in Person and Vance counties. (See Figure 9 and Appendix A-22.) Granville also had a higher absolute level of investment, suggesting that a lack of entrenched manufacturing establishments may actually encourage rapid industrial growth. Investment by outside firms in a particular area may be discouraged if firms already there are perceived as having an "anti-growth" attitude. In such cases, firms may choose instead new locations in areas where little industrial development has previously occurred and new industries

are more welcomed--- e.g., Granville County. Established industries in towns and smaller urban areas often resent newcomers because an influx of new firms may lead to a change in the established power base of which such industries are typically a part. Moreover, new firms may increase the cost of economic resources (especially labor) to established industries.

Region L, with its larger industrial base, experienced greater investment in both new plants and plant expansions (in terms of absolute levels, investment per capita, and investment per square mile) between 1968 and 1978 than did Region K. Apparently, expansion activities of existing firms did not generally dampen investment incentives for new firms. Existing firms and those potentially locating in larger urban areas, such as Rocky Mount and Wilson,* anticipate higher costs of construction and services; and the activities of one firm (either new or expanding) do not greatly affect the level of these costs, as they would in smaller communities. Hence, the activities and attitudes of older firms in larger urban areas are not as crucial to development as they tend to be in smaller communities. Halifax County in Region L, however, like Vance and Person counties in Region K, did have a high ratio of expanded to new investment in the 1968-78 period, suggesting that established industry has a greater influence on industrial development there than in other counties in Region L. (See Figure 9.)

In both regions overall, the counties which are nearest the Raleigh-Durham area--- Franklin and Granville in Region K and Wilson and Nash in Region L---had the largest amounts of new investment in their respective regions and had the highest investment per new employee in the regions. (See Appendix A-22.) The counties farthest from the Raleigh-Durham area--- Warren and Northampton---had the lowest levels of new investment.

Regions K and L are similar in many ways. Located in the northwest Coastal Plain, they are basically rural regions close to a major metropolitan area. The economic base of each region was, until recently, agriculture; but manufacturing has become an increasingly important employer in the two regions. The traditional industries in both regions have been textiles and apparel, tobacco and food processing, lumber and wood. Both regions have an average level of per capita personal income lower than the state average.

Summary

The regions differ in area, population size, density and urbanization. Region L is larger, has a greater population, is more densely populated, and contains more and larger cities. The economy of Region L is more complex and self-sufficient than that of Region K. Region L has a greater proportion of its employment in non-manufacturing sectors than does Region K---particularly finance and trade. Region K depends heavily on the Raleigh-Durham metropolitan area for jobs, services, and commerce.

The mechanization of agriculture was the main impetus to industrial development in both regions. Rapid growth in the 1960s, and decline in the 1970s, of

* Between 1968 and 1978, 76 percent of the new firm investment in Region L occurred in Rocky Mount and Wilson.

the synthetic textile industry greatly influenced the course of such development. The extensive highway network in both regions facilitated extensive out-migration in the 1960s and commuting in the later 1960s and 1970s. This extensive commuting dispersed the impact of industrial locations in both regions.

The growth of Rocky Mount, and to a lesser extent Wilson, in Region L was a major source of differences between the industrial development of the two regions. This growth generated large gains in income and increased employment opportunities in Nash County and surrounding areas. The accessibility of Region K, especially Franklin and Granville counties, to the Piedmont Crescent had a strong impact on the economic development of that region. The proximity of Region K to the Raleigh-Durham area reinforced a deficit in retail sales and promoted extensive out-commuting there, while, at the same time, facilitating new capital-intensive investment in the region. Rural areas in Nash and Wilson counties, which received much capital-intensive investment at this time, also benefited from their accessibility to Raleigh as well as from their proximity to Rocky Mount and Wilson. The greater distances of Vance, Person, Edgecombe, and Halifax counties from the Raleigh-Durham area slowed industrial development there.

Chapter 5

State and Local Policies and Industrial Site Decisions

State Policy

The objective of North Carolina's economic development policy is to raise the average level of personal income in the state to the average level of income in the nation. This was Governor Hunt's campaign promise to the North Carolina electorate.

The recruitment of new manufacturing industries to the state is a primary consideration of the current administration's subsequent economic policy. As Governor Hunt maintained in a speech given at a 1978 labor union convention, it is the administration's policy to recruit the "best and highest paying industries---period." That he is personally involved in this recruitment effort is an indication of the importance of industrial recruitment to the administration's policy, overshadowing even the importance of balanced growth. In the same speech, Hunt acknowledged that company needs dictated the location decision, not the state's balanced growth policy. He said, "if Phillip Morris wants to locate a plant in Cabarrus County, the state of North Carolina and the Governor of North Carolina will move heaven and earth to make them feel welcome. And we did."

On the other hand, the Balanced Growth Policy is the North Carolina economic development policy. The goal of balanced growth is

To reach a higher level of living throughout North Carolina by maintaining a balance of people, jobs, public services, and the environment, supported by the growing network of small and larger cities in the state.

The literal meaning of the balanced growth goal is the equalization of income levels across the state, which is probably not the most effective way of achieving the administration's stated goal of closing the gap with the national economy.

The location of new industry is a particularly important aspect of balanced growth, especially since the State Goals and Policy Board called the Balanced Growth Policy an effective way of "redressing the serious imbalances which currently exist" in the North Carolina economy. In *A Balanced Growth Policy for North Carolina*, the Board maintained that people should not be penalized in terms of employment opportunities and available services because of where they choose to live. It suggested that the state's priority should be to locate "more and better jobs . . . where people now live" rather than to recruit "the best and highest paying industries---period." A strategy of locating more and better jobs where people live requires only that new jobs in a less-developed or rural area pay wages above the average paid by industries in the area. In order to

improve the economic well-being of the local population, this wage need not be above the state average. In many areas of North Carolina, even additional textile and apparel firms may pay a relatively attractive wage, and at the same time provide work experience which raises the skill levels of the local labor force.

According to the report, balanced growth is desirable because it will

- provide more and better jobs in rural areas;
- benefit urban areas by preventing congestion;
- enhance the ability of communities of all sizes to provide adequate public services for their citizens;
- reduce the disruption in people's lives caused by the search for jobs and for higher standards of living;
- provide a diversity of life styles and work opportunities for a growing population in a big state; and
- protect natural resources.

Governor Hunt seems to agree with the philosophy of balanced growth. "Growth centers are a fact of life," he said in a July, 1978, newspaper interview. "But the question is, are we going to have two or three growth centers, or are we going to have them across the state? Without a growth policy, you could easily have growth occurring only in those few centers, making them less liveable.

"Or, we can preserve the small town atmosphere with a few good-sized cities as we have. That seems very obvious to us who grew up here and like it the way it is. I bet you that folks in other states felt that way thirty years ago before their cities grew together into one and they wound up with urban sprawl."

Yet, urban sprawl may well be what North Carolina gets. The difficulty of combining a policy of geographically balanced growth with a long-standing policy of industrial recruitment is seldom officially acknowledged by top administration officials. As recently as July, 1978, Secretary of Commerce D.M. "Lauch" Faircloth affirmed, "Governor Hunt is committed not simply to encouraging economic development, but to our recruitment of high-wage diversified industries. To those goals, the Commerce Department wants to add the challenge of balancing growth geographically, and diversifying industrial expansion itself."

Indeed, any effort by the state to implement such a dual policy is likely to encounter serious problems, especially since government officials can have only limited influence on industry decisions about new plant locations. "Some," Faircloth concedes, "but not a helluva lot." He explained that the state could exert considerable influence in about forty percent of the decisions, no influence in about forty percent, and slight influence in about twenty percent. Another official in the Department of Commerce pointed out that, in general, decisions of larger firms are less affected by efforts of the state staff than are the decisions of smaller firms.

These limitations highlight two major policy questions that the state administration must resolve. First, how does the state assist areas in attracting desirable types of industry and, secondly, how can the state take advantage of its limited influence on industry management to successfully promote North Carolina's

economic development policy?

Success in answering these questions depends in part on an understanding of how industrial location choices are made. Secrecy surrounds many aspects of the search for new sites. In addition, many of the problems that lead a firm to look for a new plant location have been carefully weighed long before industry representatives arrive in North Carolina. Yet, familiarity with the decision process can increase the ability of industrial recruiters to identify some of these concerns and to understand the limitations of state and local recruiting efforts.

A firm's decision to relocate or expand operations generally results from its inability to meet rising production costs or growing product demand in its current facilities. The firm may deal with these problems in several ways---by expanding the home operations, relocating the old plant, locating a new plant, or acquiring an additional plant.

**The Industrial Location
Decision Process**

The types of expansion of most interest in view of North Carolina's economic development policy are the relocation of an old plant and the location of a new plant. Major considerations leading to the construction of a new plant include rising product demand, the need to obtain modern facilities, and a desire to find a more favorable labor market.

Once conditions prompt a management decision to consider either plant relocation or expansion, the search for a suitable new plant site usually involves three steps: the identification of a broad geographic region, the selection of potentially acceptable communities, and, finally, the commitment to a specific location. Decisions about geographic regions are often reached rapidly after a review of current industrial development literature. The selection of a set of towns within the region usually follows research to determine which towns can provide an adequate level of services to support the planned facility. While the availability of an ample supply of labor has been very important in the past, this consideration is becoming less critical than environmental matters (such as water and sewer provisions); cost considerations (particularly the availability of empty buildings); and, finally, the accessibility of skilled labor or of facilities to train the labor force. The final selection of a specific site almost invariably follows an analysis of objective data as well as consideration of factors affecting families such as the quality of schools, cultural and recreational amenities, and climate.

A 1976 *Business Week* survey of corporate executives identified transportation facilities and labor resources as the most important factors initially considered in selecting a broad geographic area for the location of a new plant. The most important specific considerations isolated by the survey were the availability of trucking facilities and electric power, the presence of skilled labor, the nearness to existing sales areas, and a good climate. Whether or not a state had a right-to-work law was identified as the single most important consideration in choosing between competing states.

At the community level, however, the survey results indicated that different

considerations become more influential. In choosing towns as potential plant sites, the corporate executives surveyed suggested that local attitudes, taxes, politics, and living conditions all weighed heavily in the decision making process. Important considerations with respect to the specific site on which a plant might be built include, in order of their importance, the price of the property, the availability of acreage for expansion, construction costs, and access to utilities. The results of the *Business Week* survey appear in Appendix A-23.

The relative importance of the factors affecting the choice of plant locations also varies according to the product and the industrial processes used. A 1977 *Fortune* magazine survey of industry executives identified for various products the most and least important considerations for future plant locations as follows:

Products	Considerations	
	Most important	Least important
Food and kindred products	Efficient transportation facilities for products and materials Adequate water supply	Availability of clerical workers Proximity to other company facilities
Textiles, apparel, leather	Adequate waste treatment facilities Productivity of workers Availability of skilled and semi-skilled workers Community receptivity	Personal preference of company executives Growing regional market Proximity to raw materials, components or supplies Personal preference of company executives
Chemicals, rubber, plastics	Community receptivity Availability of energy Efficient transportation facilities for products and materials	Proximity to other company facilities Financial inducements Personal preference of company executives
Fabricated metals and transportation equipment	Productivity of workers Community receptivity	Availability of clerical workers Proximity to other company facilities
Machinery and instruments	State and local attitudes toward business and industry Productivity of workers State and local attitudes toward taxes on business and industry Community receptivity	Personal preference of company executives Growing regional market Proximity to other company facilities Personal preference of company executives

**Implications for
N. C. Development Policies**

The *Business Week* survey described above identified North Carolina as the second most favored state for new industry locations. (California ranked first and Texas third in the same survey.) But the state-wide implications of such a ranking are

misleading since North Carolina as a whole is not equally favored for new locations, and realistic opportunities for industrial development vary greatly in different parts of the state. North Carolina's transportation facilities and the labor situation in North Carolina are the two factors which most significantly contributed to the state's high rating, but the distribution of both good roads and suitable labor is not uniform across the state. In addition, these two attributes cannot always be combined to form a broad inducement for expanding industries. Transportation facilities are most important to high-technology, capital-intensive industries which depend on the accessibility of specialized financial and technical services, which are usually located in metropolitan areas. Labor-intensive industries, on the other hand, place greater emphasis on manpower resources than on lines of transportation, when considering sites for new plants.

The Piedmont regions and those areas in the Mountain and Coastal Plain regions which were adjacent either to the Piedmont or an interstate highway received a disproportionately large amount of the high-wage industry which located in the state between 1969 and 1975. This "expanded Piedmont Crescent," rather than the state as a whole, was the actual focus of industry attracted to North Carolina by the state's highway system. At the same time, counties situated on the fringes of this highway system---those in the East and the West and along the state's borders with Virginia and South Carolina---faced a major competitive disadvantage in trying to attract high-technology industry. Firms interested in North Carolina because of the state's labor situation have generally exhibited little concern about transportation facilities serving the area in which they might locate. Such firms have tended to set up operations in the eastern Coastal Plain or western Mountain regions where wages are generally lower because of the absence of competition for labor by higher wage industries, despite the generally inferior roads in these areas.

The significance of transportation and labor for the pattern of industrial development in North Carolina is that, although both factors focus nationwide attention on North Carolina, each factor has been particularly relevant to different industries in different specific areas of the state. High-wage, capital-intensive industry has generally located in the regions served by the interstates in and around the Piedmont, while labor-intensive industry has located in the non-interstate Coastal Plain and Mountain regions.

The Hunt administration's economic development policy essentially calls for recruiting "the best and highest paying industries," on the one hand, and for "getting more and better jobs to locate where people now live," on the other. The existence of a good statewide highway system would contribute to the realization of both aims, of course, but in fact North Carolina's highway system is not yet fully developed. Not all areas of the state are accessible by good four-lane roads and, to the extent that the expansion of high-wage capital-intensive industry is linked directly to highway development, this state's existing transportation network may be counterproductive to a policy of "balanced growth."

New and complex commuting patterns have emerged in North Carolina as

the state's transportation network has expanded. As job commuting has become more commonplace, management has become less concerned about the availability of labor and more concerned about the availability and cost of other factors of production. As a Raleigh industry-hunter maintained, "If you give a firm water and sewer, it can offer a wage high enough to draw the employment it needs, no matter where it locates."

Two additional aspects of labor and transportation generally bear on a firm's location decision: the supply of highly skilled labor and the proximity to major commercial airports. The state's expanding highway system now allows many industries to locate in rural or suburban communities which are near metropolitan areas, and thus to obtain the services of skilled technicians and the convenience of having nearby commercial air carriers, while still employing semi-skilled workers from rural areas.

Chances of success for "balanced growth" are further jeopardized by the fact that North Carolina generally competes with other states for new industry. In order to maintain a firm's interest in North Carolina, the state industry hunters must show the firm's representatives potential sites around large urban areas, such as Raleigh, as well as sites in rural counties, such as Warren and Northampton. In most cases, however, such firms must locate within an hour's drive of a major city in order to gain these dual advantages. Remote counties, such as Warren and Northampton, again have difficulty competing for new industries because of their distances from major urban airports.

While North Carolina's labor force and highway system may influence many firms to locate here, North Carolina has few programs to effectively influence, in the short run, the specific site selection of a firm within the state. One program that has been endorsed by some eastern North Carolina developers concerns technical training at community colleges and technical institutes. Instruction at these institutions to train workers in skills useful to a broad variety of industries (such as the training of maintenance mechanics, electricians and machinists) has been suggested as a means of increasing the attractiveness of rural areas to high-technology industry. Developers argue that such instruction would demonstrate a commitment to industrial growth. Currently, the community colleges' funding procedures encourage instruction in less expensive courses (e.g., clerical and administrative) while instruction in more costly "hard-technical" skills takes place largely in response to clearly identified requirements of new or expanding firms.

The state might also enhance the attractiveness of one or two areas by upgrading the regional airports there to attract major commercial carrier operations. However, with respect to both the improvement of airports and technical training, the limited resources available dictate that they be concentrated in relatively few carefully chosen areas if any noticeable results are to be achieved. Such selective allocation of state assistance is often in conflict with shorter-run political considerations.

Favorable community attitudes toward business, taxes on business, and local

industrial recruiting efforts, as well as the availability of services such as water and sewer, are the primary factors affecting industrial development at the local level. If a community is enthusiastic toward growth, the channelling of state and federal funds there for various forms of development assistance could influence some industries to locate there. However, in the absence of such community support, federal and state money for development will frequently have little positive impact on the recruiting of new firms.

Over the years, the state has tried to encourage communities to adopt positive attitudes toward growth and to take steps to prepare themselves for new industry. During the administration of Governor Bob Scott, the Governor's Award Program was established for these purposes. Although the Governor's Award Program improved facilities in some communities, it often failed to achieve local support for growth or led to the disillusionment of communities because receipt of the award was not often followed by the arrival of new industrial plants. The Hunt administration has resurrected the old Governor's Award Program under a new label, the "Governor's Community of Excellence" award. The new program will again try to "get communities ready" for industry, as a member of the Department of Commerce staff put it. However, its similarity to the Scott program suggests that its prospects for success are no greater than those of its predecessor.

This review of factors affecting industrial site decisions suggests that, in spite of the speeches and press releases to the contrary, the Piedmont Crescent and its adjoining counties are likely to be by far the greatest benefactors of state industrial development activities, as they have been in the past. The Hunt administration holds out the promise of industrial growth to more rural communities through the Balanced Growth Policy, but there is little evidence that the state has either the programs to carry out the promise or the determination needed to concentrate the allocation of resources sufficiently to achieve real results. Under these circumstances, balanced growth as it is currently presented cannot be described as a sound and workable economic development policy for North Carolina. Balanced growth may instead be more successful as a political strategy designed to assure minimum constraints on the development of the Piedmont Crescent area while encouraging unrealistic expectations with respect to development in needy rural areas.

Chapter 6

Major State and Federal Development Programs in Regions K and L, 1966-77

Introduction A major effort in this study was devoted to identifying those state and federal programs that have provided assistance to governments in Regions K and L that seem to have an impact on industrial development there, and to determining the amounts of money available to the communities, counties, and the regions through these programs.* At the same time, measures of performance were sought in order to assess the results of these federal and state programs in terms of income and industrial development. This chapter is essentially a narrative analysis of the county and regional data that resulted from comparing program expenditures with development performance. While this analysis may be of primary interest to state and local officials, the observations resulting from it and listed at the end of this chapter may be of more general interest. In summary, these observations state that in Regions K and L:

- Increases in per capita income were more closely related to the creation of more jobs than to the attraction of high-technology industry;
- The attraction of new and expanded industries depended more on investments in water and sewer facilities than on investments in any other single program category;
- The cumulative effects of investments in utilities and highways over five or more years were more important in stimulating industrial development than any combination of program investments during shorter periods;
- Investments in programs other than highway construction were less important for attracting industry in counties close to urban centers and heavily-traveled four-lane roads; and,
- The benefits of industrial development in some counties were reduced in the short run by extensive in-commuting.

The federal and state programs that have been sources of assistance for Regions K and L are listed in Appendix A-24. In the analysis that follows, these programs are grouped into five major categories:

Construction of water supply and waste disposal systems. This category includes federal grants and loans, and state Clean Water Bond funds, as well as local government bonds for water and sewer systems.

Highway construction and planning. This category includes only federal highway construction and planning funds because these are usually

* Local government bonds issued for water and sewer projects are also included because of the importance of these utilities to industrial development.

spent for interstate highways and for other primary routes that are especially important to industrial development.

Business and industrial development. This category includes federal grants and loans to businesses, local industrial development corporations, and local governments for projects to further business or industrial development.

Housing. This category consists of federal assistance to governments and individuals in purchasing, constructing, or repairing homes or housing projects.

Rural electrification. This category includes federal loans for the extension of electric service into rural areas.

The performance or rate of development of each region was assessed in terms of six factors. These were:

New and expanded jobs per 1,000 population. This is the number of jobs provided as a result of new plants or the expansion of existing plants, divided by the population in thousands.

New plant investment per capita. This is the investment in new plants divided by the population.

New plant investment per job. This is the investment in new plants divided by the number of new jobs in those plants. The resulting figures give an indication of the level of technology used in the new plants since higher-technology plants usually cost more per worker to construct.

Plant expansions per capita. This is the investment in the expansion of existing plants divided by the population.

New and expanded investment per capita. This is the total investment for new plants and for the expansion of existing plants divided by the population.

Change in per capita income. This is the percentage change in per capita personal income from one year to another.

