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ABSTRACT

The problems and advantages of locating industry in a rural setting were discussed in this conference report. The 10 individual speeches covered: changes in employment and the labor force; problems and advantages of rural locations, rural labor, and site selection; the importance of involving the Black community; the nature of the food processing industry; opportunities for state leadership in rural development; and general strategies for economic development and regional revitalization. The 4 distinct approaches identified to revitalize regional economy were: (1) upgrading of human resources, (2) creating new job opportunities, (3) new and better utilization of natural resources, and (4) improving the quality of the environment in which both employing institutions and their personnel will exist. (PS)

RURAL DEVELOPMENT

Problems and Advantages of Rural Locations for Industrial Plants

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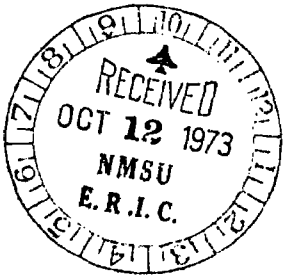

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API Series 49

PREFACE

There is widespread concern that many of the urban problems facing the United States today are tied directly to the lack of rural development. People by the thousands have migrated from rural to urban environments. This mass migration has resulted from technological and economic changes which have reduced opportunities for productive employment in rural areas. Fewer and fewer people are needed to supply the agricultural needs of the nation.

Although many feel that this migration has about run its course in the nation, the southeastern states still have a potential for continued heavy migration from rural to urban areas. This potential migration can only aggravate existing problems.

A promising development is a more general recognition by state and federal agencies that public investments must be channeled to encourage a more balanced geographical dispersal of the nation's population and economic activities. Programs are being discussed and designed to actively promote the economic and social development of our rural communities and to discourage undesirable trends of urban compaction.

To explore the alternatives for solving or preventing some of the nation's urban problems in a rural setting, a conference on "Rural Development: Problems and Advantages of Rural Locations for Industrial Plants" was held in Raleigh, North Carolina. The conference was jointly sponsored by the Agricultural Policy Institute, the Coastal Plains Regional Commission, and the Commerce and Industry Division of the North Carolina Department of Conservation and Development.

Top level executives and educators discussed the problems and advantages of rural locations from a variety of viewpoints.

The Conference Planning Committee was composed of Leigh H. Hammond, North Carolina Director of the Coastal Plains Regional Commission; Robert E. Leak, Administrator of the Commerce and Industry Division, North Carolina Department of Conservation and Development; William E. Davis, Area Director of the Economic Development Administration; W. J. Lanham, Head of the Department of Agricultural Economics, Clemson University; Fred A. Mangum, Jr., Agricultural Policy Institute, North Carolina State University; and Dwight Nichols, Tennessee Valley Authority.

Leigh H. Hammond, Chairman
Conference Planning Committee

TABLE OF CONTENTS

RECENT CHANGES IN EMPLOYMENT AND THE LABOR FORCE

C. E. Bishop[a]

A comprehensive rural development program must provide for four related elements: natural and human resource development, employment growth, and regional development. This paper focuses primarily upon recent experience in the United States in creating employment in relation to changes in technology and potential changes in the labor force.

Technological displacement of labor and growth in employment opportunities have had different impacts on different industries and regions of the nation. Some regions have done poorly in providing employment opportunities for those being added to the labor force while others have done well.

A measure of effectiveness in providing employment opportunities can be obtained by comparing the net changes in employment in an area with the normal addition to the working age population (15-64) that would have occurred from changes in age, death and retirement, assuming no emigration or immigration.

Job Creation during the 1950s

During the decade of the 1950s, employment in the United States increased by 72 for each 100 persons added to the working age group.[1] However, there was large variation among the states in their ability to create employment opportunities for those added to the labor force age

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[a]Vice-President, Research and Public Service Programs, University of North Carolina at Chapel Hill.

[1]Many of the remaining 28 were housewives, students and others not counted in the labor force.

group (Figure 1). Six states, the Dakotas, Arkansas, Mississippi, Kentucky, and West Virginia, experienced a decrease in total employment between 1950 and 1960. The South, West North Central and Northern Plain states performed poorly. In contrast Nevada, California, and Florida experienced phenomenal increases of 300-400 jobs for each 100 increase in their population in the labor force age group. Thus, there were strong incentives for people to migrate from the slow-growing states to those with better employment opportunities.