Program and performance data on which the analyses in this chapter are based are in Appendices A-25, A-25a, A-25b, and A-25c.

Assistance to local governments from state and federal agencies comes in many forms. Such assistance is generally provided through direct expenditures, grants, loans, and loan guarantees. Loans, loan guarantees, and grants, sometimes called "outlays," are made to cities and counties by the federal government in response to applications from these local governments. To reduce the likelihood that local agencies will submit proposals that are unwise or inconsistent with other local plans and actions, each application must be reviewed by the appropriate local, state, and federal agencies (and frequently by Councils of Governments). Comments on the applications from agencies below the federal level are not binding, although they may influence the final decision of the federal agency. These procedures have been developed to reduce the chance that a federal agency will

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unwittingly provide assistance for a local project that has not been evaluated by appropriate state and local officials. Councils of Governments (COGs) were originally established in part to facilitate this coordination process. Once a local government application is finally approved by the federal agency, the requested assistance is usually provided directly to the local government.

An important characteristic of this complex and often time-consuming process is the large number of agencies through which an application must pass. There are opportunities at each level of government for the introduction of comments or delays that can affect the final action taken on any request. While many applications for federal assistance are processed in a routine fashion, governments occasionally try to circumvent the procedures described above to avoid bureaucratic or political obstacles.

The federal grant application process also emphasizes the importance of political linkages between local, state, and federal governments. County commissioners with close ties to the governor, for example, may be more successful in avoiding delays at the state level and criticism of their applications for federal assistance. Similarly, political congeniality between state and federal officials can be helpful to the state and its local governments. The importance of these relationships may explain, at least in part, the variation in federal (and state) assistance to local governments from one year to the next. Elected officials and their appointees change frequently, and political alliances often change with them.

A second reason for the variations from year to year in the level of federal and state assistance is that funds for these projects are often distributed in rather large lump sums, especially when they are destined for major local public works projects such as water and sewer systems. And of course, communities may only need to expand water or sewer systems every five or ten years.

The final and perhaps most obvious reason for variations in the flow of federal funds to local governments is availability. The Congress, like its legislative counterparts in the states, may increase or reduce the yearly amount of money any federal agency has to spend.

Although there are relatively few state programs directly related to industrial development, those that rely on grants or loans are generally bound by procedures similar to those described above for federal agencies. However, coordination is frequently less extensive and, of course, final action is taken at the state level. The role of the state is expected to increase in importance as a result of the agreement announced jointly by President Carter and Governor Hunt in November, 1978, under which the Farmers Home Administration and other federal agencies will work with North Carolina agencies to improve the coordination of federal and state assistance, especially in rural areas. If this agreement increases the importance of the state's role in the allocation of federal funds, it also emphasizes the need for a sound state development policy to guide these allocation decisions. However, the language of the agreement suggests that the current state economic development policy may not be so important after all. It states: "The Balanced Growth Policy (BGP) for North Carolina will be used as the

guiding foundation for activities *when and where applicable.*" (Emphasis added). In other words, even the Balanced Growth Policy is to be subject to political interpretation.

The complexities of the grant process, as well as the shifting political sands on which it seems to rest, suggest that government grants and loans do not always function as precise tools for the accomplishment of specific program or policy objectives.

A review of program and performance information at the regional level often tends to obscure the vast differences among the counties, but can be useful as a means of tentatively identifying relationships between program investments and economic development. The first chart below on program outlays in Regions K and L shows the region that received the greatest assistance (measured in dollars invested per capita) in each of the five major program categories during each of three time periods: 1966-69, 1970-73, and 1974-77. The second table indicates the region that had the highest performance in each of the six performance categories during each of three similar time periods.

Comparisons at the Regional Level

PROGRAM OUTLAYS IN REGIONS K AND L

Program Categories	Region Receiving the Most Assistance		
	In 1966-69	In 1970-73	In 1974-77
Construction of water supply and waste water disposal systems.	L	L	L
Highway construction and planning.	K	K	L
Business and industrial development.	L	K	L
Housing.	K	L	K
Rural electrification.	K	K	K

DEVELOPMENT PERFORMANCE IN REGIONS K AND L

Performance Categories	Region with the Highest Performance		
	In 1965-69	In 1970-74	In 1975-78
New and expanded plant jobs per 1,000 population.	K	L	K
New plant investment per capita.	L	L	K
New plant investment per job.	L	K	L
Plant expansions per capita.	K	L	L
New and expanded plant investment per capita.	K	L	L
Change in per capita income.	K*	L	K**

* 1966-70 ** 1974-76

During all three periods, 1966-69, 1970-73, and 1974-77, Region L had more investments in water and sewer than Region K and Region K had greater per

capita investments in rural electricity than Region L. These were the only two categories of the five in which one region consistently had larger program expenditures than the other. With respect to water and sewer, Region L had much higher investments than Region K prior to and during the 1966-69 period, primarily because Region L made much greater use of local bonds to pay for water and sewer facilities. By the 1970-73 period, Region K had begun to close the gap, in part as a result of state Clean Water Bond funds. Region L was only slightly ahead in per capita water and sewer investments by the 1974-77 period.

During 1966-69, Region K received greater assistance than Region L in three of the five program categories, and demonstrated higher performance in four of the six categories. However, Region K's performance depended heavily on the expansion of existing plant facilities whereas the performance of Region L was more the result of investments in new plants. The higher investments per job for new plants in Region L also indicated that new plants there utilized more advanced technology than did those in Region K. More jobs per capita were created in Region K than in Region L during 1965-69 as a result of investments in new plants and in the expansion of existing plants.

During 1970-73, program investments in Regions K and L changed relatively little from the previous period, except in two areas. First, expenditures were higher in Region K than in Region L for business and industrial development programs. Secondly, outlays in Region L for housing became larger than those in Region K. With respect to performance during 1970-74, however, Region L had higher figures than Region K in five of the six categories. The larger outlays in Region L for housing were probably stimulated by the growth in per capita income, which was in turn a result of new jobs. Industrial expansion in Region L resulted primarily from surplus water and sewer capacities near cities in the region and from the attraction of industry to sites close to four-lane highways.

By the 1974-77 period, Region L had larger per capita outlays than Region K in three of the five program categories. Although Region K had more new jobs and more new plant investment per capita, Region L had more expansion of existing plants and greater new plant investment per new job than did Region K.

Considering the entire 1966-77 period, the cumulative effects of water and sewer investments in Region L, which resulted in capacity sufficient to support industrial growth, in combination with the attractions of urban areas and four-lane highways, were important to that region's performance, especially during 1970-74. Region K, on the other hand, which performed very well in 1965-69, had much lower performance figures than Region L in 1970-74 but rebounded in several important categories in 1975-78. During the latter period, Region K had greatly increased investments in water and sewer facilities.

Within this performance data the most striking relationships occurred among three categories: new and expanded jobs per 1,000 population, new plant investment per new job, and growth of per capita income. Not surprisingly, the region that provided more new jobs in any of the three-year periods also had the highest rate of growth in per capita income. However, higher growth of per capita income

also occurred consistently in the region that had *lower* new plant investment per new job. Since high new plant investment per new job is generally associated with high-technology plants, the performance data shows that, in these regions, the attraction of high-technology plants was associated with lower growth in per capita income.

The following discussion is based on a review of the relative levels of expenditures in the five program categories between 1966 and 1977 in the counties in each region and on consideration of the six indicators of performance for these counties. (See Appendices A-24 through A-25c.) The analysis is supplemented by additional information obtained from interviews and written sources. (See Appendices B and C.)

In general, expenditures on federal highways (Column B in Appendix A-25b) and water and sewer facilities (Column A) were followed by investments in new industries (Column G), especially high-technology plants (Column H). Excess capacity in water and sewer facilities was increasingly attractive to new industry as transportation links were improved, and lack of sufficient water and sewer capacities acted as a strong deterrent to new industrial development, in spite of improvements in highways. The creation of jobs in new and expanded industries was also associated with increases in water and sewer outlays, especially in those counties where much of the increased capacity was absorbed by the expansion of existing industry.

WATER AND SEWER. Adequate water and sewer facilities are essential in attracting new industry, especially high-technology industry. Water is an important ingredient in many manufacturing activities, e.g., processing food, and the manufacture of chemicals, rubber, and plastics. Water is also important as a coolant in many other operations such as primary metals and glass manufacture. Industries also require waste treatment facilities, and such facilities are of particular concern to chemical and textile dyeing firms because their sewage is often difficult to treat.

Local decisions to expand water and sewer facilities may be prompted by the desire of local firms to expand, although in some areas, local textile firms opposed the expansion of water treatment facilities, apparently to discourage new industry. Opposition from local interests was one of the causes of Region K's relatively late start in the expansion of water and sewer facilities. In at least one county in the region, the same type of opposition continues to delay expansion of waste treatment facilities.

Although technical advice was occasionally available from state agencies, before 1971 and the passage of the state Clean Water Bond Act, there were no state programs to provide financial assistance to local governments for the construction of water supply and waste water systems. Consequently, the financing of such projects relied largely on bonds issued by local governments and on federal programs of the Environmental Protection Agency (or its predecessors), the Farmers Home Administration, the Department of Health, Education and

Welfare, the Department of Housing and Urban Development, and the Department of Commerce.

Before 1965, water and sewer projects in both regions were concentrated fairly heavily in the vicinity of larger towns, where the tax base was sufficient to support the non-federal project costs. In Region K, Roxboro in Person County had the greatest amounts of water and sewer investments, followed by Henderson in Vance County. These kinds of projects were more evenly distributed throughout Region L during 1957-65, but the largest investments were in Roanoke Rapids in Halifax County and in the city of Wilson. The water and sewer facilities constructed as a result of heavy investment in these four counties during 1957-65 were sufficient to meet new demands for several years thereafter. This was reflected in lower water and sewer investments in three of the four counties in the years following 1965. The relatively high level of expenditures for water and sewer projects in Vance County during 1966-77 resulted from the fact that Henderson was the principal applicant for the Regional Water System that will eventually serve the five counties of Region K.

From 1966 to 1969, there were marked differences in both the amounts and types of water and sewer investments in Regions K and L. In Region L, the total outlays for these purposes were about \$11 million or about \$44 per capita. The corresponding figures for Region K were about \$2.2 million total and \$17 per capita. These major differences were accounted for primarily by the much greater use of bonds for water and sewer projects by the local governments in Region L as compared to those in Region K. During this period, the local bonds issued in Region L for water and sewer projects amounted to over four times the amounts issued in Region K on a per capita basis. In view of the need to match federal grants with local funds, this difference was very important.

In the 1970s in Region K, inadequate sewer facilities were the most serious limitation on industrial recruitment in most of the five counties. Lack of sufficient sewage facilities was also a problem in Region L at times. Inadequate waste treatment capacity was cited as the major obstacle to industrial recruitment activities in Nash County in recent years. In contrast, in the late 1960s and early 1970s, excess water and sewer capacity had been one of Rocky Mount's major attractions. The existence of adequate water resources was instrumental in the decision of Firestone to locate a plant in Wilson and in the selection of Franklin County by Novo Biochemical as the site for its new American plant.

Major water and sewer investments in Franklin County during 1974-77 resulted from the passage of the Clean Water Bond Act by the North Carolina Legislature in 1971 and from the interest of Gulf General Atomic in locating a plant there. Gulf's plans to locate in Franklin County were discontinued, but the availability of water attracted Novo Biochemical to Franklin County in 1977.

Waste treatment facilities are especially important to textile dyeing operations, which explains, in part, the link between high rates of investment in water and sewer facilities and high rates of plant expansion investments per capita in Granville County during 1970-74, in Nash County during 1970-74 and 1975-78, in

Edgecombe County during 1965-69, and in Vance County during 1965-69 and 1970-74. As new and expanding textile operations used up the excess waste treatment capacities in Nash and Granville counties, investment slowed in new and more diversified plants. The diversification effort in Granville County was in some ways aided by the recession, since the closing of one textile dyeing plant provided that county with excess sewer facilities that were important in attracting smaller non-textile firms to the area. In Nash County, the recession caused severe cut-backs in textile operations, but much of the investment activity in that county since then has been in plant expansions, many of which were alterations in textile plants to allow them to produce materials other than polyester. In 1978, Nash County was still near the limit of its waste treatment facilities.

WATER, SEWER, AND HIGHWAYS. Good highways that link non-urban areas to urban services are important for industrial development and especially for high-technology industry located outside metropolitan areas.

Moreover, the generally good secondary road system also contributes to industrial development by effectively increasing the labor pool available to plant sites. It is not unusual for workers in Regions K and L to drive 30 or 40 miles to their jobs, often in another county. In some respects, this extensive commuting splits the benefits of industrialization between the county of residence and the county in which the job is located because some income is spent in both. As energy costs rise and commuting becomes more expensive, it seems likely that people will have to live closer to work unless they can use public transportation or other means to reduce their transportation costs.

In Regions K and L, the relative federal expenditures for highways generally reflect the relative levels of four-lane road construction. Work on I-85 during 1966-69 and 1970-74 heavily weights per capita highway outlays in Region K, obscuring to some extent the fact that other important primary highway construction was also in progress there, especially during 1966-69. Construction on I-95 in Region L, particularly the "missing link" between Kenly and Gold Rock in the 1974-77 period, and on U.S. 64 and U.S. 264, greatly increased federal highway expenditures in Nash and Wilson counties.

The effect of this massive highway construction was, again, to reinforce the attractiveness of these areas, given adequate water and sewer facilities. Granville and Nash counties benefited most during 1966-69 from the dual advantages of available water and highways, while Franklin and Wilson benefited most from these same advantages during 1970-73 and 1974-77. In spite of the relatively heavy expenditures for water and sewer facilities and for highways, Northampton County did not greatly benefit from increased investments in new or expanded plants. The greater distance of that county from larger urban areas reduced the impact of the I-95 corridor there. In addition, much of the investment in water and sewer in Northampton County was used for the development of basic municipal services.

Taken together, water and sewer and highway expenditures seem to have had

the greatest impact on jobs. The levels of federal highway expenditures in counties may be considered as rough measures of the increased accessibility of these areas. For example, the construction of I-85 in 1971 in Granville County was accompanied by a high level of investment in new plants. These new plants also utilized relatively high technology (as reflected by new plant investment per new job) for which access to urban services is important. The impact of the highway was diminished somewhat by the shortage of sewer facilities, so that investment in new plants in Granville during 1970-74 was less than the regional average. Nash County was in a somewhat similar situation with respect to water and sewer facilities. The opening of segments of highways I-95 in 1974 and U.S. 64 in 1977 did not generate the expected increases in new firm investments in Nash County (as similar circumstances did in Wilson County), because of inadequate waste water treatment facilities there.

WATER, SEWER, AND ELECTRICITY. Providing public utilities in an area is an important prerequisite for industrial development there, and increasing the generating capacity (in the case of electricity) and the treatment capacity (in the case of water) are major ways of expanding these services. A major difference between public investment in power and public investment in water resources arises because public investment in the latter is concerned with both the main treatment station and the extension of lines to new service areas, while public investment in power is largely confined to the extension of lines. Moreover, the extension of power lines is a much smaller proportion of the total cost of providing electricity to a given area than is the cost of extending water and sewer lines compared to the total cost of providing water and sewer services. The extension of water and sewer lines to any given area is also a much more time-consuming and costly venture than is the extension of power lines to the same area, especially in North Carolina, where power lines are usually above ground. Consequently, the availability of electrical power in an area generally precedes the availability of water and sewer treatment facilities, so that, while availability of power is an important consideration for the location of most new industries, outlays for rural electrification are *not* correlated with industrial development. They signify rather the preliminary efforts to prepare rural regions for future (long run) industrial development and increased urbanization.

In recent years, firms have become increasingly interested in going into operation as soon as possible after they select a new plant site. Extending water and sewer services to potential sites is generally the most time consuming constraint. These factors may account for the desire of many firms to find sites with suitable available buildings because such buildings usually have adequate water and sewer connections.

HIGHWAYS AND BUSINESS AND INDUSTRIAL DEVELOPMENT. Public outlays for business and industrial development generally involved financial assistance to small businesses, Economic Opportunity loans to small businesses, business and

industrial development loans from the Farmers Home Administration, grants and loans from the U.S. Department of Commerce for the development of facilities for industrial development, loans to local development companies and loans to minority business enterprises. Warren County and Soul City received the largest amount of these outlays in Regions K and L. The Councils of Governments (COGs) in each of the regions attracted relatively large amounts from these programs for Rocky Mount in Nash County and Henderson in Vance County during the 1974-77 period. Overall, most business and industrial development loans were for small business assistance.

Counties receiving relatively large outlays for business and industrial development in each of the regions were usually those counties not located on an interstate, e.g., Edgecombe in 1966-73 and Franklin in 1966-69. Furthermore, new plant investment per job was generally lower in counties receiving relatively high outlays for business and industrial development, suggesting that such outlays are usually connected with less capital-intensive manufacturing operations that frequently locate in less accessible areas. The attraction of remote areas for some firms may be explained in part by the high cost of land near interstate highways.

HOUSING AND GROWTH IN PER CAPITA INCOME AND JOBS. Growth in per capita income is most closely associated with growth in new and expanded jobs per capita among the indicators of relative industrial performance. This relationship suggests that the creation of jobs is a more successful method of improving economic well-being in the counties of Regions K and L than is the promotion of capital-intensive (high-wage) industry. However, when industrial investment both creates large numbers of jobs and pays higher wages (as in the case of Firestone and to a lesser extent Kerr Glass in Wilson County), the impact on income is impressive. For the most part, however, investment consisting of relatively large outlays per job created did not greatly improve economic performance in any county in the two regions. Extensive commuting may have contributed to that situation. Workers are usually willing to commute farther for high-paying jobs than for low-paying jobs, and many of the highest paid workers in the new capital-intensive plants in the two regions often do not reside in the county where they work.

Among the categories of government outlays, growth in per capita income is most highly associated with growth in housing. The link between federal outlays for housing and per capita income growth may be influenced by several factors. First, federal housing assistance loans may only be feasible after per capita income has improved. Secondly, urbanization increases with per capita income (and vice versa), and requires greater housing expenditures. And, finally, an incentive to increased urbanization may be the increase in the number of jobs available in new and expanding industries. As more and more jobs become available, incomes rise and more people move to an urban area to take advantage of the increased job opportunities. Demand for both public and private housing increases as a result of these three factors.

Observations

The preceding analysis of public investments and industrial growth patterns in Regions K and L suggest several general observations:

- Increases in per capita personal income were more closely related to the number of new jobs created in new or expanded plants than to the attraction of high-technology industry.
- Investment in water and sewer facilities had more effect in the attraction of investments for new and expanded industry than did investments in any other single program category, although in some cases, industrial development lagged several years behind the expansion of water and sewer facilities.
- The cumulative effect of investments in utilities and highways over six to ten years was more important in stimulating industrial development than was any combination of program investments for shorter time periods.
- The proximity of a county to an urban center or to a heavily-traveled four-lane highway diminished the relative influence of other (non-highway) program expenditures in attracting new industry.
- Extensive commuting dispersed the effects of industrial development and, for this reason, the short-run benefits of industrialization to some counties may have been less than expected.
- Outlays for housing followed growth in per capita personal income and increases in the number of jobs available.

Chapter 7

Comments From Regions K and L

What makes or breaks industrial development ?

As a component of the research for this study, comments were sought from industrial recruiters, bankers, plant managers, elected officials, county managers, Chambers of Commerce officials, Councils of Governments (COGs) staffs, and others involved in industrial development in Regions K and L. Similar questions were asked in each interview. Initial questions were general and interviewees were encouraged to talk about what they considered important to the development of their communities, counties, or regions. A list of all persons interviewed is in Appendix B. In addition, several state officials involved in industrial recruiting or economic development were interviewed, and their comments are also included.

Major topics discussed with the persons interviewed are listed below. The percentage figures to the right of each topic generally reflect the extent of the comments received in each region about the topic. In tabulating interview results, greater weight was given to the discussion of a topic than to mere mention of it, so that higher percentage figures indicate topics discussed at greater length. A topic *discussed* by all persons interviewed in a region would have received a maximum score, 100 percent.