There also was large variation of employment growth within states. An example of the variation in growth among counties, within states, can be seen from Figure 2 showing North Carolina. During the decade of the 1950s, North Carolina generated only 25 jobs for each 100 persons added to the working force age group. There was, therefore, an incentive for large scale migration from the state. But seven counties in the Piedmont, in and around the major metropolitan centers, created more employment opportunities in relation to the potential increases in the indigenous labor force than the national average. Incentives were created to migrate to these counties. In contrast, a high percentage of the counties in the most rural parts of the state, the Coastal Plain and Appalachian Region, experienced a decline in employment during the decade even though population in the working force age group would have increased in the absence of migration.

In brief, during the 1950s, changes in the technology of production were accompanied by changes in market structure, community organization and population location. There was increased concentration of employment among counties within states and among states. Generally speaking, the rural states and counties did not fare well during the decade. Few of them created enough nonfarm jobs to employ those who were displaced from farming by new technology. Most of them experienced large net emigration.

Changes in the 1960s

Many recent developments have altered industrial location advantages. Transportation costs have been altered by the development of the interstate highway system, commercial aviation and containerization. Locational advantages also have been altered by the advent of computers and

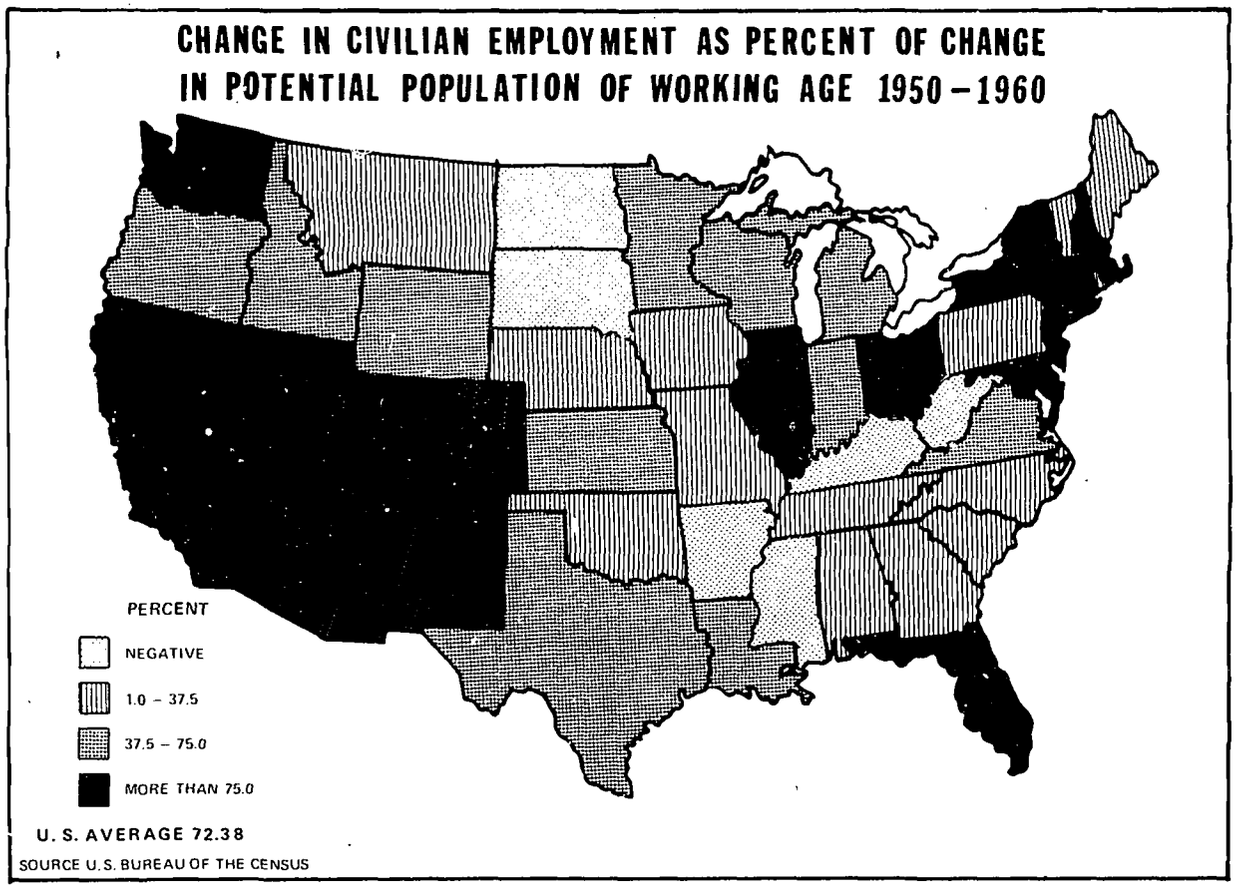
CHANGE IN CIVILIAN EMPLOYMENT AS PERCENT OF CHANGE
IN POTENTIAL POPULATION OF WORKING AGE 1950 – 1960
PERCENT
NEGATIVE
1.0 – 37.5
37.5 – 75.0
MORE THAN 75.0
U. S. AVERAGE 72.38
SOURCE U.S. BUREAU OF THE CENSUS