Data

Topic	Region K	Region L
"Industry hunting," tourism or recreation	97%	76%
Water supply, waste disposal, or utilities	86%	63%
Industrial sites	70%	79%
Labor, unemployment, and unions	57%	50%
Transportation	47%	34%
Livability	43%	18%
Taxes	2%	18%
Wages	1%	10%
Environmental standards	1%	11%
Housing	1%	8%
Markets	1%	5%

COMMENTS ON "INDUSTRY HUNTING," TOURISM, AND RECREATION

Although attracting new industries to any rural area is difficult, this state's industry hunters are not doing as much as they can. One local official claimed the state had not helped bring a new plant into the region in the last eight years. There was considerable criticism at the local level of the turnover on the state staff and of the influence of politics on the state's economic development efforts. The former allegedly results in a lack of professionalism and the latter undermines

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the credibility of the process. As one person put it, "Nine different state industry hunters have been assigned to (this) county in the last seven years." Another said, "I have been told I'm not getting more attention because I won't pass anything under the table." Although some people interviewed think it is too early to judge the administration of Governor Hunt, one official observed that "there is not as much action as talk---long-range political factors seem to carry a lot of weight."

The general feeling is that state agencies are cooperative in local industrial recruitment efforts. While many interviewees recognize the limitations of small rural communities, others feel strongly that they have made the effort to do the things state officials said needed to be done to attract industry. And, having done those things, local officials believe the state should bring them more industrial prospects. One industrial recruiter felt that the state should identify industries that would do well in rural areas and go after them with a special team of the best state industry hunters. As it is now, he said, the state simply reacts to the industries that express an interest. On the other hand, some local officials said that a high percentage---in some cases, ninety percent---of their industrial prospects are brought to them by the state.

State Industrial Recruitment Efforts in Region L

Most of the industrial prospects that come to Region L are brought there by the state industry hunters. The percentage of all such prospects brought to counties and communities by state officials was estimated to be between 75 percent and 95 percent. Although one experienced official noted that the "state can either help you or hurt you," most of those interviewed believed that the state industrial recruiting staff is doing a good job. A local industrial developer observed that he had talked to eighty-five prospects in one year, all referred by the state staff. That figure is probably uncommon, however, and concern was even expressed that the number of state recruiters is too small to deal with the workload. Officials of smaller towns and less populous counties felt that they were not getting enough prospects. Some of the more experienced local developers doubted that the state can dictate the directions that industrial growth will take. Others believed that seeking "high-technology" industry would rule out all locations except the Research Triangle and Charlotte. A more moderate view was expressed by one developer who felt that the state could help if it would settle for small plants in small towns and seek industries that pay wages higher than the local average, even though such wages might not be higher than the average for the state as a whole.

As in Region K, a number of persons interviewed in Region L believed that the turnover on the state industrial recruiting staff is excessive and that these jobs should not be used for political patronage. One stated flatly that the state staff has gone downhill since the Hodges administration.

Some industrial developers in the more rural counties wondered what was being done with the \$300,000 appropriated in 1977 to provide increased assistance in industrial recruiting to small communities. One person from a larger

town said that a small community development program would waste both time and money because many small towns could not accommodate an industry.

Leadership at the top was considered especially important by several developers and Governor Jim Hunt received praise for his direct involvement in industrial recruiting.

This region has been rather successful at attracting U.S. Economic Development Administration (EDA) funds in recent years. EDA money was important in the recent construction of new facilities at Vance-Granville Technical Institute and at Piedmont Technical Institute. Soul City in southern Warren County has also been an effective magnet for EDA funds. However, several officials pointed out that the funding formulas for some state and federal programs are biased against less populous counties and communities: allocation of program funds on the basis of population frequently generates amounts too small to hire even one employee to carry out the program. EDA has also helped establish some industrial parks in Region K, although interest in the park idea is greater in some counties than others. EDA loans for businesses are not sufficiently used, according to one official.

Federal and State Financial Assistance in Region K

State funds have also benefited this region. Butner, an unincorporated state-run town, is considered an asset to the region, in part, because of the large state payroll and, in part, because of the industrial sites available in that area. Officials interviewed commented favorably on recent action by the state to grant relief to industries for a portion of the inventory tax and on the authority of local governments to issue revenue bonds to finance projects that would increase the area average wage.

Small Business Administration (SBA) loans have been used to some advantage, especially in Nash County. However, an observer there with knowledge of the entire region believed that EDA loans for the development of industrial sites are not widely used. One source in this region complained about the excessive paper work required for participation in many federal programs, and some concern was also expressed about federal requirements for the disclosure of information about local firms, especially in the case of water and sewer projects. At the same time, officials acknowledged the important role of federal agencies in providing loans and grants for water and sewer projects, especially EPA (Environmental Protection Agency), HUD (Department of Housing and Urban Development) and FmHA (Farmers Home Administration). In this connection, several complaints were voiced about EPA restrictions on the size of waste disposal facilities eligible for federal assistance. (This restriction was generally cited as limiting treatment plants to current demand plus ten percent. Many developers felt such limited capacity would already be exceeded by the time any new treatment plant is completed.)

Federal and State Financial Assistance in Region L

Perhaps one of the most important areas of state assistance is the industrial training program of the Department of Community Colleges. The state provides

funds for local institutions to train workers for new industries in the start-up process. Reaction to this program among those interviewed in Region L was generally very favorable. However, a number of developers felt that not enough training was offered in advance of specific job openings in skills that are commonly required by many industries. In the jargon of technical trainers, the practice of teaching skills in advance of specific demands for them is called "stock piling." It is done to some extent in the more industrialized areas of North Carolina, especially with regard to special skills required in the furniture and textile industries. Some developers in Region L believed the institutions in their areas should offer more of these types of courses. They felt that having such courses as a part of the continuing curriculum would be an attraction to some of the high-technology industries. This argument is supported to some extent by the view of an official of a national consulting firm, who said that industrial prospects consider the presence of such on-going courses as an indicator of community interest in industrial development. For community colleges and technical institutes, however, such training programs can be very expensive because they involve costly equipment, few students, and relatively long periods to reach required skill levels. In short, these are low-volume, high-cost programs. The state approach to funding community colleges and technical institutes tends to reward growth which, within a given budget ceiling, can be more readily achieved by low-cost, high-volume programs. At a meeting on November 8, 1978, with Charles R. Holloman, acting president of the Department of Community Colleges, members of the Eastern North Carolina Development Association discussed these problems and asked what might be done to address them. One of the most likely solutions identified during this meeting seemed to be a state appropriation by the 1979 General Assembly to pay for new programs to provide more training in technical "hard-skill" areas.

Community Attitudes in Region K

Interviews with county and community advocates of industrial development suggested at least three different types of relationships between industrial recruiters and the localities they serve. In some cases, the industry hunter feels strong support from community leaders as well as popular support for industrial expansion. In other situations, local leadership is much less decisive but not opposed to development. And, in still other cases, there is strong but subtle opposition to development among community leaders, often resulting in continuous maneuvering on both sides to gain an advantage. As one rather frustrated developer put it, "Somebody doesn't want any more industry here." In small communities, such opposition can take many forms. It may be that old and influential families simply do not want things to change, or do not want to share their influence with others. Farmers, confronted with rising costs and a scarcity of labor, may feel themselves threatened by the uncertain effects of new plants. They might well prefer to pass their holdings on to their children rather than to sell land for an industrial site, even at a good price. Still others may fear that

industry will increase the economic and political power of blacks who comprise a large share of the population of many counties. Existing industry may be opposed to increased competition for labor. Environmentalists worry about the effects of industry on water and air and about the prospect that higher levels of industrialization might lower the general quality of life.

Yet, industrial developers feel that a "positive" community attitude is extremely important to their efforts to recruit new industry. Resolving legitimate differences at the local level would seem to be important in advance of an invitation to a new plant. On the other hand, the secrecy with which such decisions are usually made makes widespread local discussion virtually impossible.*

All counties in Region K except Franklin and Person had either planning commissions or industrial development commissions with county-wide industrial recruitment responsibilities listed with the state Department of Commerce. In Franklin County, county commissioners were listed as the principal contacts for this purpose. In Person County, the contacts were the county manager and the president of the Roxboro Development Corporation. All of the officials interviewed felt that their counties were adequately staffed to handle prospects in a professional manner. The absence of a full-time industrial development person in Franklin County was mentioned by one plant manager as a factor that made it somewhat difficult for him to identify and contact the right people to help him solve problems. In other counties, the assistance provided by industrial development or planning commission personnel was generally praised by plant managers.

According to one experienced industrial developer, "The number one thing is leadership at the county level." His logic is persuasive even if one considers only the fact that most industrial development commissions are appointed by county commissioners. But county commissioners are also important in other ways. They can negotiate effectively with the towns and cities for the extension of services and they must find the means to pay the county's share of the cost. They are also among the most effective advocates of road building programs.

Most of those interviewed believed that "a positive community attitude" was indispensable in attracting new industry. One example cited was the enthusiasm of the people of Wilson for the huge Firestone plant which recently located there, and the consideration shown employees of that firm who moved to Wilson. This spirit was in turn influenced by, and influenced, the attitudes of community leaders. And, as several interviewees pointed out, these leaders are essential to the success of industrial development because the cities and towns must usually cooperate in providing water and sewer services even though plant sites may be outside of the town limits.

One political figure pointed out that in some cases new industry has a decided effect on community attitudes. Such development can result in the creation of

* Government secrecy is explored in another Center publication, *The Right to Be Able to Know, Public Access to Public Information* by Fred Harwell.

a new middle class that wrests, or attempts to wrest, power from the older influential families.

Financing in Region K Most of the counties in the region have an industrial development corporation authorized to buy and sell land, construct buildings, and issue stock. These corporations have been helpful in establishing industrial parks and in obtaining other sites for new industries. In recent years, there seems to have been a trend for new plants to locate away from industrial parks, in part, to decrease their visibility and, in part, to avoid city taxes in the event the city decides to include the park within its municipal limits. Securing financial support for industrial parks does not seem to have been a problem. However, some persons interviewed said that financing for new plants and expansions is becoming more difficult to obtain from banks, especially those once local banks that have recently become branches of statewide institutions. The implication is that branch banks are less likely to cooperate with each other in financing a large project than were locally-owned banks. Branch banks are also viewed as more conservative with respect to risk. As one observer put it, "They are only interested in the bottom line."

Although industrial revenue bonds are considered a highly desirable alternative by those interviewed, they had not yet been used to finance new or expanded plant facilities.

Financing in Region L Most of those interviewed did not report serious problems in obtaining financing for plant facilities. Where conventional financing has not been available, the Business Development Corporation in Raleigh frequently has provided assistance. This private organization was established during the administration of Governor Luther Hodges to provide loans to firms desiring to build, expand, or reopen manufacturing facilities. The corporation has funds of its own, as well as lines of credit with a number of financial institutions across the state. Comments of those interviewed suggested that the Business Development Corporation is a distinct asset to industrial development, especially as an alternative to government financing. Several communities have established similar local corporations with the authority to buy and sell land, issue stock, and construct buildings. These organizations are viewed as helpful in the acquisition and development of sites for new industries.

Personal Relationships in Regions K and L Although local industrial developers must have broad knowledge of industry needs and practices, several of those interviewed in Region L felt that having personal contacts in industry and in state agencies was valuable in solving problems and in attracting new plants. The success of some local developers appeared to be directly related to their previous experience (and contacts) in larger industries outside of the state. On the other hand, some developers in Region K pointed out the desirability of having a "home-grown" developer who knows local attitudes, local politics, and the people who influence both.

WATER SUPPLY, WASTE DISPOSAL, AND UTILITIES

Water and Sewer in Region K

There was almost unanimous recognition that excess water and sewer capacity is very important for any area seeking industrial growth. Water supplies pose less of a problem because of the relative availability of federal funds. In this connection, Soul City has been important to the region because as a "new community" it has received a great deal of federal support. Its influence has been particularly important to federal funding of the regional water system. As a result of that system and of the potential for tying into it, most of the officials in larger towns in Region K felt they have adequate water to permit steady growth. The situation with respect to sewer treatment capacities is less favorable. Some communities have been able to "stay ahead" of sewer demand through construction supported by state Clean Water Bond money and federal assistance, largely from EPA. Local bonds are also an important source of funds for these projects and are regarded by some as a measure of community interest in growth. Complaints were heard about the EPA policy of limiting support for sewer projects to those that will result in treatment plants with capacities of not more than 110 percent of current demand. Some officials felt that the ten percent additional capacity would be insufficient for new industrial needs. The general impression is that EPA is not interested in providing the waste treatment capacity necessary for industrial growth. One community solved the problem by going to EPA for funds to support a waste treatment project for 110 percent of current needs and then approaching EDA for funds for the additional capacity needed to serve new industries. According to local industrial development representatives, EPA balked at first but eventually went along with the plan, a good example of the ambivalence of federal programs.

If a community has sufficient water and sewer capacity for a prospective new industry and the site needs pipes laid to it, a question arises about who pays the costs. In seeking the answer, community leaders must weigh the potential plant taxes, the cost of the pipelines, the amount of water required, and the type and amount of sewage that will be put into their system. While there is no fixed rule, local governments will usually extend water and sewer lines at no cost to the company if this expense will be equaled by property taxes on the new plant over the next six to ten years. One county industrial developer cautioned that about half the expected taxes ought to be set aside to meet other service needs of a new plant.

Although Soul City has plenty of water, as indicated above, it lacks sewer capacity. According to one official, this problem will be solved now that a \$600,000 sewer bond issue has passed in Warren County. The funds are to be used to connect Soul City to the Warrenton sewer system and to connect Warrenton to the regional water system.

As in Region K, the persons interviewed in Region L spoke at length about the importance of adequate water and sewer facilities for attracting new industries. In addition, at least one developer recognized that most counties cannot afford

Water and Sewer in Region L

to provide water and sewer everywhere, especially in view of the rising cost of sophisticated treatment facilities and service lines. This explains to some extent the attractiveness of sites for new industries in the vicinity of larger towns and may also reflect renewed interest in the industrial park concept as a means of reducing these costs.

Water and sewer services have been especially important in the development of Nash County and in the relationship of the county to Rocky Mount. There seemed to be no doubt in the minds of those interviewed that the good Nash-Rocky Mount relationship, resulting in extension of water and sewer lines west from the city, has been a great asset to the county. Rocky Mount, which straddles the border between Nash and Edgecombe counties, has appeared to be more closely associated with Nash County development. According to one observer, some strains in the relationship between Rocky Mount and Edgecombe County go back to the opposition of some Rocky Mount citizens to earlier efforts by Tarboro, the Edgecombe County seat, to stimulate its own development.

Both Roanoke Rapids and Rocky Mount have in the past had limited sewer capacities, and Rocky Mount reportedly lost the Miller brewery for this reason. Both cities now have some excess capacity and expect more in a few years.

Other Utilities in Region K Few comments were received on utilities other than water and sewer. However, one plant manager complained about telephone service. He said the system serving him required the assistance of an operator for every long distance call, a matter of some significance in his international business. To compound his problem, he is located less than ten miles from two small towns but must call "long distance" to both. Region K is served by three smaller telephone companies as well as by Southern Bell.

Roxboro officials felt they were in a particularly favorable position with respect to electric power because of the large Carolina Power and Light Company (CP&L) generating capacity in that area. CP&L's initial decision to come there was influenced by favorable freight rates on coal shipped in on the Norfolk and Western Railroad. Region K is served by Duke Power Company, CP&L, and three electric membership corporations (EMCs).

Other Utilities in Region L No major problems were identified with respect to electric power and telephone. Comments about natural gas indicated that rising prices and limited supplies have virtually neutralized the advantage of being on or near gas pipelines. In the past, however, proximity to natural gas was an important consideration for some types of plants. Firestone considered Roanoke Rapids, in part, because of the availability of natural gas, but other factors favored Wilson.

[Subsequent to the interviews for this study, a number of newspaper articles appeared about the rates charged by the Virginia Electric Power Company (VEPCO) in its northeastern North Carolina service area, including some parts of Region L. These rates were generally higher than the rates charged by other companies in other areas of the state and allegedly discouraged industrial develop-

ment. In Region L, Northampton County is served primarily by VEPCO.]

COMMUNITY "LIVABILITY"

Although services offered by a community are of some importance in attracting new industries, they do not seem to be as critical as some of the amenities discussed below. However, the quality of schools, libraries, and shopping facilities are noted as especially important by firms that plan to bring the families of employees from some other region of the country. High-technology industries are often the ones that bring families because they cannot find enough local employees with the required skills, or because they want employees in responsible positions who have been with the company for some time. If the number of new families moving into a small community is large, the question of services can be critical to the location decision because the employees involved are the ones the company wants most to retain. Some comments by persons interviewed in Region K indicate doubt that small towns there can satisfy the service expectations of sophisticated urban families from other states.

Services in Region K

Many of those interviewed considered the small towns and cities of Region L good places to live, and they believed this to be an important asset. They were conscious of the need for adequate schools, medical care, police, and other services. At least one official felt that schools are not so important to new families moving into the area. Another suggested that about half of the expected tax revenue from a new plant would probably be needed to provide services other than water and sewer. Several developers were uncertain that their communities could absorb and adequately serve large numbers of new residents. It was the general feeling that new higher-technology industries tend to import more families from other parts of the United States than do industries utilizing less-skilled workers.

Services in Region L

More than one industrial recruiter has driven his prospect past a plant site and then hurried on to the country club and the most exclusive residential area in the community. The logic of such an itinerary is explained by the word "amenities." Their great importance is reflected by the fact that many top-level employees of plants in Region K live in the comfortable outskirts of Raleigh and Durham. The attractions of these two cities (and of the Research Triangle Park) include museums, universities, private schools, and golf courses. They also offer an urban "feel" that is more comfortable for families moving to this region from other populous states. Some of the plants would probably not have located in Region K if there had been no Raleigh or Durham within an hour's drive.

Amenities in Region K

Developers in the larger towns in Region L thought that their communities offered adequate residential areas and amenities such as country clubs and restaurants, and the region as a whole benefited from cultural attractions in Raleigh.

Amenities in Region L

TRANSPORTATION FACILITIES

Highways in Region K Many of those interviewed considered Interstate 85 to be a great advantage but they were critical of their own efforts to make the most of it. Major problems mentioned were the lack of water and sewer services close to I-85, except in the immediate vicinity of towns, and the absence of attractions to cause tourists to stop instead of passing through. U.S. 58, a mostly four-lane highway which runs east and west just north of the Virginia border, is also of importance, especially to the western part of the region.

The significance of major highway routes and of the politics involved in the selection of the final route were the subject of comment, including the allegation that I-85 was shifted slightly to avoid passing through the farm of a state official. In addition, efforts by Oxford and Granville County residents, extending over sixteen months, succeeded in convincing state highway officials to locate I-85 close to Oxford. This action and the resulting interchanges were important in attracting Oxford's first major motel.

Highways in Region L It was generally agreed that U.S. 301 and Interstate 95 are extremely important to industrial development in Region L, especially to the cities of Roanoke Rapids, Rocky Mount, and Wilson. Other highways have been less important in the past, and only recently have U.S. 64 and 264 been upgraded to provide essential east-west connections. Prior to that construction, Region L, though relatively close to Raleigh, was insulated to some extent from the effects of that growing urban center. Interstate 95 and U.S. 301 are especially important to motels and restaurants in the Rocky Mount area, most of which will be in a less favorable position now that the Gold Rock-Kenly segment of I-95 has been opened, bypassing these establishments on U.S. 301.

The location of the large Firestone plant outside of Wilson required the improvement of access roads from the plant site to U.S. 301. The quick and favorable response of the state Department of Transportation to this need was the subject of several compliments by developers.

Airports in Region K Most of the comments in Region K suggested the acceptance of the Raleigh-Durham airport as the logical commercial facility, but emphasized the importance of paved and lighted airports within the region to handle company aircraft.

Airports in Region L A number of those interviewed cited as one of the region's greatest needs an airport served by two or more commercial carriers. At present, the only airport in Region L with commercial service is the Rocky Mount-Wilson airport served by Piedmont Airlines. Air travelers from the region rely heavily on the Raleigh-Durham airport which is served by United, Delta, Eastern, Piedmont, and intra-state commuter airlines.

The counties of Region K are served by railroads as indicated below:

Railroads in Region K

Franklin	Seaboard Coast Line (SCL)
Granville	Seaboard Coast Line and Southern
Person	Norfolk and Western
Vance	Southern and Seaboard Coast Line
Warren	Seaboard Coast Line

The SCL link between Franklinton and Louisburg in Franklin County is being paralleled by a water line to increase its attractiveness to industry.

North-south lines in particular were mentioned as being important to the region. The Firestone plant in Wilson ships about 18,000 tires per day, mainly by rail. Service in Region L is provided by the Atlantic Coast Line, the Atlantic and East Carolina Railway, and by the Norfolk and Southern Division of the Southern Railroad. Rail transportation was considered especially important to the early development of Region L.

Railroads in Region L

INDUSTRIAL SITES

As a result of the efforts of industrial development corporations in most counties, acreage is available for plant sites, usually with water and sewer. In one county, problems were encountered because desirable land was controlled by a small number of families who were reluctant to sell. Having sites that can quickly be made ready for prospects is an important and time-consuming job for industrial development staff people. It involves securing options to buy land, pushing the extension of utilities to sites, and stressing the importance of development in the community.

Availability in Region K

Those interviewed expressed a number of complaints about the availability of land for plant sites. As one developer put it, "They (owners) want to save it for their children or they want a fortune for it." Some felt that property owners were just greedy, but there was general agreement that successful developers must make an effort to put site "packages" together before industrial prospects arrive. One Raleigh staff man said that inadequate advance site development is a fairly common failing of less experienced local officials. Some "industrial parks" are little more than untilled farmlands that lack most of the essentials for plant use. Around the more industrialized towns there is renewed interest in the development of industrial parks to reduce the cost of providing services and utilities to new plants. However, developers must also deal with what one official referred to as "Greta Garbo" plants---those that want to be alone.

Availability in Region L

Buildings in Region K In the past few years, more prospective industries have been looking for sites on which usable buildings have already been constructed, apparently to avoid high construction costs and the high cost of borrowing construction money. Communities have responded by identifying and promoting vacant buildings, and the Department of Commerce staff is cataloging these for its use in contacts with prospects. Several persons who were interviewed cited a need for "shell buildings" that could be quickly modified to accommodate new manufacturing operations, but one community has a building, now occupied, that had stood vacant for four years.

Buildings in Region L Many firms are looking for sites that include usable buildings. Some believe this interest is spurred by uncertainty about the economic future and the desire to avoid large construction outlays. Others believe the trend is traceable to a desire to get into production as soon as possible after a decision is made to open a new facility. Developers estimated that 70-90 percent of their prospects are looking for an opportunity to occupy existing buildings, a view that has prompted the industrial development staff in Raleigh to collect data on available structures across the state. Most of the larger communities have corporations established to purchase or secure options to purchase land for sites and to construct "shell" buildings. However, there was evidence of considerable caution in building facilities for firms not yet in sight.

Soil Mapping in Region K Detailed soil mapping is important to some location decisions and it was found to be frequently lacking in Region K. While detailed mapping of entire counties may not be justified, better coordination of mapping schedules with proposed industrial sites may improve the use of limited mapping resources and avoid bringing new plant prospects to sites ultimately found to have unsuitable soils.

LABOR, UNEMPLOYMENT, AND UNIONS

Labor in Region K Most of those interviewed described the region as having an abundance of unskilled labor and very little skilled labor. In general, the labor force was considered to be trainable. Favorable comments were received on the industrial training programs of the Vance-Granville Technical Institute and Piedmont Technical Institute, although some thought they could do a better job. As an illustration of the abundance of unskilled labor one industrial recruiter said that a new fast-food restaurant in his area had 1,000 applications for 27 positions. Plants rely heavily on local labor although some workers commute from Virginia and from other counties outside of Region K. Most plant managers were pleased with their workers. Industry hunters are mindful of the needs of existing businesses in weighing the labor requirements of new plants. There was also some evidence that new plant managers try not to recruit too many of the same skills from any single plant in the same area.

A few of those interviewed felt that the pool of available labor was adequate, that enough skilled labor was available, and that unskilled labor could be readily trained to meet most needs. However, many believe there are insufficient numbers of people with skills commonly required by many industries. Such comments led to both praise and criticism of the community college system: praise for doing a good job in training most production line employees for new plants and criticism for not having enough continuous programs to train higher-skilled workers such as machinists and electrical maintenance technicians. At the same time, several noted that available labor is sometimes difficult to train in the higher industrial skills.

Labor in Region L

During the 1960-70 period, many workers were making the transition from the farm to the factory. One experienced industrial developer noted the importance of the textile industry in this process because, as he pointed out, it provided an entry point for unskilled labor. It was there that the unskilled often had their first exposure to the basic routines and disciplines needed for an organized production process. Many of them learned well and went on to better jobs in more sophisticated plants. The often-criticized "cut and sew" operations provided similar experience for the women who frequently made up the bulk of the available labor supply in rural areas. One person noted that federal Comprehensive Employment and Training Act (CETA) programs have been of some assistance in achieving the same purposes.

Unemployment rates of five to eight percent were mentioned in the counties of Region K. Although not considered to be serious problems, underemployment and the inability to retain high school graduates are of concern.

Unemployment in Region K

Unemployment was considered to be a problem by most of those interviewed and special concern was expressed about the inability to provide enough jobs for high school graduates. Layoffs in the textile industry, especially in polyesters, have caused some serious problems in the past. The weaving of synthetic fibers expanded rapidly in the 1960s and contracted with almost equal speed in the 1970s. However, although there were work force reductions during the 1975 recession, several county officials said they had no plant closings.

Unemployment in Region L

Seasonal employment in tobacco production also contributes to higher unemployment rates in the winter months.

Although a few plants in Region K have unions, the sentiment among those county officials interviewed was overwhelmingly against what was referred to as "militant labor organizations." One industrial recruiter explained this by saying he had never had a prospect that did not inquire about local attitudes with respect to unions, the implication being that plants prefer communities that are opposed to unions. Some of those interviewed believe that blacks are

Unions in Region K

more disposed than whites to unionization and that the high percentage of blacks in Region K discourages some industries. On the other hand, a few developers feel that their communities would not close the door on a union plant, provided it brought assets such as significantly higher wages. It may be of some significance that Chambers of Commerce appear to be more active in industrial recruitment in Region K than in some other regions. These, of course, tend to represent existing businesses and may be more conservative in their attitudes toward unions. The much publicized Brockway Glass Company incident in Roxboro, Person County, resulted in part from a Chamber of Commerce recommendation against recruiting that union plant that was allegedly "leaked" by a county commissioner. The result was a great deal of local furor and embarrassment. And, although the governor and other groups in Roxboro tried to heal the wound, Brockway went to nearby Danville, Virginia.

Unions in Region L Almost all of those interviewed said that the people in their counties were very much opposed to unions. This seemed to be especially true in Edgecombe County and somewhat less true in Halifax County. One developer believed his county's commissioners would not necessarily oppose a union plant if the union involved was not "militant." All of those interviewed seemed to feel that a "right-to-work" law is important to attract new industry. Plant managers praised the climate of "industrial peace," and some argued that there is no need for unions if management is doing its job. There was some feeling that the confrontation between organized labor and the J.P. Stevens Company in Roanoke Rapids had dampened the enthusiasm of some industrial prospects for that area.

WAGES

Wages in Region K Comments from the counties in Region K reflected a good deal of skepticism about the usefulness of the expressions "high-technology industry" and "higher-paying industry." Some feel that the terms are vague because they are relative to the technology or wages in a particular area. If a county has very low wages, any plant, including a "cut and sew" (garment) operation, may look attractive. Under these circumstances, making mobile homes can pass for "high-technology," even though the wages may be below that of the state as a whole. On the other hand, if by "higher-paying industry" one means plants that pay above the state average, many of the communities in Region K feel they cannot expect to attract such firms.

Wages in Region L Discussions about wages in Region L reflected the conviction that "higher-paying" industry is essential. Most developers said they would not actively recruit textile plants except for some rural areas. Almost all were opposed to getting any more "cut and sew" operations. In both cases, opposition was based primarily on relatively low wages paid by these kinds of firms, although concern was also expressed about the effects of unpredictable tastes in fashions. The memory of the rapid rise and fall of polyester fabrics seemed fresh in many minds.

Two observations with respect to taxes were made by many of those interviewed in Region K. One was that taxes in the counties of the region are generally low and provide an attraction to new plants. The other impression given is that more and more communities see new plant investments as a way to spread the costs of increasingly expensive services they must provide. Person County, where CP&L pays 44 percent of the county taxes, may be an extreme example. The county recently raised its sales tax to four cents, one of the last counties in the state to do so.

Taxes in Region K

All counties in the region, except Wilson County, have tax rates below the state average. In Northampton County, officials pointed out the importance of the Virginia Electric Power Company (VEPCO) plant there to the tax base. In Nash County, the property tax has recently been reduced as a result of the growing value of industrial property.

Taxes in Region L

ENVIRONMENTAL PROTECTION

Most of those industrial recruiters interviewed in Region K expressed concern that new plants be environmentally "clean." None of the plant managers reported experiencing any particular difficulty with water and air agencies or standards. There was a very high awareness of environmental considerations and especially of the effects of heavy pollution on sewage treatment requirements. Industrial recruiters were credited with assisting new plants in solving problems related to environmental standards and permits. Most officials took the position that they would not flatly oppose very many industries on purely environmental grounds but that they would weigh any potential pollution against new plant benefits.

Environmental Protection
in Region K

Developers in Region L were generally agreed that they would "shy away from" heavy industrial polluters. Some were especially sensitive to dyeing plants that are notorious for creating waste disposal problems. None reported any serious problems in getting the required permits but some complained about the paper work. At least one developer noted difficulty with the Department of Cultural Resources because of archaeological sites that would have been affected by plant locations, although the matter was eventually resolved amicably. Air quality standards which are sometimes mentioned as a limitation on development in eastern North Carolina were not identified as an issue by those interviewed.

Environmental Protection
in Region L

Chapter 8

Policy Considerations, Additional Areas of Concern, and Recommendations

Although this study of economic development, and especially of industrial development, in North Carolina has focused on Regions K and L, the problems and opportunities of these two regions are typical of those in vast areas of the state that lie on or beyond the fringes of the few metropolitan centers. This chapter extracts from the economic development experiences of these regions and their ten counties broad policy considerations and recommendations that affect the state as a whole. The following pages also address two other major factors that must be considered in the development of the state: the management of growth in and around cities, and the influence of national economic trends.

A Growth Management Policy for North Carolina

While inventory tax reduction, industrial revenue bonds, and similar measures have tended to keep North Carolina in a competitive position with its neighbors, the arrival of new industry in the state is more profoundly influenced by regional and national trends. Many other states in the South, the Southwest, and the far West are experiencing industrial expansion similar to that occurring here, and the individual actions of state and local governments have had little to do with this general trend.

The principal economic development problem confronting North Carolina is not the attraction of new industry; it is the management of growth resulting from the industrial expansion being experienced throughout the Sunbelt. In its formulation of a "balanced growth policy," the Hunt administration seems to have recognized this problem but the substance of that policy is less reassuring.

North Carolina's Balanced Growth Policy presupposes the attraction of new industry to the state, a systematic increase in the number of higher-wage plants here, and the location of these facilities close to the homes of people who can work in them. The current administration is trying, with some success, to accomplish all of these objectives at once. But given the national trends, the service needs of high-technology industry, the relative advantages of urban areas, and the existing stable demographic characteristics of this state, the practical effect of the current administration is not "balanced growth."

In spite of policy rhetoric by state officials, any new industry is likely to be welcomed to North Carolina regardless of where it locates, provided its operations comply with state law. Most industries, especially those dependent on high technology, will, for many reasons, be drawn to areas within commuting distance of the urban Piedmont. Plants of labor-intensive industries generally tend to

locate in more rural areas if possible. At the same time, as competition for labor increases, some plants from the urban Piedmont have begun to relocate in less-developed communities where labor is cheaper and more readily available. Although the surplus of unskilled but trainable resident labor in rural areas is decreasing, there is some evidence that this labor pool is now being supplemented by low-income workers who are moving from the Northeast back to the South, therefore reversing earlier trends.

Under these circumstances, relatively few new high-technology industries will locate in rural areas more than fifty miles from urban centers within the near future. Consequently, the best way to provide job opportunities for people who choose to live in these more remote areas would be to get higher-wage industries to locate as far from urban areas as the service and skilled labor needs of the firm will allow. At the same time, measures designed to increase the mobility of these rural workers would be desirable, particularly the development of more energy-conserving transportation modes.

This alternative development strategy differs considerably from "balanced growth." It concentrates on growth management in order to maximize the benefits of economic development to the citizens of the state.

Essential to any such "growth management" is a determination, based on thorough research, of the role each county might play in the overall development of the state. The fifty-mile radius for industry location mentioned above is obviously arbitrary, but it is useful for identifying each county's position in the flow of economic events, a position that is largely determined by its economic relationships with the surrounding region. As a general guide, counties can be grouped into three categories. First, the most obvious and easiest to distinguish are the urban counties. Second, there are the fringe counties, usually within fifty miles of urban centers, in which industries often locate to avoid some of the liabilities of cities while still relying on those cities for services, amenities, and skilled labor. In the third category are the rural counties, those located beyond the urban fringe, in which new industries locate primarily to take advantage of abundant low-skilled labor.

Whereas current policy seems to suggest that these three kinds of areas can develop similarly, the proposed strategy would acknowledge that they have developed differently and will continue to do so. A new growth-management approach which acknowledges geographic and demographic differences among various counties and regions would enable each county to participate more fully in the overall economic development of the state with confidence that pronouncements from Raleigh consisted of realistic assessments and not political rhetoric. The new strategy would also be more economical in that it would concentrate federal, state and local investment into projects tailored to the differing needs in the three categories of counties. Finally, an honest appraisal by the counties (and planning regions) of how they have developed, how they are likely to develop, and---consistent with these observations---how their citizens believe

they should develop would make it easier for local officials to deal with real issues associated with their probable futures.

State government would also benefit from such an approach. By accepting the idea that the main engine of development in North Carolina, industrialization, will inevitably help some counties more than others, state government can begin working on realistic alternatives to stimulate other forms of investment in areas less attractive to industry, and at the same time concentrate with greater intensity on those problems which are unique to the urban and urban fringe areas.

One of the most important roles of state government would be to provide the data needed by counties to accurately assess their positions, an underlying assumption being that counties and communities ought to be responsible for their own planning. Counties and communities may, of course, choose to rely on Councils of Governments (COGs) staffs for research and planning, but local governments should abandon the notion that the state will adequately plan their development and should seize the opportunity to do the planning themselves. The fact that many larger cities in North Carolina have already begun this suggests that some smaller towns and rural counties have too little revenue to afford research and planning staffs. However, the costs are small in comparison to the costs of uninformed or ill-advised choices about future growth.

A second important task for state government is the sound management of programs that influence the wise development and preservation of human and natural resources throughout North Carolina. Research and interviews in connection with this study demonstrate that water is essential to industrial development, as it is indeed to all development. There were times when water was considered as limitless as air, but North Carolina is now fast approaching the time when water, and the sewage that enters it, must be closely managed to ensure that enough water is available at the right places for people, industry, and agriculture. Special attention should also be directed to the needs of poor people in rural areas to ensure that they share equitably in the benefits of development.

State and federal economic development programs (with the exception of highway construction) are essentially options available for local governments to use in dealing with growth problems and opportunities. While this study indicates that many of the programs considered had some positive effects, there is doubt that they were, in all cases, the best choices for stimulating development or for maximizing its benefits. State government could provide an important service to local citizens by providing incentives for local governments to adequately research their own feasible development options, to present and explain those options to their citizens, and to identify in their plans the steps to be taken to respond to citizens' concerns.

Additional Areas of Concern

Any responsible North Carolina economic development policy should explicitly recognize the dependence of the North Carolina economy on that of the U.S., and national trends must be reflected in any state economic development strategy. The major national concerns with great bearings on the state economy are the

rising costs of energy, the nationwide decline in manufacturing employment, and the growing international trade deficit.

The most immediate challenge to North Carolina and the nation is the inefficient use of energy in maintaining the American standard of living. The need to guide development in ways that consider the increasing costs of energy is especially important in North Carolina where the dispersed living pattern and extensive highway network are components of an "energy-intensive" life style. Failure to anticipate high energy costs has led to inefficient development patterns and higher costs of production for American manufacturers in comparison to their foreign counterparts. Extensive commuting in private automobiles to rural or suburban manufacturing establishments indirectly increases American costs of production because firms must pay workers enough to draw them to a given location.

Relatively unrestricted industrial recruitment has greatly contributed to the inefficient use of land in North Carolina, particularly in the urban fringe areas along the interstates, where the advantages of good transportation are the greatest. Firms are abandoning urban locations in favor of sites on the urban fringe to escape out-dated tax structures and increasing traffic congestion in central business districts.

While the nation's energy problems cannot be solved at the state level, North Carolina economic development policy must address the implications of future shortages on the state's pattern of industrial development. The state simply does not have enough leverage to insure that its attempt to "get firms to locate where people are" will greatly mitigate the problem. The development of energy-efficient land use patterns (especially in urban and urban fringe areas) and the encouragement of extensive mass transit (especially in rural and urban fringe areas and consistent with contemporary commuting patterns) are essential for dealing with the energy situation.

The continuing nationwide decline in manufacturing employment raises some questions about North Carolina's emphasis on industrial recruitment, especially in view of the state's attractiveness to manufacturing operations. The dispersed settlement pattern, the highway network, and the labor situation have all contributed to this state's comparative advantage. However, the state must recognize the potential risk over the long run of too much emphasis on manufacturing. Increased competition from abroad (not just in textile manufacture but also in the manufacture of higher-technology goods) and the greater sensitivity of manufacturing employment to cyclical changes in the economy make additional dependence on manufacturing a precarious strategy.

North Carolinians do need jobs and, in the short run, providing additional manufacturing jobs for rural residents may be the most efficient way to meet this need. However, the best way to get more jobs in rural areas might be through incentives to encourage expanding North Carolina firms to locate there. The state has potentially greater influence over the management decisions of the many manufacturing firms within its boundaries than it does over the decisions of com-

panies located elsewhere. Nevertheless, providing a majority of new jobs in rural areas in manufacturing should be viewed as an interim measure. In the long run, the state should seek to encourage alternative occupations for the people in these areas that are more consistent with national trends and more likely to contribute to their economic stability.

The recognition of different growth possibilities and different needs of the residents in different parts of the state (i.e., the urban, the rural, and the urban fringe areas) should strengthen the North Carolina economy, particularly in the context of the world economic system. As the competitive advantage of the United States in the manufacture of high-technology industry erodes, other activities must be enhanced to enable the U.S. to import necessities from abroad. The importance of agriculture and agriculture-support industries is vital. North Carolina's prime agricultural land should not be diverted to industrial uses, and special incentives should be developed to encourage the expansion of agricultural production.

Alternative industries potentially benefiting more rural areas of the state also include recreation-avocation or health-related industries, centering around the current recreational attractions and current health and educational facilities in the state. The potential for increasing tourism-related activities in the state is substantial, especially as Americans increasingly try to use their leisure time more efficiently and as foreigners find the United States a less expensive vacation place.

- Recommendations**
1. The state should adopt a "growth management policy" that recognizes and builds on the differing patterns of growth in different counties and regions in order to maximize the benefits of probable growth to all North Carolinians. As parts of the "growth management policy," the state should:
 - a. Develop definitions of the three types of areas--urban, urban fringe, and rural--that are consistent with the characteristics of North Carolina development and that emphasize the most significant economic differences among the three types of areas.
 - b. Amend the General Statutes (Chapter 153A, Article 18) to *require* counties to accomplish multi-county economic development planning and to require the establishment of county planning boards that are representative of the general population in each county. The General Statutes should be further amended to specify that county economic development research must include a detailed analysis of the existing economic structure of the county and its surrounding regions, county objectives with respect to unemployment, per capita income, income and employment stability, multiplier effects, industrial mix, commuting and employment patterns, and measures to reduce the costs of essential goods and services. Amendments to the General Statutes should also require that county economic development plans specify in detail the economic structure the plan is

designed to produce.*

- c. Appropriate \$1 million for allocation to the counties to accomplish the research and planning addressed in Recommendation 1b above. This appropriation should be distributed by a formula that provides more funds to counties with low average per capita income and less funds to counties with high average per capita income. Not less than five percent of each county's allocation should be used in presenting to the public the results of the research and planning outlined in Recommendation 1b.
- d. Require approval of county economic development plans by citizen planning boards not later than July 1, 1981, as a prerequisite for local government participation in non-mandated state and federal economic development programs.
- e. Direct state agencies to periodically provide each county, at no cost, specific information needed for county economic development planning, consistent with the state agencies' areas of responsibility.
- f. Request the University of North Carolina, in cooperation with private colleges and universities, as part of their public service programs, to systematically identify the major growth and growth management problems and opportunities in North Carolina's urban, urban fringe, and rural areas, to indicate the major policy and investment options for dealing with these problems and opportunities, and to distribute the results of this research to all local governments and to appropriate state agencies by July 1, 1980.
- g. Request the private colleges and universities, in cooperation with their public counterparts, to develop specific proposals for introducing into rural areas new opportunities for economic growth other than through manufacturing. These proposals should include consideration of potential destination recreation areas, multi-county and multi-state opportunities, and the potential of the state's health, education, avocation, agricultural support, and recreation industries. Special consideration should be given to proposals that can offset the likely impact of increased foreign textile competition on North Carolina communities that are heavily dependent on textile plants for employment. The results of this research should be distributed to all local governments and to appropriate state agencies by July 1, 1980.