Figure 1

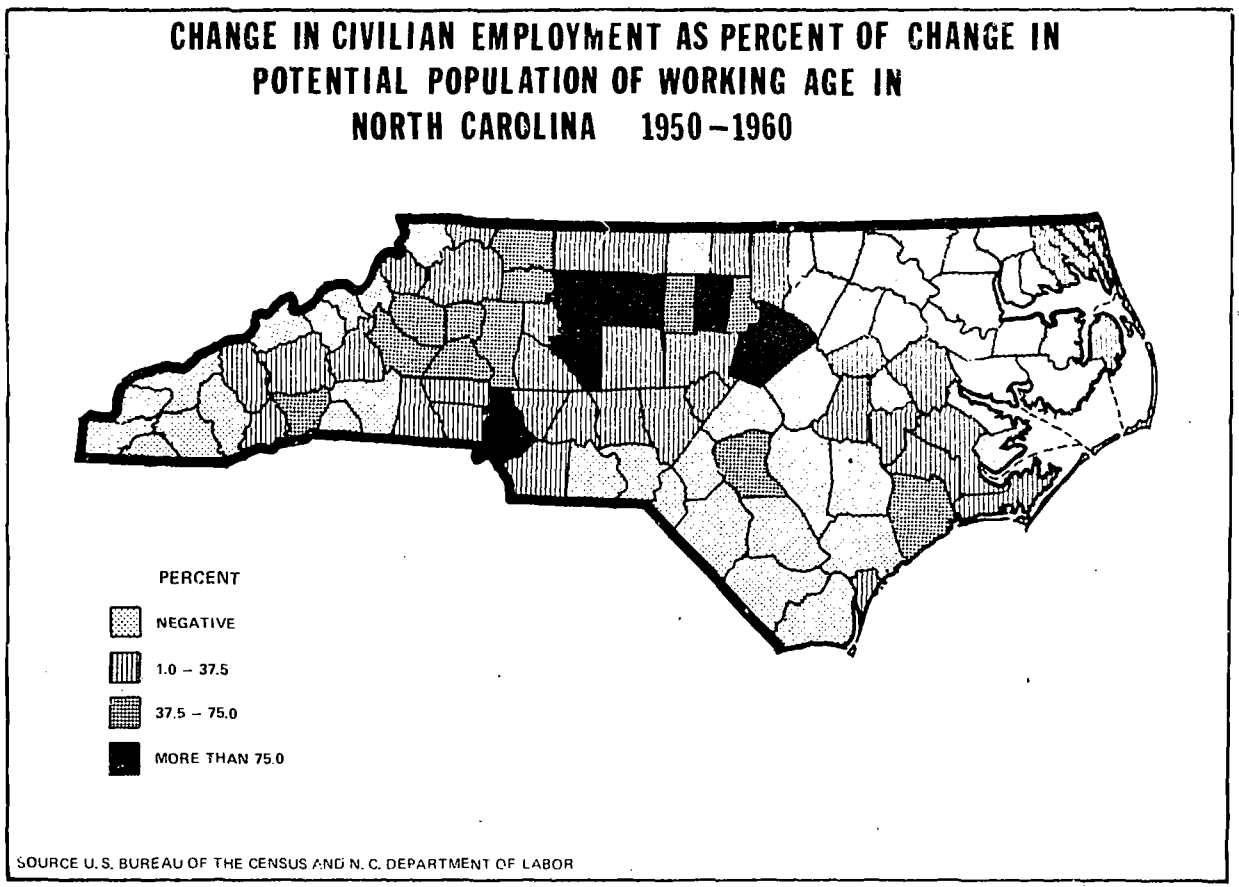

Figure 2

by improvements in communication technology. Air conditioning has benefited some areas more than others. Energy costs are being altered by the development of nuclear sources of energy. Perhaps even more important, during most of the 1960s, the economy experienced high levels of employment, low unemployment and rapidly rising prices. Under these conditions, the supply of labor assumed a more important role in plant location decisions. These factors have contributed to a more dispersed pattern of economic growth, including more rapid growth in the non-metropolitan areas.

During the period 1962-1967, the rate of employment growth in private nonfarm industries in non-metropolitan counties was greater than in metropolitan counties (Figure 3). In contrast, in earlier periods the development of nonfarm jobs in non-metropolitan areas lagged behind the rate of growth in metropolitan areas.