* The existing Councils of Governments (COGs) are logical organizations to accomplish these research and planning tasks. However, existing multi-county regions are not always satisfactory units for economic planning. Regardless of where the research and planning is done, the responsibilities for approving and implementing plans should rest with the county commissioners.

2. Request the Commissioner of Labor, the Secretary of the Department of Natural Resources and Community Development, and the President of the Department of Community Colleges to study ways of increasing the opportunities for low-income people to gain technical skills through Comprehensive Employment and Training Act (CETA) programs, apprenticeship programs, and the programs offered by community colleges and technical institutes, especially in rural areas, and to report the results to the Governor and the General Assembly by January 15, 1980.

3. Appropriate \$40,000 to the Board of Governors of the University of North Carolina to support a joint project of the urban public and private universities to identify the major North Carolina problems associated with urban economic development and to propose state and local strategies and actions which would enable urban citizens to more fully understand and more effectively manage urban growth problems. The results of this project should be distributed to all local governments and to appropriate state agencies by July 1, 1980.

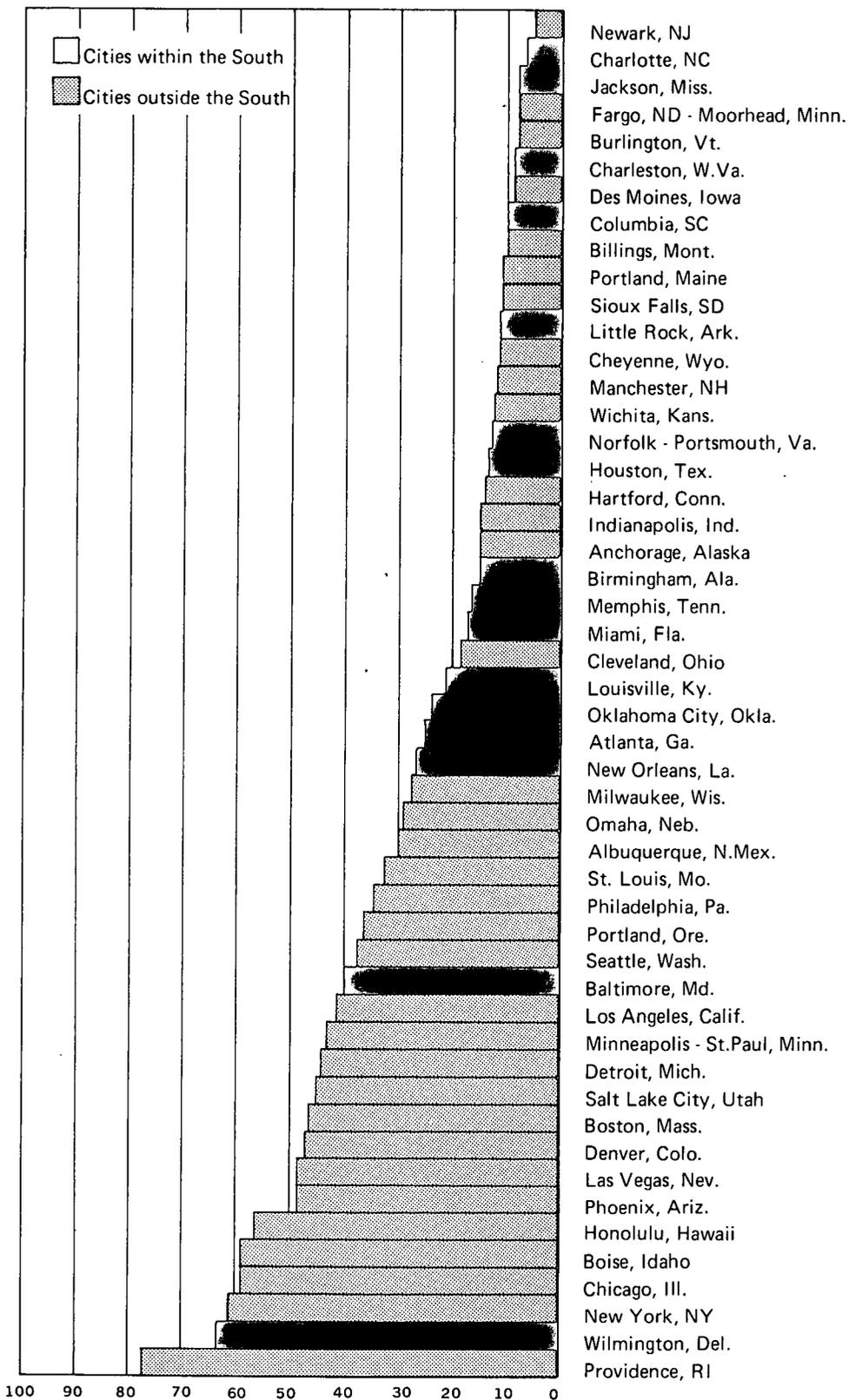
4. Establish a study commission to recommend to the Governor and the 1981 session of the General Assembly changes in the General Statutes to clarify and strengthen the state's role in water management. The commission should examine the actual resources devoted to water management at the state level in light of relevant legislation already enacted. The study should be governed by the recognition that the availability and economical delivery of fresh water to areas that require it is a question distinct from the total amount of water in the state. Ultimately, the state will have to establish a system for reconciling competing demands for the same water.

5. Request the Governor's Committee on Rural Public Transportation to recommend to the Governor by December 1, 1979, specific incentives for businesses and government units and, if required, appropriations that will encourage the development of rural transportation systems, in order to increase the access of rural workers to employment opportunities near towns and cities and to reduce the impact of higher fuel costs on such access.

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A-1 Percentage of Each State's Population in Its Largest City, 1970



Source: North Carolina Atlas, 1975

A-2 N.C. Agriculture

Rank of N.C. Agriculture - Sales and Other Characteristics*

	<u>South</u>	<u>US</u>
Flue-cured tobacco	1	1
All tobacco	1	1
Sweet potatoes	1	1
Peanuts	3	3
Apples	3	9
Corn	1	10
Grapes	3	10
Peaches	4	10
Soybeans	6	12
All crops	3	6
Eggs	2	3
Turkeys	1	3
Broilers	4	4
Hogs	1	11
Livestock & poultry	4	16
All farm sales	2	11
Rural farm population (1970)	1	2
Number of farms (1969)	4	7

* Based on 1971 figures unless otherwise noted.

Agriculture in N.C. and U.S., 1969

	<u>North Carolina</u>	<u>United States</u>
Number of farms	119,386	2,730,250
Percent of land in farms	40.8%	47.0%
Average acreage per farm	106.6	389.5
Cropland harvested per farm	27.1A.	100.0A.
Value of land and buildings per farm	\$35,551	\$75,725
Value of land and buildings per acre	\$333	\$194

Source: North Carolina Department of Agriculture, Division of Agricultural Statistics

A-3 N.C. Compared to Other Southern and Industrial States

State	Population 1976 (In 000's)	Manufacturing Employment 1975 (In 000's)	Rank in manufacturing 1975	% of indust. employment in mfg., 1975
North Carolina	5,469	737	8	36.9
Industrial States				
California	21,520	1,585	1	20.3
New York	18,084	1,407	2	20.7
Pennsylvania	11,862	1,336	3	30.2
Ohio	10,690	1,256	4	31.4
Illinois	11,229	1,220	5	27.6
Michigan	9,104	980	6	31.3
New Jersey	7,336	736	9	27.5
Indiana	5,302	644	10	33.4
Massachusetts	5,809	594	11	25.5
Wisconsin	4,609	503	12	31.3
Connecticut	3,117	389	16	32.0
Southern States				
Maryland	4,144	230	24	16.1
Virginia	5,032	366	17	20.8
West Virginia	1,821	120	33	21.4
Kentucky	3,428	254	22	24.3
Tennessee	4,214	454	13	30.3
South Carolina	2,848	336	18	34.3
Georgia	4,970	433	14	25.1
Florida	8,421	328	19	12.0
Alabama	3,665	320	20	27.8
Mississippi	2,354	198	26	29.7
Louisiana	3,841	182	27	15.2
Arkansas	2,109	176	29	28.4
Oklahoma	2,766	159	31	17.6
Texas	12,487	800	7	18.1
United States	214,659	18,347	—	23.8

% of indust. work force unionized, '74	Right-to-work states, 1974	Hourly wage of production workers 1975	Personal income per capita 1975 Average	Rank	
6.9	yes	\$ 3.51	\$ 4,801	41	NC
28.2	no	5.21	6,555	7	CA
38.0	no	4.91	6,603	6	NY
37.5	no	4.96	5,874	20	PA
33.2	no	5.55	5,883	19	OH
35.9	no	5.40	6,750	4	IL
38.4	no	6.15	6,240	11	MI
28.2	no	4.93	6,629	5	NJ
33.2	no	5.49	5,587	27	IN
24.4	no	4.47	6,159	2	MA
28.7	no	5.26	5,627	25	WI
25.1	no	4.78	6,854	6	CT
21.6	no	5.03	6,437	9	MD
13.8	yes	3.99	5,671	24	VA
38.2	no	5.12	4,815	40	WV
25.1	no	4.65	4,668	45	KY
18.7	yes	3.92	4,766	43	TN
8.0	yes	3.59	4,521	47	SC
14.5	yes	3.88	4,969	37	GA
12.5	yes	4.04	5,517	28	FL
19.1	yes	4.13	4,557	46	AL
12.0	yes	3.55	4,041	50	MS
16.3	*	4.81	4,729	44	LA
16.8	yes	3.59	4,383	49	AR
15.0	no	4.41	4,996	34	OK
13.0	yes	4.57	5,387	31	TX
—	—	4.81	5,834	—	US

* Louisiana enacted a right-to-work law in 1976.

Source: Data from United States Government Statistical Abstract

A-4 Trends in N.C. and 14 Other Southern States (%)

State	Population Growth 1960-70	Net Migration Rate 1960-70	Metropolitan Population Growth 1960-70	Non-Agrl. Employment Growth 1960-70	Manufacturing Employment Growth 1960-70
Maryland	26.5	12.4	29.9	61.0	5.0
Virginia	17.2	3.6	26.6	49.3	32.7
West Virginia	- 6.2	- 14.2	- 2.6	12.4	0.8
Kentucky	5.9	- 5.0	14.1	39.1	47.6
Tennessee	10.0	- 1.3	12.7	43.4	48.6
North Carolina	11.5	- 2.1	22.2	49.1	38.9
South Carolina	8.7	- 6.2	18.4	44.4	39.3
Georgia	16.4	1.3	26.6	48.2	36.3
Florida	37.1	26.8	39.5	62.9	57.3
Alabama	5.4	- 7.1	7.2	30.1	39.9
Mississippi	1.8	- 12.2	23.0	42.8	55.0
Louisiana	11.8	- 4.0	14.0	31.9	23.1
Arkansas	7.7	- 4.0	18.1	45.5	62.7
Oklahoma	9.9	0.6	19.7	32.3	57.0
Texas	16.9	1.5	23.6	43.6	87.4
United States	13.3	**	73.7	30.8	15.3
	1970-76	1970-76	1970-76	1970-77	1970-77
Maryland	5.6	1.7	4.5	17.2	- 13.7
Virginia	8.2	3.5	8.2	23.7	7.3
West Virginia	4.4	1.2	- 0.3	17.0	- 0.5
Kentucky	6.4	2.3	3.4	23.9	9.4
Tennessee	7.3	21.6	6.9	16.1	2.8
North Carolina	7.6	2.4	8.2	11.8	2.6
South Carolina	9.9	3.8	12.3	27.8	10.1
Georgia	8.3	2.3	9.1	22.3	4.8
Florida	24.0	21.6	22.2	34.9	10.2
Alabama	6.4	2.1	6.1	22.9	8.6
Mississippi	6.2	*	15.3	30.2	23.1
Louisiana	5.4	- 0.6	9.1	25.8	9.5
Arkansas	9.7	5.5	10.7	28.4	22.8
Oklahoma	8.1	4.2	8.9	25.3	19.9
Texas	11.5	4.9	14.3	32.2	17.6
United States	5.6	**	4.3	8.6	- 1.3

*less than .05% **not applicable

Source: United States Government Statistical Abstract

A-4a Income and Wages in N.C. and 14 Other Southern States

STATE	PER CAPITA PERSONAL INCOME					AVG. HOURLY EARNINGS *	
	State Avg. 1976	Growth Rate 1970-76	As % of U.S. 1960	As % of U.S. 1970	Avg. 1976	Avg. Rate 1975	% of U.S. 1975
Maryland	\$6,441	64%	105	109	109	\$5.03	104
Virginia	6,276	72	84	94	97	3.99	84
West Virginia	5,394	77	73	77	84	5.12	102
Kentucky	5,423	75	71	78	84	4.65	95
Tennessee	5,432	76	71	79	84	3.92	81
North Carolina	5,409	68	72	82	84	3.51	72
South Carolina	5,126	73	63	75	80	3.59	75
Georgia	5,571	68	74	85	86	3.88	79
Florida	6,108	65	88	94	95	4.04	85
Alabama	5,105	75	68	74	79	4.13	85
Mississippi	4,575	76	55	66	71	3.55	74
Louisiana	5,386	76	74	78	84	4.81	100
Arkansas	5,073	77	62	72	79	3.59	75
Oklahoma	5,657	69	84	85	88	4.41	92
Texas	6,243	75	87	91	97	4.57	95
United States	6,441	63	100	100	100	4.81	100

*Of production workers

Source: U.S. Government Statistical Abstract

A-5 Industrial Employment Growth, Rates of Increase, 1970-76 (%)

	U.S.	South	N.C.
Total Nonagricultural Employment	10.0%	17.7%	13.9%
Manufacturing	-3.5	3.5	5.7
Wholesale & Retail Trade	13.9	21.8	15.2
Finance, Insurance & Real Estate	15.3	27.9	23.6
Government	21.3	25.1	24.0
Services	23.4	32.0	24.5
Transportation, Communication & Public Utilities	-0.9	8.2	8.3

Source: North Carolina Department of Commerce, An Economic Assessment

A-6 Distribution of Employment by Industrial Sector (%)

<u>1970</u>	<u>N.C.</u>	<u>South</u>	<u>U.S.</u>
Mining	0.2	1.7	0.9
Construction	5.4	6.0	5.0
Manufacturing	40.3	25.9	27.3
Durable	12.2	11.4	14.8
Nondurable	28.1	14.5	12.5
Transportation, Communication & Public Utilities	5.2	6.4	6.4
Wholesale & Retail Trade	18.2	21.4	21.2
Finance, Insurance & Real Estate	3.9	4.7	5.2
Services	12.0	14.7	16.4
Government	14.8	19.0	17.8
<u>1976 (January - May)</u>			
Mining	0.2	1.8	1.0
Construction	5.6	5.5	4.1
Manufacturing	37.4	22.8	23.9
Transportation, Communication & Public Utilities	4.9	5.9	5.7
Wholesale & Retail Trade	18.4	22.2	22.0
Finance, Insurance & Real Estate	4.2	5.6	5.4
Services	13.1	16.5	18.4
Government	16.1	20.3	19.5

Source: L.K. Lynch and E.E. Brunson, *Southern Growth 1970-1975*, (Raleigh, N.C.; Southern Growth Policies Board, 1976), U.S. Bureau of Labor Statistics, *Employment and Earnings*, various issues.

A-6a Industry Mix in N.C. and U.S. (1963 and 1972) *

SIC ¹ INDUSTRY	NORTH CAROLINA		UNITED STATES	
	1963	1972	1963	1972
20 Food	4.4%	3.9%	9.2%	8.2%
21 Tobacco	5.7	3.1	.5	.4
22 Textiles	46.0	41.8	6.4	6.4
23 Apparel	9.0	10.7	8.4	8.1
24 Lumber	5.4	4.5	4.0	3.5
25 Furniture	10.1	10.4	2.6	2.9
26 Paper	2.6	2.3	4.0	4.0
27 Printing	1.5	1.4	4.4	4.4
28 Chemicals	2.2	3.3	4.0	4.1
29 Petroleum	**	**	.9	.7
30 Rubber	.6	2.1	2.7	3.5
31 Leather	**	**	2.2	1.7
32 Stone, Clay	2.0	2.0	3.8	3.6
33 Primary Metals	.7	.7	7.6	7.2
34 Fabricated Metals	1.8	2.2	7.1	7.8
35 Non-Elec. Machinery	2.2	3.5	8.9	9.5
36 Electrical Machinery	3.8	4.3	8.6	8.8
37 Transport Equipment	.9	1.1	10.1	9.8
38 Instruments	.4	1.1	1.7	1.8
39 Misc. Manufacturing	.5	1.6	2.5	2.4
Total	100.0	100.0	100.0	100.0

¹ Standard Industrial Classification

* Proportion of total man-hours accounted for by the indicated industry

** Included in Miscellaneous Manufacturing (SIC No. 39)

Source: U.S. Census of Manufacturers in 1963 and 1972

A-7 Manufacturing Employment (000)*

SIC	1960			1965			1970		
	NC	US	NC/US	NC	US	NC/US	NC	US	NC/US
20 Food	33.5	1790.0	1.9%	37.8	1756.7	2.2%	41.4	1781.7	2.3%
21 Tobacco	32.3	94.0	34.4	29.9	86.8	34.4	28.7	81.7	35.1
22 Textiles	222.8	924.4	24.1	246.4	925.6	26.6	280.6	977.6	28.7
23 Apparel	35.3	1233.2	2.9	57.1	1354.2	4.2	75.1	1372.2	5.5
24 Lumber	33.5	626.8	5.3	30.4	606.9	5.0	27.2	572.5	4.8
25 Furniture	44.6	383.0	11.6	58.4	430.7	13.6	66.2	459.9	14.4
26 Paper	13.9	601.1	2.3	14.6	639.1	2.3	18.0	706.5	2.5
27 Printing	9.6	911.3	1.1	11.3	979.4	1.2	14.7	1106.8	1.3
28 Chemicals	14.0	828.2	1.7	18.1	907.8	2.0	27.7	1051.3	2.6
29 Petroleum		211.9			182.9			190.4	
30 Rubber		379.0			470.8			580.4	
31 Leather		363.4			352.9			322.2	
32 Stone, clay, glass	10.4	604.0	1.7	12.5	628.3	2.0	14.8	638.5	2.3
33 Primary metals	2.5	1231.2	0.2	3.7	1301.0	0.3	5.6	1314.8	0.4
34 Fabricated metals	8.5	1135.3	0.7	11.2	1269.0	0.9	16.0	1379.9	1.2
35 Non-elect. machinery	12.5	1479.0	0.8	19.0	1735.3	1.1	29.5	1976.9	1.5
36 Elect. machinery	25.4	1467.1	1.7	28.7	1659.2	1.7	40.9	1922.9	2.1
37 Trans. equipment	3.8	1568.9	0.2	4.6	1740.6	0.3	8.2	1806.8	0.5
38 Instruments		354.3			389.0			458.6	
39 Misc. manufacturing		389.9			419.5			425.7	
TOTAL	509.3	16,796.0	3.0	596.2	18,062.0	3.3	718.6	19,369.0	3.7

*Blank entries represent insignificant levels of employment.

Source: S. Johnston, "Analysis of Economic Growth in North Carolina." Research memorandum.

A-8 Average Hourly Earnings of Production Workers

	1960			1970			1976		
	US (\$1)	NC (\$1)	NC/US %	US (\$1)	NC (\$1)	NC/US %	US (\$1)	NC (\$1)	NC/US %
Manufacturing	2.26	1.54	68.1	3.36	2.46	73.2	5.19	3.75	72.4
Durable goods				3.55	2.55	71.8	5.55	3.85	69.5
24 Lumber	1.89	1.27	67.2	2.96	2.17	73.3	4.71	3.31	70.2
25 Furniture	1.88	1.43	76.1	2.72	2.41	87.0	3.98	3.57	89.6
32 Stone, Clay, Glass	2.28	1.44	63.2	3.40	2.68	78.8	5.29	4.10	77.5
33 Prim. Metal	2.81	2.06	73.2	3.93	2.98	75.8	6.80	4.32	63.6
34 Fab. Metals	2.43	1.76	72.4	3.53	3.00	85.0	5.43	4.29*	—
35 Machinery	2.55	1.63	63.9	3.77	2.81	74.5	5.76	4.24	73.7
36 Electronics	2.28	1.92	84.2	3.28	2.61	79.6	4.91	4.06	82.8
37 Trans. Equip.	2.74	2.09	76.3	4.05	2.81	69.2	6.54	4.15	63.4
38 Instruments	2.31	na	—	3.35	na	—	4.87	na	—
39 Misc. Mfg.	1.89	na	—	2.83	na	—	4.01	na	—
Non-durable goods				3.08	2.42	78.6	4.68	3.73	79.7
20 Food	2.11	1.30	61.6	3.16	2.32	73.4	4.96	3.63	73.2
21 Tobacco	1.70	1.82	107.1	2.91	3.18	108.9	4.91	5.21	106.2
22 Textiles	1.61	1.51	93.8	2.45	2.35	95.9	3.67	3.53	96.2
23 Apparel	1.59	1.20	75.5	2.39	2.00	83.7	3.41	2.94	86.3
26 Paper	2.26	2.25	99.6	3.44	3.27	95.1	5.43	5.17	95.3
27 Printing	2.68	2.22	82.8	3.92	3.04	77.6	5.69	4.37	76.9
28 Chemicals	2.50	1.92	76.8	3.69	3.03	82.1	5.89	4.86	82.6
29 Petroleum	2.89	na	—	4.28	na	—	7.14	na	—
30 Rubber	2.32	na	—	3.20	na	—	4.62	4.20	91.0
31 Leather	1.64	na	—	2.49	na	—	3.44	na	—

* 1975 rate

na: figure not available

Sources: N.C. State Government Statistical Abstract
North Carolina Department of Commerce, An Economic Assessment

A-9 N.C. Basic Demographic Characteristics by Multi-County Region, 1970

	Population	% Urban	% Rural	% Rural nonfarm	Median yrs. of school	% White	% Black	% Indian
Mountains								
A	115,024	10.0	8.0	82.0	9.5	95.2	1.9	2.88
B	223,576	41.7	7.5	50.8	11.3	92.6	7.1	0.08
C	162,276	29.8	3.3	66.9	9.9	85.7	14.2	0.04
D	139,364	8.7	16.9	74.4	9.1	97.4	2.5	0.04
E	227,402	32.5	2.1	65.4	10.1	92.3	7.6	0.05
Piedmont								
F	870,150	59.8	2.6	37.6	10.8	81.5	18.3	0.14
G	981,393	53.5	6.1	40.4	10.6	81.9	17.9	0.15
H	121,692	19.1	5.6	75.2	9.9	69.3	30.5	0.23
J	540,599	59.1	6.0	34.9	11.5	75.0	24.6	0.10
Coastal Plain								
K	133,997	24.4	21.3	54.2	9.5	56.8	42.7	0.47
L	246,842	37.6	11.9	50.4	9.5	56.2	43.4	0.34
M	306,663	58.6	7.4	34.0	11.3	72.3	25.5	1.41
N	154,684	22.7	14.5	62.8	9.4	49.4	31.4	19.01
O	172,305	35.7	9.3	54.9	10.8	71.3	27.7	0.66
P	410,123	42.1	8.9	48.9	10.9	72.4	27.0	0.16
Q	178,667	33.8	15.5	50.7	9.8	58.9	41.0	0.04
R	97,302	24.1	9.7	66.2	9.9	62.1	37.8	0.05
North Carolina								
	5,082,059	45.0	7.4	47.6	10.6	76.7	22.2	0.87

Sources: U.S. Census Bureau
Stone, The North Carolina Economy

A-10 N.C. Geographic Characteristics by Multi-County Region, 1975

	Population	Total Area* (000 A.)	Percent of Land		Density (pop. per sq. mile)	Classifi- cation
			Urban & built-up	In farms**		
Mountains						
A	125,400	1,982.2	1.6	9.3	41.3	rural
B	238,300	1,191.7	4.8	18.5	128.7	urban
C	174,800	1,098.0	5.0	24.6	102.6	rural
D	154,000	1,615.4	3.6	25.8	61.4	rural
E	247,200	1,068.3	6.1	22.8	151.8	urban
Piedmont						
F	927,700	2,389.7	10.7	39.4	254.4	urban
G	1,037,900	3,506.0	8.6	32.7	191.4	urban
H	127,400	1,422.0	3.6	16.9	58.1	rural
J	603,000	2,125.1	6.7	27.8	182.7	urban
Coastal Plain						
K	138,100	1,376.0	3.6	29.3	65.8	rural
L	256,900	1,725.6	4.1	50.5	96.2	rural
M	334,700	1,428.5	4.2	32.0	151.0	urban
N	169,500	1,621.9	3.2	27.1	67.5	rural
O	199,300	1,886.4	2.8	15.3	69.9	urban
P	427,600	3,671.4	2.2	24.4	88.6	rural
Q	185,500	2,046.9	3.4	30.0	61.8	rural
R	104,200	1,506.8	1.8	21.2	31.9	rural
North Carolina						
	5,451,000	33,755.4	4.7	24.9	111.9	rural

*Including large water bodies
**cropland and pasture

Data Sources: Profile, North Carolina Counties, 1977
N.C. State Government Statistical Abstract, 1976
N.C. Balanced Growth Policy- An Agenda for Public Discussion, 1977

A-11 Population Growth and Migration Rates in Multi-County Regions (%)

	Population Growth			Migration Rates			1960-70 Change		
	'50-'60	'60-'70	'70-'75	'50-'60	'60-'70	'70-'75	urban pop.	rural farm pop.	rural non-farm pop.
Mountains									
A	-4.4	5.4	8.1	-18.8	-3.1	5.3	2.4	-58.0	24.3
B	4.6	11.9	6.6	-8.4	2.7	4.5	17.4	-35.8	20.5
C	0.8	8.7	7.7	-15.8	-2.8	3.7	12.1	-72.9	25.6
D	-5.9	7.0	10.5	-20.4	-3.0	7.1	17.1	-42.8	31.7
E	15.6	19.0	8.7	-3.6	4.7	3.6	28.8	-68.5	25.7
Piedmont									
F	19.2	19.7	6.6	0.1	6.0	2.0	20.6	-53.3	32.6
G	21.1	13.8	5.6	2.3	1.1	1.8	17.2	-43.2	28.4
H	1.5	2.0	4.7	-16.7	-8.7	1.3	5.2	-63.7	17.0
J	13.7	22.8	11.4	4.1	9.8	7.3	37.1	-50.6	33.8
Coastal Plain									
K	-2.3	-4.2	3.4	-19.8	-14.8	0.4	18.2	-50.6	33.6
L	2.3	-4.6	4.3	-17.8	-16.4	0.7	4.9	-64.6	42.9
M	26.5	25.3	9.1	-2.7	4.0	1.2	103.4	-52.6	-3.9
N	0.5	-3.1	9.6	-23.3	-17.2	2.8	19.6	-62.9	39.2
O	5.2	8.0	15.7	-13.3	-3.0	11.1	13.5	-52.4	32.4
P	27.4	5.8	4.3	1.6	-12.0	-2.7	72.5	-55.2	-2.4
Q	1.9	-0.8	3.3	-17.6	-11.3	-0.1	11.7	-53.7	36.6
R	0.1	-0.4	7.1	-16.9	-9.2	4.7	1.1	-54.0	19.3
North Carolina									
	12.2	11.5	7.3	-8.1	-2.1	2.4	26.9	-53.6	24.5

Sources: Profile, North Carolina Counties, 1977
P. Stone, The North Carolina Economy

A-12 Employment Growth Rates in Multi-County Regions

	Total empl.		Non-agri. employment				Manufacturing employment				Mfg. empl. in	
	1960-1970 % increase	1970-1976 % increase	1960-1970 % increase	1970-1977 % increase	1970-1974 % increase	1974-1977 % increase	1960-1970 % increase	1970-1977 % increase	1970-1974 % increase	1974-1977 % increase	1975 as % of '74	1977 as % of '74
Mountains												
A	22.9	14.3	35.0	22.7	11.4	10.2	35.9	*	3.9	13.2	84.4	95.5
B	21.6	12.9	27.0	18.8	14.5	3.8	37.1	4.8	12.8	12.8	73.3	82.7
C	26.0	15.0	47.0	21.2	15.2	5.2	46.6	16.8	18.5	9.5	90.0	98.6
D	29.6	20.9	51.0	34.6	16.8	15.2	60.1	8.6	9.1	14.8	86.6	99.5
E	36.6	9.3	40.0	11.5	11.1	3.6	42.5	8.2	10.3	11.5	87.9	98.1
Piedmont												
F	33.1	9.8	36.0	15.2	9.1	5.6	33.2	*	0.2	9.5	89.8	98.4
G	22.1	12.0	28.0	16.4	13.5	2.5	22.6	1.3	5.9	5.8	90.4	95.6
H	13.6	14.1	22.0	24.4	11.3	11.8	39.8	21.7	11.8	23.5	88.1	108.8
J	36.1	25.8	44.0	34.0	24.2	7.9	38.1	21.6	21.8	10.1	90.8	99.8
Coastal Plain												
K	9.2	11.3	39.0	20.6	13.9	5.9	85.1	17.6	21.2	10.2	88.0	97.0
L	4.3	16.7	26.0	27.0	17.7	7.9	44.0	29.4	31.8	10.5	90.5	98.2
M	34.2	20.1	53.0	27.5	20.6	5.7	69.6	25.2	32.3	5.4	89.8	94.6
N	13.3	10.7	50.0	24.1	15.9	7.1	88.2	21.8	25.7	16.4	83.2	96.8
O	20.6	17.3	38.0	26.9	17.9	7.6	65.3	5.9	9.8	6.6	90.5	96.4
P	21.3	13.0	44.0	24.5	13.6	9.6	87.3	19.3	18.4	7.7	93.5	100.7
Q	12.3	21.3	29.0	37.2	18.4	15.9	59.9	32.7	30.2	8.0	94.3	101.9
R	6.6	15.4	23.0	25.6	11.7	12.4	19.7	*	6.8	0.5	91.1	91.5
North Carolina	24.5	17.9	35.5	22.5	11.8	6.7	38.3	8.5	10.7	10.1	89.0	98.0

*Manufacturing employment in 1977 was less than in 1970

Source: North Carolina labor force estimates.
P. Stone, The North Carolina Economy.

A-13 Per Capita Income and Percentage Changes in Multi-County Regions

Geographical Division	1962 level/rank	1966 level/rank	1970 level/rank	1974 level/rank	Percentage Change				
					62-66	66-70	70-74	66-74	62-74
Mountains									
A	1340/13	1799/12	2480/16	3543/17	34.2	37.8	42.8	96.9	164.4
B	1793/5	2346/5	3197/5	4615/4	30.8	36.3	44.3	96.7	157.4
C	1481/9	2108/7	2886/9	4190/11	42.3	36.9	45.2	98.8	182.9
D	1191/16	1615/15	2501/15	3618/16	35.6	54.9	44.7	124.0	203.8
E	1830/4	2599/3	3366/4	4613/5	42.0	29.5	37.0	77.5	152.1
Piedmont									
F	2083/2	2792/1	3655/2	5049/2	34.0	30.9	38.1	80.8	142.4
G	2104/1	2718/2	3745/1	5219/1	29.2	37.8	39.3	92.0	148.0
H	1462/10	1948/10	2812/10	4052/12	33.2	44.3	44.1	108.0	177.1
J	1843/3	2450/4	3578/3	4960/3	32.9	46.0	38.6	102.4	169.1
Coastal Plain									
K	1306/14	1617/14	2688/13	3869/14	23.8	66.2	43.9	139.3	169.2
L	1386/11	1810/11	2769/11	4302/7	30.6	53.0	55.4	137.7	210.4
M	1622/6	1949/9	3023/6	4232/8	20.2	55.1	40.0	117.1	160.9
N	1098/17	1489/17	2404/17	3636/15	35.6	61.4	51.3	144.2	231.1
O	1492/8	1994/8	2924/8	3993/13	33.6	46.6	36.5	100.2	167.6
P	1571/7	2199/6	2987/7	4408/6	40.0	35.8	47.6	100.4	180.6
Q	1256/15	1770/13	2703/12	4200/10	40.9	52.7	55.3	137.3	234.4
R	1345/12	1543/16	2618/14	4222/9	14.7	69.7	61.2	173.6	213.9
North Carolina	1728	2296	3252	4616	32.9	41.6	41.9	101.0	167.1

Data Source: Profile, North Carolina Counties, 1977

Research Triangle Institute, Indicators of Social and Economic Well-Being in NC, 1971

A-14 Sectoral Distribution of Employment in Multi-County Regions

	Agriculture			Industrial Employment, 1970			
	% of total employment 1960	1970	% change 1960-70	percent of total employment in: mfg.	trade	services*	other
Mountains							
A	14.4	5.8	-50.6	36.9	14.1	28.0	15.2
B	8.5	4.3	-38.6	33.3	17.1	30.6	14.7
C	16.5	2.8	-54.5	52.8	13.2	20.4	10.8
D	21.8	8.7	-48.3	40.0	14.2	23.9	13.2
E	4.0	1.8	-39.2	56.0	13.0	19.2	10.0
Piedmont							
F	3.9	1.9	-35.7	38.4	18.9	26.7	14.1
G	7.6	3.2	-48.6	43.3	16.4	25.2	11.9
H	12.2	5.7	-47.1	41.8	14.2	25.7	12.6
J	10.0	4.6	-37.6	20.8	18.2	43.8	12.6
Coastal Plain							
K	35.0	11.5	-61.5	35.0	15.3	27.1	11.1
L	27.1	11.5	-55.8	28.5	18.6	28.2	13.2
M	19.1	7.7	-46.0	21.9	21.5	35.6	13.3
N	33.4	11.6	-60.6	35.2	15.1	26.1	12.0
O	19.5	7.9	-51.1	26.2	19.1	30.1	16.7
P	25.1	11.3	-45.4	19.9	20.0	35.7	13.1
Q	26.2	14.8	-46.7	22.7	20.1	30.4	12.0
R	23.0	11.1	-48.3	23.8	18.9	32.5	13.7
North Carolina	13.1	5.4	-48.7	35.2	17.4	29.1	12.9

*Includes government

Source: P. Stone, The North Carolina Economy

A-15 Populations of Counties and Selected Cities and Towns, Regions K and L

1950-60	Pop. 1960	% Change 1950-60	Rate of migration 1950-60	% Urban 1960	Major City or town	Pop. 1960	% Change 1950-60	% of region's pop. '60
Region K	139,913	- 2.3	-19.8	19.8	Henderson	12,740	15.9	9.1
Franklin	28,755	- 8.3	-24.3	10.0	Louisburg	2,862	12.4	10.0
Granville	33,110	4.1	-12.7	21.1	Oxford	6,978	4.4	21.1
Person	26,394	8.3	-13.7	19.5	Roxboro	5,147	19.1	19.5
Vance	32,002	- 0.3	-20.1	39.8	Henderson	12,740	15.9	39.8
Warren	19,652	-16.5	-34.6	0.0	Warrenton	1,124	- 3.6	5.7
Region L	258,711	2.3	-17.8	31.0	Rocky Mount	32,147	16.1	12.4
Edgecombe	54,226	5.0	-17.4	42.9 ¹	Tarboro	8,411	3.9	15.5
Halifax	58,956	0.9	-20.8	32.7 ²	Roanoke Rapids	13,320	63.3	22.6
Nash	61,002	1.8	-17.6	28.4	Rocky Mount (pt)	17,322	16.9	28.4
Northampton	26,811	- 5.7	-25.6	0.0	Rich Square	1,134	16.8	4.2
Wilson	57,716	5.9	-14.9	49.8	Wilson	28,753	24.9	49.8

1960-70	Pop. 1970	% Change 1960-70	Rate of migration 1960-70	% Urban 1970	Major City or town	Pop. 1970	% Change 1960-70	% of region's pop. '60
Region K	133,527	- 4.6	-14.8	24.4	Henderson	13,896	9.1	10.4
Franklin	26,820	- 6.7	-15.4	11.0	Louisburg	2,941	2.8	11.0
Granville	32,762	- 1.1	-11.3	32.7 ³	Oxford	7,178	2.9	21.0
Person	25,914	- 1.8	-13.7	20.6	Roxboro	5,340	4.3	20.6
Vance	32,691	2.1	-10.1	42.5	Henderson	13,896	9.1	42.5
Warren	15,340	-21.9	-28.7	0.0	Warrenton	1,035	- 7.9	6.7
Region L	246,842	- 4.6	-16.4	37.6	Rocky Mount	34,284	6.6	13.9
Edgecombe	52,341	- 3.5	-15.9	47.1 ¹	Tarboro	9,425	12.0	18.0
Halifax	53,884	- 8.6	-21.0	36.8 ²	Roanoke Rapids	13,508	1.4	25.1
Nash	59,122	- 3.1	-13.8	32.2	Rocky Mount (pt)	19,032	9.9	32.2
Northampton	24,009	-10.5	-23.7	0.0	Rich Square	1,254	10.5	5.2
Wilson	57,486	- 0.4	-12.2	51.1	Wilson	29,347	2.1	51.1

1970-76	Pop. 1976	% Change 1970-76	Rate of migration 1970-75	% Urban 1976	Major City or town	Pop. 1976	% Change 1970-76	% of region's pop. '60
Region K	137,100	2.7	0.4	27.7	Henderson	14,280	2.8	10.4
Franklin	27,800	3.6	3.7	11.2	Louisburg	3,130	6.4	11.2
Granville	32,500	- 0.8	- 2.1	38.6 ³	Oxford	7,260	1.1	22.3
Person	26,800	3.4	- 0.5	29.7	Roxboro	7,970	48.4	29.7
Vance	33,800	3.4	- 2.0	42.2	Henderson	14,280	2.8	42.2
Warren	16,200	5.6	7.4	0.0	Warrenton	1,140	10.1	7.0
					Norlina	1,130	16.6	7.0
Region L	258,100	4.6	0.7	39.9	Rocky Mount	39,480	15.1	15.3
Edgecombe	54,800	4.7	- 0.9	48.5 ¹	Tarboro	10,170	7.9	18.5
Halifax	55,000	2.1	- 2.3	37.7 ²	Roanoke Rapids	14,440	6.9	26.2
Nash	65,600	10.9	5.9	35.1	Rocky Mount (pt)	23,040	21.1	35.1
Northampton	22,900	- 4.6	- 2.4	0.0	Rich Square	1,330	6.1	5.8
					Garysburg	1,510	553.7	6.6
Wilson	59,800	4.0	1.1	54.7	Wilson	32,730	11.5	54.7

¹Includes Rocky Mount

²Includes Scotland Neck and Enfield

³Includes Butner-Creedmoor cluster

Source: N.C. Department of Conservation and Development, Division of Community Planning, Population of Counties and Minor Civil Divisions, 1910-1960.

Profile, North Carolina Counties, 1977

A Balanced Growth Policy for North Carolina

A-16 Employment and Commuting Patterns in Regions K and L

		Region K	Region L	N. Carolina
Number of employed residents	1960	43,164	81,593	1,638,600
	1970	47,684	85,965	1,852,600
	1974	51,250	94,570	2,050,600
	1977	53,440	100,250	2,116,000
Percentage change	1960-70	10.5	5.4	13.0
	1970-74	7.5	10.0	10.7
	1974-77	4.3	6.0	10.3
Employment by place of work	1960	41,274	81,775	1,633,500
	1970	43,245	86,420	1,917,300
	1974	46,490	98,790	2,165,600
	1977	47,810	103,360	2,239,500
Percentage change	1960-70	4.7	5.7	17.4
	1970-74	7.5	14.3	12.9
	1974-77	2.8	4.6	3.4
Number of residents working in region	1960	38,416	71,982	
	1970	38,266	70,676	
Percentage change	1960-70	-0.4	-1.8	
Number of non-residents commuting into region	1960	1,370	3,050	
	1970	2,311	5,667	
Percentage change	1960-70	68.7	85.8	
Net number commuting in and out of region	1960	- 1,890	155	
	1970	- 4,439	455	
Number of residents commuting within region	1960	1,488	6,713	
	1970	2,668	10,077	
Percentage change	1960-70	79.3	50.1	
% of employed residents commuting out of region	1960	7.6	3.5	
	1970	14.2	6.1	
% of employed residents commuting within region	1960	3.4	8.2	
	1970	5.6	11.7	

Source: North Carolina Commuting Patterns, 1960 and 1970
North Carolina Labor Force Estimates, 1978

A-17 Commuting Patterns for Counties in Regions K and L

	Commuting to & from other counties in region			Commuting to & from counties outside region			A ¹	A ²	A ³	Net Commuting
	From	To	Net	To	From	Net				
1960										
Region K	1,488	1,488	0	3,260	1,370	-1,890	—	—	—	—
Franklin	448	157	-291	1,176	313	-863	93.9	18.3	6.1	-1,154
Granville	306	404	98	668	367	-301	92.0	9.8	7.9	-203
Person	74	30	-44	667	297	-370	96.3	8.1	3.7	-414
Vance	441	766	325	342	253	-89	90.2	7.7	9.7	236
Warren	219	131	-88	407	140	-267	94.2	12.4	5.8	-355
Region L	6,713	6,713	0	2,895	3,050	155	—	—	—	—
Edgecombe	2,941	1,794	-1,147	399	621	222	85.4	19.2	14.6	-925
Halifax	467	1,108	641	471	705	234	90.5	5.1	9.5	875
Nash	1,817	3,136	1,319	693	907	214	80.7	12.9	19.3	1,553
Northampton	1,005	213	-792	495	221	-274	93.3	19.9	6.7	-1,066
Wilson	483	462	-21	837	596	-241	94.4	6.7	5.6	-262
1970										
Region K	2,668	2,668	0	6,750	2,311	-4,439	—	—	—	—
Franklin	478	165	-313	2,802	409	-2,393	91.6	34.5	8.4	-2,706
Granville	534	914	380	1,414	816	-598	84.6	16.9	15.3	-218
Person	275	103	-172	1,069	490	-579	93.5	13.6	6.4	-751
Vance	728	1,312	584	687	428	-259	86.2	11.5	13.8	325
Warren	653	174	-479	778	168	-610	90.1	31.5	9.9	-1,089
Region L	10,077	10,077	0	5,212	5,667	455	—	—	—	—
Edgecombe	4,720	2,404	-2,316	601	1,037	436	80.3	27.6	19.7	-1,880
Halifax	1,001	1,129	128	775	794	19	89.0	10.2	11.0	147
Nash	2,574	5,303	2,729	1,383	1,360	-23	73.0	18.0	27.0	2,706
Northampton	931	282	-649	1,210	512	-698	85.1	32.0	14.8	-1,347
Wilson	851	959	108	1,243	1,964	721	86.4	10.2	13.6	829

A¹ Number living and working in county as percent of total working in county

A² Percent of working county residents working outside county

A³ Percent of total working in county living outside county

Source: North Carolina Commuting Patterns, 1960 and 1970.

A-18 Employment and Income Growth in Regions K and L

Employment 1970-1977

	% Change by place of work									
	Non-agri.	Manufacturing		Non-mfg.	Const.	Trans. comm. utilities	Trade	Finance insurance real estate	Service	Govt.
		70-74	70-77							
Region K	20.3	21.2	17.3	22.6	15.9	37.8	22.7	12.8	24.6	23.9
Franklin	31.3	24.3	29.5	26.4	87.5	*	29.3	42.8	54.5	11.8
Granville	23.4	38.2	23.7	23.3	85.7	*	35.8	30.8	*	22.8
Person	22.2	12.4	10.2	38.2	18.7	240.0	25.2	9.1	12.9	59.3
Vance	17.9	21.3	18.3	17.5	*	31.4	18.2	*	18.0	48.1
Warren	1.9	**	*	5.3	57.1	*	4.9	66.7	nc	6.3
Region L	22.8	31.8	29.4	27.0	28.3	22.9	33.6	42.2	11.3	27.1
Edgecombe	25.0	52.0	36.1	18.3	44.8	26.6	19.7	2.7	15.3	7.2
Halifax	4.9	16.4	11.4	9.9	9.2	42.5	16.3	5.7	*	19.5
Nash	39.6	48.6	40.5	33.0	24.0	5.8	49.3	69.1	5.3	58.7
N'hampton	12.5	17.3	16.7	7.7	54.5	*	25.4	*	*	3.8
Wilson	87.1	12.0	30.1	33.3	9.1	29.6	34.1	51.4	29.9	38.8

Income Growth, 1971-76 By Sector

	By Place of Work										
	Total	Farm income	Non-farm	Manufacturing			Const.	Trans. comm. utilities	Trade	Wholesale	Retail
				Total	Non-durable	Durable			Total		
Region K	51.5	45.8	59.8	55.6	48.7	69.0	57.0 ¹	271.0	52.7	36.7	57.5
Franklin	71.3	102.5	63.4	67.8	72.5	61.8	88.5	79.0	52.6	23.7	65.0
Granville	58.6	19.7	65.4	59.6	44.7	103.2	116.9	120.3	64.9	115.9	52.6
Person	62.1	55.0	63.1	56.9	56.0	58.3	56.1	393.0	59.0	88.9	53.3
Vance	50.8	27.1	52.6	51.6	42.0	75.6	26.6	63.3	42.4	10.1	59.2
Warren	45.8	21.8	59.3	36.3	33.0	41.2	nd	27.8	56.0	63.3	54.7
Region L	75.8	90.3	74.1	87.7	93.8	72.2	66.0	80.9	66.7	95.6	54.6
Edgecombe	75.3	153.2	67.8	82.5	91.5	73.1	87.6	70.1	52.2	50.2	53.0
Halifax	51.6	4.3	56.8	61.9	60.8	67.9	63.7	70.8	52.4	63.0	49.2
Nash	86.9	87.4	86.8	100.4	102.9	87.6	90.8	107.9	73.2	107.8	60.5
N'hampton	62.7	67.3	60.8	75.9	76.2	75.8	108.6	46.5	56.9	108.7	35.1
Wilson	85.0	124.8	80.4	105.7	119.9	58.9	37.1	81.2	75.3	113.9	54.8

* Level of non-agricultural employment in 1977 is less than 1970 level.

** Level of manufacturing employment in 1974 is less than 1970 level.

*** Income level in 1976 is less than income level in 1971.

nc-No change recorded in level of employment between 1970 and 1977.

nd-Income level not disclosed for either 1971 or 1976.

¹Calculation excludes Warren County.

²Calculation excludes Franklin County.

Sources: N. C. Labor Force Estimates

U. S. Bureau of Economic Analysis, data on personal income

% change by residence

	Total	Agri.	Non-agri.
Region K	13.6	-20.8	20.6
Franklin	19.2	-21.3	29.9
Granville	14.7	-34.5	23.7
Person	15.6	-21.3	22.2
Vance	13.1	-20.0	17.8
Warren	*	-21.9	1.1
Region L	19.1	-19.9	27.0
Edgecombe	26.3	-19.4	37.8
Halifax	6.7	-20.5	12.5
Nash	23.3	-20.6	29.8
N'hampton	3.7	-20.4	9.7
Wilson	23.3	-18.8	31.6

	Finance	Service	Government			By residence 1971-77	By Place of work		Per Capita personal inc.	
			Total	State & local	Federal civilian		62-70	70-76	62-70	70-76
Region K	42.4 ²	56.9	70.1	63.2	141.1	65.9	47.4	66.1	105.8	70.1
Franklin	nd	56.8	67.1	68.5	65.8	80.1	18.6	61.7	110.4	76.3
Granville	76.3	21.9	73.6	61.5	270.9	106.8	66.6	71.0	109.1	77.4
Person	33.8	44.2	64.4	66.9	58.1	65.4	52.9	66.2	116.1	59.3
Vance	17.9	80.3	72.5	72.6	83.6	60.7	69.6	68.0	100.1	71.3
Warren	118.8	82.0	54.4	57.5	39.8	59.0	-4.8	49.7	105.6	59.4
Region L	79.0	54.8	69.0	70.7	68.9	79.8	52.4	85.5	99.8	82.5
Edgecombe	68.6	32.2	72.7	70.8	87.4	82.2	44.7	86.7	107.0	87.7
Halifax	39.5	30.2	66.1	66.1	68.5	61.7	29.1	58.7	79.3	67.8
Nash	104.1	64.5	74.6	78.3	37.6	84.8	69.8	100.0	101.1	77.1
N'hampton	***	45.8	60.1	59.8	74.7	74.7	17.7	70.3	89.3	96.1
Wilson	59.5	79.4	67.6	70.3	51.2	87.5	65.1	91.8	104.3	88.2

A-19 Average Weekly Wage Rates by Manufacturing Sector, 1975

Industrial Classification	Franklin	Granville	Person	Vance	Warren	Edgecombe	Halifax	Nash	N'hampton	Wilson	N.C.
20 Food	100.39	*	208.19	139.10	*	120.92	136.44	165.87	77.81	194.14	163.58
21 Tobacco	—	*	—	125.27	—	100.50	—	119.75	—	135.07	215.16
22 Textiles	143.80	137.83	150.98	114.23	*	126.75	*	133.21	—	163.54	137.79
23 Apparel	95.78	87.47	*	121.49	*	97.59	107.94	99.82	97.07	101.86	106.64
24 Lumber	115.33	109.16	86.21	118.95	101.20	106.76	134.83	137.51	127.26	134.30	131.67
25 Furniture	103.04	—	—	*	—	146.69	—	210.00	—	*	137.60
26 Paper	—	*	—	—	—	*	*	—	—	*	224.45
27 Printing	*	*	*	155.68	*	139.63	125.67	132.58	—	159.34	165.56
28 Chemicals	—	—	—	*	—	167.48	*	194.44	150.51	191.82	222.61
29 Petroleum	—	—	—	—	—	—	—	—	—	—	170.18
30 Rubber	—	*	—	—	—	*	*	*	—	187.23	163.47
31 Leather	—	—	—	—	—	—	—	*	—	—	129.39
32 Stone,clay,glass	—	*	122.07	235.40	—	139.65	151.89	151.37	—	141.06	181.94
33 Primary metals	—	—	*	—	—	*	—	*	—	*	194.03
34 Fab. metals	—	*	*	123.48	—	151.10	*	179.75	—	*	197.43
35 Non-elect. mach.	*	*	*	*	—	184.46	*	200.62	*	136.65	213.91
36 Electronics	—	*	192.51	*	—	—	*	*	—	—	199.42
37 Trans. equip.	—	—	*	158.63	66.71	*	—	143.24	—	173.24	167.56
38 Instruments	*	—	—	—	—	*	—	—	—	—	188.26
39 Misc. mfg.	—	*	—	—	—	*	—	*	139.53	*	146.85
Total mfg.	118.14	133.08	146.94	133.48	115.69	148.00	143.65	137.67	122.91	151.25	157.13
All private indus.	118.86	129.41	134.81	133.90	110.60	147.41	132.59	141.53	113.83	147.32	156.24
Private & public	119.83	140.24	136.10	134.69	112.17	148.09	133.48	143.13	115.07	148.72	na

na-not available *-data not disclosed dash-no employment recorded in sector
Source: North Carolina Insured Employment and Wage Payments, 1975

A-20 Manufacturing Establishments by Branch and County *

1965	Franklin	Granville	Person	Vance	Warren	Region K
20 Food	4	1	3	6	2	16
21 Tobacco	2	4	—	4	2	12
22 Textiles	3	6	3	11	1	24
23 Apparel	2	3	1	3	1	10
24 Lumber & Wood	32	14	14	3	28	91
25 Furniture	2	—	—	—	—	2
26 Paper	—	—	—	—	—	0
27 Printing	1	2	1	1	1	6
28 Chemicals	—	—	1	—	—	1
29 Petroleum	—	—	—	—	—	0
30 Rubber	—	—	1	—	—	1
31 Leather	—	—	—	—	—	0
32 Stone, clay, glass	—	—	2	3	—	5
33 Primary metals	—	—	1	—	—	1
34 Fab. metals	—	—	2	1	—	3
35 Machinery	—	1	—	2	—	3
36 Elect. machinery	—	1	1	—	—	2
37 Trans. equipment	—	—	1	2	—	3
38 Instruments	—	—	—	—	—	0
39 Misc. mfg.	—	—	2	1	—	3
Total number of mfg. establishments	46	32	33	37	35	183
Mfg. employment						
Total	1,223	2,312	2,440	3,465	861	10,301
Average	26	72	74	94	25	56
Avg. employment of lumber & wood	13 ¹	11	13	10	10	12
Avg. employment in all other	67	120	119	101	83	100

1977	Franklin	Granville	Person	Vance	Warren	Region K
20 Food	5	2	5	5	1	18
21 Tobacco	3 ²	2 ²	2	4	3 ²	6
22 Textiles	3	12	3	14	1	33
23 Apparel	6	7	2	3	2	20
24 Lumber	39	15	7	6	35	102
25 Furniture	4	—	—	1	—	5
26 Paper	—	—	—	—	—	0
27 Printing	1	3	3	5	1	13
28 Chemicals	—	—	3	2	—	5
29 Petroleum	—	—	—	—	—	0
30 Rubber	—	1	—	—	—	1
31 Leather	—	—	—	—	—	0
32 Stone, clay, glass	—	1	2	4	—	7
33 Primary metals	—	—	1	—	—	1
34 Fab. metals	1	1	2	4	—	8
35 Machinery	1	1	4	3	—	10
36 Elect. machinery	—	—	2	1	—	5
37 Trans. equipment	—	—	1	4	—	5
38 Instruments	2	—	—	—	—	2
39 Misc. mfg.	—	2	—	—	—	2
Total number of mfg. establishments	62	48	37	56	40	243
Mfg. employment						
Total	2,720	3,500	4,520	6,390	860	17,990
Average	44	73	122	114	21	74
Avg. employment of lumber & wood	12	5	6	28	10	11
Avg. employment in all other	97	155	149	124	98	167

*Data includes employment in insured manufacturing establishments only.

¹Figures include employment in furniture manufacturing establishments

²No persons were employed in these establishments in 1977; establishments were not included in calculations

Source: Bureau of Employment Security Research, Employment Security Commission of North Carolina, North Carolina Insured Employment and Wage Payments, 1965 and 1974.

1965	Edge-combe	Halifax	Nash	North-ampton	Wilson	Region L
20 Food	10	10	19	2	20	61
21 Tobacco	3	—	6	—	9	18
22 Textiles	7	2	7	—	1	17
23 Apparel	1	3	14	1	5	24
24 Lumber & wood	7	47	24	20	19	117
25 Furniture	4	—	2	—	—	6
26 Paper	—	3	—	—	—	3
27 Printing	3	2	4	1	2	12
28 Chemicals	—	1	—	3	1	5
29 Petroleum	1	—	—	—	—	1
30 Rubber	—	—	1	—	2	3
31 Leather	—	—	—	—	—	0
32 Stone, clay, glass	4	3	1	1	3	12
33 Primary metals	—	—	1	—	1	2
34 Fab. metals	2	1	2	—	1	6
35 Machinery	2	—	2	—	—	4
36 Elect. machinery	—	—	—	—	—	0
37 Trans. equipment	1	—	3	—	3	7
38 Instruments	—	—	—	—	—	0
39 Misc. mfg.	2	—	—	4	3	9
Total number of mfg. establishments	47	72	86	32	70	307
Mfg. employment						
Total	4,031	6,129	4,245	1,141	3,570	19,111
Average	86	85	59	36	51	62
Avg. employment of lumber & wood	14	18	23 ¹	30	21	21
Avg. employment in all other	98	212	61	45	62	87

1977	Edge-combe	Halifax	Nash	North-ampton	Wilson	Region L
20 Food	6	2	17	4	17	46
21 Tobacco	4	—	3	—	6	13
22 Textiles	8	3	13	—	3	27
23 Apparel	5	6	22	5	10	48
24 Lumber	7	50	24	18	12	111
25 Furniture	5	—	1	—	3	9
26 Paper	1	2	1	1	2	7
27 Printing	4	3	6	—	6	19
28 Chemicals	2	—	3	3	4	12
29 Petroleum	—	—	—	—	—	—
30 Rubber	2	1	1	—	4	8
31 Leather	—	—	—	—	—	—
32 Stone, clay, glass	3	5	5	—	5	18
33 Primary metals	2	—	—	—	2	4
34 Fab. metals	5	1	3	—	1	10
35 Machinery	7	2	5	1	3	18
36 Elect. machinery	—	1	1	—	—	2
37 Trans. equipment	1	—	1	—	6	8
38 Instruments	1	—	—	—	—	1
39 Misc. mfg.	2	—	2	5	1	10
Total number of mfg. establishments	65	76	108	37	85	371
Mfg. employment						
Total	7,270	6,740	11,100	1,750	8,090	34,950
Average	112	89	103	47	95	94
Avg. employment of lumber & wood	20	18	22	29	23	22
Avg. employment in all other	123	223	126	64	107	125

**A-21 Investments in New and Expanded Manufacturing Establishments in
Regions K and L**

		Region K	Region L
Total Investment (in \$1,000)			
New plants	1960-1969	33,720	74,992
	1970-1978	96,994	163,986
Plant expansions	1960-1969	46,996	80,075
	1970-1978	76,718	221,121
New and expanded	1960-1969	80,716	155,067
	1970-1978	173,712	385,102
Investment Per Capita (in \$1.00)			
New plants	1960-1969	246.63	296.67
	1970-1978	702.35	640.07
Plant expansions	1960-1969	343.47	316.78
	1970-1978	555.52	863.08
New and expanded	1960-1969	590.37	613.46
	1970-1978	1,257.87	1,503.13
Investment Per Square Mile (in \$1.00)			
New plants	1960-1969	15,936	27,703
	1970-1978	45,838	60,578
Plant expansions	1960-1969	22,240	29,581
	1970-1978	36,256	81,185
New and expanded	1960-1969	38,145	57,284
	1970-1978	82,094	142,263
Number of New Manufacturing Establishments			
	1968-1978	55	88
	1968-1972	26	52
	1973-1978 (6 mo.)	29	36
Total Investment in New Plants (in \$1,000)			
	1968-1978	116,595	226,012
	1968-1972	42,366	63,984
	1973-1978	74,229	161,778
Average Investment in New Plants (in \$1,000)			
	1968-1978	2,120	2,568
	1968-1972	1,629	1,230
	1973-1978	2,560	4,495
Total Number of New Jobs Created			
	1968-1978	4,793	10,192
	1968-1972	3,065	5,077
	1973-1978	1,728	5,065
Average Size of Employment in New Firms			
	1968-1978	87	118
	1968-1972	118	97
	1973-1978	59	141

	Region K	Region L
Investment Per Employee in New Firms (in \$1.00)		
1968-1978	24,326	22,175
1968-1972	13,822	12,603
1973-1978	42,956	31,940
Investment Per Employee in Plant Expansions (in \$1.00)		
1968-1978	19,314	26,414
1968-1972	15,182	12,121
1973-1978	23,105	38,449
Total Investment Per Total New Jobs Created (in \$1.00)		
1968-1978	21,743	24,978
1968-1972	14,425	12,389
1973-1978	30,931	35,113

Source: Various reports of the N.C. Department of Commerce, Industrial Development Division.

A-22 Investments in New and Expanded Manufacturing Establishments in Regions K and L (1968 - 78)

Investment in New Manufacturing Establishments

County	Total Invest. \$(000)	% of Invest. in region	Avg. Invest. \$(000)	Avg. Inv. employ.	New firm w/largest capital investment	Location	Year	Invest. employ.	SIC code	New jobs
Franklin	\$ 36,902	31.6	\$3,075	\$38,000	Novo Biochemical Industries ¹	Franklinton	1977	\$214,300	28	70
Granville	\$ 53,836	46.2	\$3,365	\$35,000	Certain-Teed Products	Oxford	1976-8	\$180,000	29	100
Person	\$ 9,320	8.0	\$1,331	\$19,000	Amax Resource Recovery System ¹	Roxboro	1975	\$100,000	32	10
Vance	\$ 7,405	6.3	\$ 617	\$ 6,000	Kerilon USA	Henderson	1969	\$ 15,900	22	170
Warren	\$ 9,119	7.8	\$1,303	\$16,000	Harriet Henderson Yarns	Norlina	1970	\$ 42,400	22	125
Edgecombe	\$ 18,458	7.8	\$1,318	\$10,000	Polylok Finishing Corporation	Tarboro	1973	\$ 29,700	22	175
Halifax	\$ 14,574	6.2	\$2,078	\$18,000	Myers Industries Patch Rubber Div.	Roanoke Rapids	1978	\$ 30,000	32	150
Nash	\$ 69,453	29.5	\$1,654	\$20,000	Masonite Corp. ¹	Spring Hope	1970	\$ 96,000	24	125
N'hampton	\$ 1,382	1.2	\$ 276	\$ 4,000	Union Camp Corp.	Seaboard	1969	\$ 40,000	24	25
Wilson	\$129,715	55.2	\$7,630	\$38,000	Kerr Glass Manufacturing Co. ¹	Wilson	1977	\$300,000	32	100

Employment in New Manufacturing Establishments

County	New Units	Empl. in new units	% of new empl. in region	Avg. empl. in new firms	Largest new employer	Location	Year	No. of new jobs	SIC code	Invest. employ.
Franklin	12	968	20.9	81	Burlington Indus.	Franklinton	1973	220	22	\$77,300
Granville	16	1,502	31.3	94	Northern Telecom	Butner	1973	250	36	\$12,400
Person	7	480	10.0	68	Collins & Aikman	Roxboro	1972	305	22	\$26,400
Vance	12	1,290	26.9	107	Multi-knit Corp.	Henderson	1968	300	22	\$ 6,700
Warren	7	553	11.5	79	Weimetco, Ltd.	Soul City	1978	200	23	\$10,000
Edgecombe	14	1,820	18.3	130	Black and Decker Manufacturing Co.	Tarboro	1970	500	36	\$ 6,000
Halifax	7	825	8.3	117	W.R. Grace & Co. Airmold Division	Roanoke Rapids	1974	225	30	\$25,500
Nash	42	3,573	36.0	85	Texfl Industries	Rocky Mount	1972	750	22	\$26,700
N'hampton	6	293	2.9	48	Seaboard Mfg.Co.	Seaboard	1969	125	23	\$ 1,500
Wilson	17	3,411	34.4	200	Firestone Tire & Rubber Company	Wilson	1973-4	1,800	30	\$46,000

Investment and Employment in Plant Expansions

County	Expan. Invest. \$(000)	% of region total	Jobs created	% of region total	Investment Employ. in plant expan.
Franklin	\$ 4,060	4.1	510	10.0	\$ 8,000
Granville	\$ 29,580	30.1	832	16.3	\$ 25,500
Person	\$ 31,470	32.0	1,150	22.6	\$ 27,400
Vance	\$ 29,471	30.2	2,579	50.6	\$ 11,500
Warren	\$ 3,177	3.2	20	0.4	\$158,000 ²
Edgecombe	\$ 22,187	9.5	1,729	19.5	\$ 12,800
Halifax	\$ 41,613	17.7	515	5.8	\$ 80,800
Nash	\$121,545	51.8	4,686	52.8	\$ 25,900
N'hampton	\$ 2,722	1.2	177	2.0	\$ 15,400
Wilson	\$ 46,307	19.7	1,766	19.9	\$ 26,200

¹Largest Investor is also largest employer; next largest investor reported

²Insignificant employment for calculation

A-23 Important Considerations in Selecting Specific Area or Site
 According to 1976 Business Week Survey of Company Executives

	Total Respondents			Total Respondents	
	No.	%		No.	%
BASE = 100%					
MARKETING	1,877	90	COMMUNITY	2,059	99
Nearness to present sales area	984	47	Reasonable or low taxes	1,273	61
Need for plant to service new or expanding sales area	964	46	Favorable attitudes of community and residents to industry	1,279	61
Other	85	4	Favorable political climate toward business	966	46
Not important	66	3	Adequate educational facilities in area	725	35
No answer	212	10	Pleasant living conditions for employees	1,005	48
LABOR	2,058	99	Adequate recreational and cultural facilities	562	27
Availability of labor with necessary skills	1,006	48	Cost of living or economic conditions in area	818	39
Favorable labor climate	1,394	67	Financial stability of community	694	33
Labor rates	724	35	Other	24	1
Other	42	2	Not important	3	*
Not important	14	1	No answer	30	1
No answer	31	1	SITE	2,016	97
TRANSPORTATION	2,064	99	Zoning restrictions	697	33
Access to rail facilities-freight	647	31	Ample area for expansion	1,239	59
Trucking	1,586	76	Reasonable cost of property	1,435	69
Water freight transportation	155	7	Reasonable cost of construction	1,219	58
Near airport	538	26	Access to utilities	1,014	49
Local transportation for employees	437	21	Waste disposal	533	26
Other	59	3	Topography	167	8
Not important	11	1	Raw land acquisition	204	10
No answer	25	1	Improved land acquisition	181	9
SOURCES OF SUPPLY	1,970	94	Existing industrial site	350	17
Near sources of raw material(s)	704	34	Highly sophisticated site such as new towns	50	2
Availability of natural gas	652	31	Industrial park	273	13
Availability of electric power	1,058	51	Other	18	1
Commercial services available (industrial distributors producers of components and sub-assemblies)	739	35	Not important	6	*
Ample water supply	470	22	No answer	73	3
Other	24	1	LOCATION	2,007	96
Not important	30	1	Urban	395	19
No answer	119	6	Suburban	1,145	55
CLIMATE	1,772	85	Metropolitan	267	13
Favorable climate for personnel	1,227	59	Rural	563	27
Favorable climate for production processes	600	29	Other	27	1
Other	26	1	Not important	17	1
Not important	141	7	No answer	82	4
No answer	317	15			
STATE	1,998	96			
Availability of state industrial development program	446	21			
A right to work state	976	47			
Industrial revenue bond financing	395	19			
Industrial training program	272	13			
Availability of state industrial loans	253	12			
Special tax inducements	864	41			
State income tax	600	29			
Incentives for industrial pollution control	269	13			
Financial stability of state	806	39			
Other	80	4			
Not important	17	1			
No answer	91	4			

*Less than 1/2 of 1%.

Note: Number and percent columns exceed base due to multiple mentions.

A-24 State and Federal Programs

- A. Programs included in the five major program categories considered in Appendices A-25 through A-25c.
1. **CONSTRUCTION OF WATER SUPPLY AND WASTE DISPOSAL SYSTEMS**
 - U.S. Environmental Protection Agency (EPA)
 - Grants for the construction of waste water treatment works.
 - U.S. Department of Agriculture, Farmers Home Administration (FmHA)
 - Loans and grants for water and waste water disposal systems.
 - Water system development grants and loans.
 - Sewer system development grants and loans.
 - U.S. Department of Health, Education and Welfare (HEW)
 - Water pollution control program.
 - U.S. Department of Housing and Urban Development (HUD)
 - Basic water and sewer facilities grants.
 - Public works planning advances.
 - N.C. Department of Human Resources and Department of Natural Resources and Community Development
 - 1971 Clean Water Bond Act allocations.
 2. **HIGHWAY CONSTRUCTION AND PLANNING**
 - U.S. Department of Transportation, Federal Highway Administration (FHWA)
 - Highway planning and construction grants.
 3. **BUSINESS AND INDUSTRIAL DEVELOPMENT**
 - U.S. Office of Economic Opportunity
 - Economic opportunity loans to small businesses.
 - U.S. Small Business Administration (SBA)
 - Small business financial assistance program.
 - Loans to development companies.
 - U.S. Department of Commerce
 - Grants and loans for development facilities.
 - Management advice and technical assistance for minority businesses.
 - U.S. Department of Agriculture, Farmers Home Administration (FmHA)
 - Business and industrial development loans.
 - Community facilities loans.
 4. **HOUSING**
 - U.S. Department of Agriculture, Farmers Home Administration (FmHA)
 - Rural housing loans.
 - Home mortgage insurance.
 - Low to moderate income housing loans.
 - Loans for above moderate income housing.
 - Loans for rental housing.
 - Loans for very low income housing.
 - Loans for very low income house repair.
 - Farm labor housing loans.
 - U.S. Department of Housing and Urban Development (HUD)
 - Low rent public housing program.
 - Low to moderate income housing loans.
 - Home improvement loan insurance.
 - Home purchase mortgage insurance.
 - Insurance on mortgages for low and moderate income families, at or below the market rate of interest.
 - Assistance for rental and house payments.
 - Mobile home loan insurance.
 - Multi-family housing program.
 - Housing and community development program.
 5. **RURAL ELECTRIFICATION**
 - U.S. Department of Agriculture, Rural Electrification Administration (REA)
 - Rural electrification program.

B. Other state and federal programs considered in this study but *not* included in the data for Chapter 6 (Appendices A-25 through A-25c).

U.S. Office of Economic Opportunity (OEO)

Community economic development program.

U.S. Department of Commerce

Economic development technical assistance program.

U.S. Department of Housing and Urban Development (HUD)

Community development block grants.

Urban planning assistance.

College housing program.

Urban renewal program.

U.S. Department of Agriculture, Farmers Home Administration (FmHA)

Financial assistance to small towns and rural groups.

Grants for community improvements.

U.S. Department of the Interior

Geological, mineral, and water resources investigations, and topographic mapping.

U.S. Department of Agriculture, Soil Conservation Service (SCS)

Soil survey program.

N.C. Department of Natural Resources and Community Development

State community assistance program.

N.C. Housing Finance Agency.

N.C. Department of Commerce

Business assistance program.

Industrial development program.

Travel and tourism program.

N.C. Department of Transportation, Division of Highways

Primary roads construction program.

Secondary roads construction program.

A-25 How Data in A-25a, A-25b, and A-25c Were Developed

In arriving at the program data in Appendices A-25a and A-25b, it was first necessary to group the individual local, state, and federal programs (listed in Appendix A-24) into major categories. Five categories were selected:

- Construction of water supply and waste disposal systems;
- Highway construction and planning;
- Business and industrial development;
- Housing; and
- Rural electrification.

Assistance provided under the various programs was then identified in dollar amounts from Federal Outlays documents, annual reports of the State Local Government Commission, and annual reports on the State Clean Water Bond Act. Total amounts for each of the five categories were then calculated for each county and region for each of three time periods: 1966-69, 1970-73, and 1974-77.

To compensate for differences in population, these region and county totals were then divided by the appropriate population figures to arrive at per capita figures. The regional program data in Appendix A-25a are per capita figures and the discussion in Chapter 6 of Regions K and L is based on this per capita program information.

At the county level, the per capita figures were compared to the regions' per capita figures and county program outlays are expressed in Appendix A-25b as a percent of the region averages.

The following were considered as measures of success in industrial development and, to some extent, in overall economic development:

- Investment in new and expanded plants per 1,000 population;
- New plant investment per capita;
- New plant investment per new job;
- Investment in the expansion of existing plants per capita;
- Investment in new and existing plants per capita; and
- Change in per capita income.

At the regional level, this performance data was calculated in absolute terms and used in comparing the performance in the regions to each other and in searching for linkages to the five program investment categories. Performance data for Regions K and L is in Appendix A-25a.

For the counties, performance data was converted to percent of the regional averages and the resulting data are the basis for the discussion of county performance in Chapter 6. County level performance data is in Appendices A-25b and A-25c.

Primary sources of performance data were reports of the Department of Commerce on new or expanded industry; Profile, North Carolina Counties, 1977, prepared by the state Department of Administration; and the North Carolina State Government Statistical Abstract, 1976, prepared by the Research and Development Section, Division of State Budget and Management.

A-25a Region Per Capita Outlays and Performance Data

Outlays Per Capita (\$)

	Period	A Water & Sewer	B Federal Highway	C Bus. & Indust. Devel.	D Housing	E Rural Elect.
Region K	66-69	16.88	144.53	11.51	65.27	2.68
	70-73	23.97	96.12	17.10	168.33	13.54
	74-77	153.79	35.11	12.90	173.53	22.82
Region L	66-69	44.64	18.88	22.07	45.09	2.29
	70-73	36.12	40.56	8.20	185.03	6.18
	74-77	165.14	385.53	42.46	119.46	0

Performance Data

	Period	F New & Exp. Jobs Per 1000 Pop.	G New Plant Invest. per Capita (\$)	H New Plant Invest. per Job (\$)	I Plant Expan. Investment Per Capita (\$)	J G + I (\$)	K Change In Per Capita Income *
Region K	65-69	47.6	197.19	7,974	293.36	490.35	+55.5%
	70-74	30.8	483.52	24,970	232.32	715.84	+43.9
	75-78	20.7	379.30	57,690	330.94	710.24	+18.2
Region L	65-69	29.7	221.36	13,359	239.77	461.13	+53.0%
	70-74	45.7	682.28	23,470	365.53	1047.81	+55.4
	75-78	17.1	213.59	62,490	510.20	723.78	+17.5

* Change in per capita income is for the periods 1966-70, 1970-74, and 1974-76.

A-25b County Outlays and Performance Data as Percentages of Region Averages

Outlays

	Periods	A Water & Sewer	B Federal Highway	C Bus. & Indust. Devel.	D Housing	E Rural Elect.
Region K						
Franklin	66-69	22.3%	0 %	150.7%	78.8 %	1.4 %
	70-73	41.4	152.3	5.5	106.3	49.6
	74-77	109.8	119.4	26.7	72.5	38.1
Granville	66-69	86.1	312.6	51.4	61.4	35.3
	70-73	102.9	219.4	28.9	104.4	89.2
	74-77	51.3	70.7	64.3	122.2	88.2
Person	66-69	0	0	45.3	220.7	211.3
	70-73	0	1.4	108.4	151.8	223.3
	74-77	138.4	201.8	32.9	136.6	267.5
Vance	66-69	139.3	85.8	54.5	79.6	0
	70-73	260.5	62.3	151.8	97.6	9.9
	74-77	138.0	42.9	106.5	97.8	7.3
Warren	66-69	0	19.4	305.5	63.5	441.4
	70-73	25.4	0	293.2	75.9	199.4
	74-77	41.2	75.3	403.0	48.2	210.4
Region L						
Edgecombe	66-69	101.0	3.4	184.2	105.9	0
	70-73	154.5	1.7	103.5	120.8	233.6
	74-77	280.0	5.1	17.3	145.7	0
Halifax	66-69	25.0	51.1	83.0	84.8	266.5
	70-73	41.1	92.5	101.1	83.1	128.8
	74-77	35.6	17.4	20.0	98.7	0
Nash	66-69	192.0	254.4	63.9	101.8	1.0
	70-73	177.4	270.8	82.5	79.3	58.0
	74-77	34.5	261.9	329.7	94.1	0
Northampton	66-69	215.3	156.8	91.2	111.3	429.1
	70-73	114.3	40.5	136.2	72.7	81.3
	74-77	104.6	14.6	45.4	137.7	0
Wilson	66-69	36.6	52.6	80.1	102.6	3.8
	70-73	20.6	44.8	99.0	129.2	0
	74-77	66.3	119.4	21.2	52.0	0

Performance

	Period	F New & Exp. Jobs Per Capita	G New Plant Invest. per Capita	H New Plant Invest. per Job	I Plant Expan. Investment Per Capita	G + I
Region K						
Franklin	65-69	107.4 %	102.5 %	72.5 %	41.3 %	65.8 %
	70-74	113.3	301.1	178.7	9.6	206.6
	75-78	41.0	139.4	211.6	8.4	78.4
Granville	65-69	72.7	195.1	171.0	92.1	133.3
	70-74	106.9	66.6	60.5	107.3	79.9
	75-78	96.8	270.4	193.7	141.7	210.4
Person	65-69	66.5	3.0	32.1	125.4	76.4
	70-74	78.5	64.6	84.2	26.6	51.7
	75-78	107.3	10.8	381.3	276.1	134.4
Vance	65-69	144.0	98.3	91.9	168.8	140.6
	70-74	132.9	9.8	12.4	236.3	83.3
	75-78	149.7	.6	1.1	40.9	19.4
Warren	65-69	109.2	59.7	43.8	31.9	43.0
	70-74	30.8	71.6	159.8	76.2	73.1
	75-78	94.0	39.8	13.4	8.6	25.2
Region L						
Edgecombe	65-69	94.3	72.0	97.3	134.9	104.7
	70-74	91.6	38.4	43.6	73.5	41.3
	75-78	74.2	33.4	27.4	36.7	35.7
Halifax	65-69	47.6	24.8	62.6	177.6	104.3
	70-74	25.7	26.3	96.8	56.5	38.6
	74-77	44.0	39.9	28.9	98.0	80.8
Nash	65-69	164.1	253.0	134.9	52.4	153.5
	70-74	183.8	133.0	87.7	218.5	152.8
	75-78	191.1	59.3	29.8	211.4	166.5
Northampton	65-69	53.9	20.1	59.5	10.5	15.1
	70-74	11.3	1.0	7.2	1.5	1.3
	75-78	48.4	30.4	80.0	21.2	23.9
Wilson	65-69	97.1	46.6	50.0	79.8	63.8
	70-74	127.5	231.5	144.6	107.3	188.2
	75-78	154.4	285.5	110.4	69.0	132.8

**A-25c County Per Capita Income Growth Rates Expressed
as Percentages of Regions Per Capita Income Growth Rates**

Counties	1966-70	1970-74	1974-76
Region K			
Franklin	85.8%	111.4%	100.5%
Granville	83.2	116.9	94.5
Person	111.0	89.7	78.6
Vance	98.9	99.8	105.5
Warren	84.0	64.7	132.4
Region L			
Edgecombe	91.7	113.4	87.4
Halifax	80.9	93.3	61.1
Nash	103.0	92.6	97.7
Northampton	69.1	137.4	79.4
Wilson	93.8	89.2	171.4

B Persons Interviewed in Regions K and L

Region K

Carl Coats, President, Louisburg Chamber of Commerce.
Allan C. Soderburg, Plant Manager, Novo Biochemical Industries, Inc., Franklin County.
James T. Bailey, Personnel Manager, Novo Biochemical Industries, Inc., Franklin County.
John K. Nelms, Executive Director, Granville County-Oxford Planning Commission, Oxford.
Jarmen Stallings, President, Granville County Chamber of Commerce.
Charles Harper, Plant Manager, CertainTeed Corporation, Oxford.
Harold Penley, General Manager, Masonite Corporation, Oxford.
E. E. Long, President, Roxboro Development Corporation, Roxboro.
Roy Lowe, County Manager, Person County, Roxboro.
J. D. Everett, Executive Director, Kerr-Tar Regional Council of Governments, Henderson.
J. Edwin Fisher, Executive Director, Henderson-Vance County Planning Commission, Henderson.
Robert Hale, Chairman, Henderson-Vance County Planning Commission, Henderson.
George Allen, Executive Vice President, Henderson-Vance County Chamber of Commerce, Henderson.
William Dennis, Editor, *Henderson Daily Dispatch*, Henderson.
Charles A. Hayes, Executive Director, Warren County Industrial Development Commission, Warrenton.
W. D. Little, President, Norlina Development Corporation, Norlina.

Region L

Peyton Beery, Executive Vice President, Tarboro-Edgecombe Development Corporation, Tarboro.
W.E. Phillips, Jr., Mayor, Pinetops.
John M. Oliver, Executive Director, Halifax County Development Commission, Roanoke Rapids.
William E. Howell, Executive Director, Region L Council of Governments, Rocky Mount.
George Harris, Region L Council of Governments, Rocky Mount.
Wilbur H. Rose, Executive Vice President, Nash County Industrial Development Commission, Rocky Mount.
L. R. Holoman, Jr., County Manager, Nash County, Nashville.
F. B. Cooper, Jr., Chairman, Nash County Commissioners, Nashville.
J. D. Barkley, member, Nash County Industrial Development Commission.
Howard A. Gelo, President, Gelo Corporation, Rocky Mount.
A. M. Cooper, Plant Manager, Research Cottrell, Inc., Sharpsburg.
Ronald Batchelor, Mayor, Red Oak.
Bobby Bissettee, Mayor, Middlesex.
John H. Gurganus, Jr., Director, Northampton County Economic Development Commission, Jackson.
Joe Motzino, Chairman, Northampton County Economic Development Commission, Jackson.
Charles M. Clayton, Executive Director, Wilson Industrial Council, Wilson.
John Boettner, Plant Manager, Firestone Tire and Rubber Company, Wilson.
H. Moseley Hussey, Executive Vice President, Wilson Chamber of Commerce.
Jack Mitchell, Senior Vice President, Branch Bank, Wilson.
John Wilson, Chairman, Wilson County Commissioners, Wilson.

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N.C. Center for Public Policy Research
P.O. Box 10886 • 700 W. Morgan Street
Raleigh, N.C. 27605 • (919) 833-1656