The growth in employment in relation to the potential increase in the labor force from the indigenous population also was strikingly different among the states in the 1960s than in the 1950s. Between 1962 and 1966, the United States created employment for 76 of each 100 persons added to the working age group. The distribution of employment gains among the states was much better in relation to the potential increases in the labor force than during the 1950s (Figure 4). Progress in the southeastern states was quite pronounced, with Tennessee and Georgia exceeding the national average, and other southern states performing at a rate only slightly less than the national average. During this period, absolute decreases in employment occurred in only four states in the northern part of the Great Plains.

During the 1960s about half of the rural and semi-rural counties in the nation created enough private nonfarm jobs to offset the declines in the farm labor force.[2] As a result of this improvement in employment opportunities, the predominantly rural counties did much better in retaining their population than they did in the 1950s (Figure 5).

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[2] Clark Edwards and Calvin Beale, "Rural Change in the 1960s," National Agricultural Outlook Conference, ERS, USDA, February 1969, p. 5.

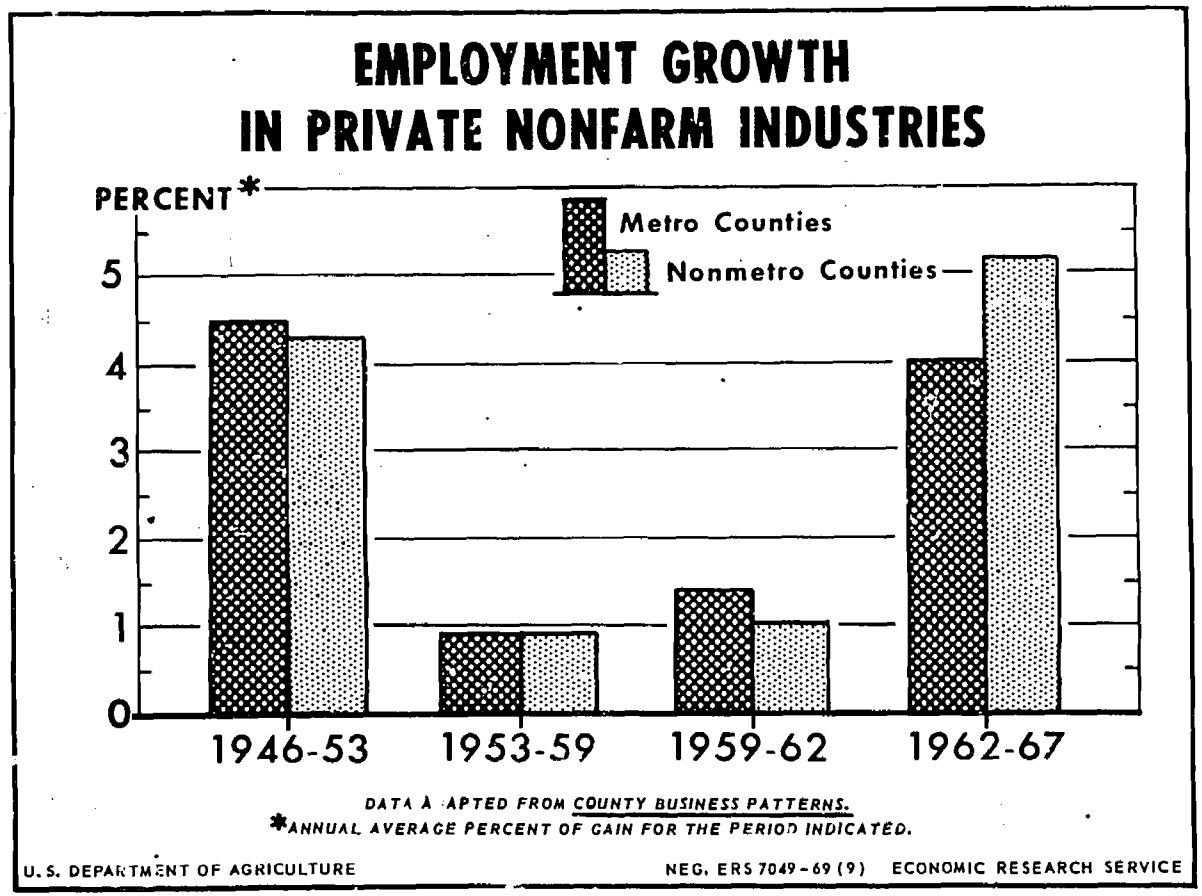


Figure 3

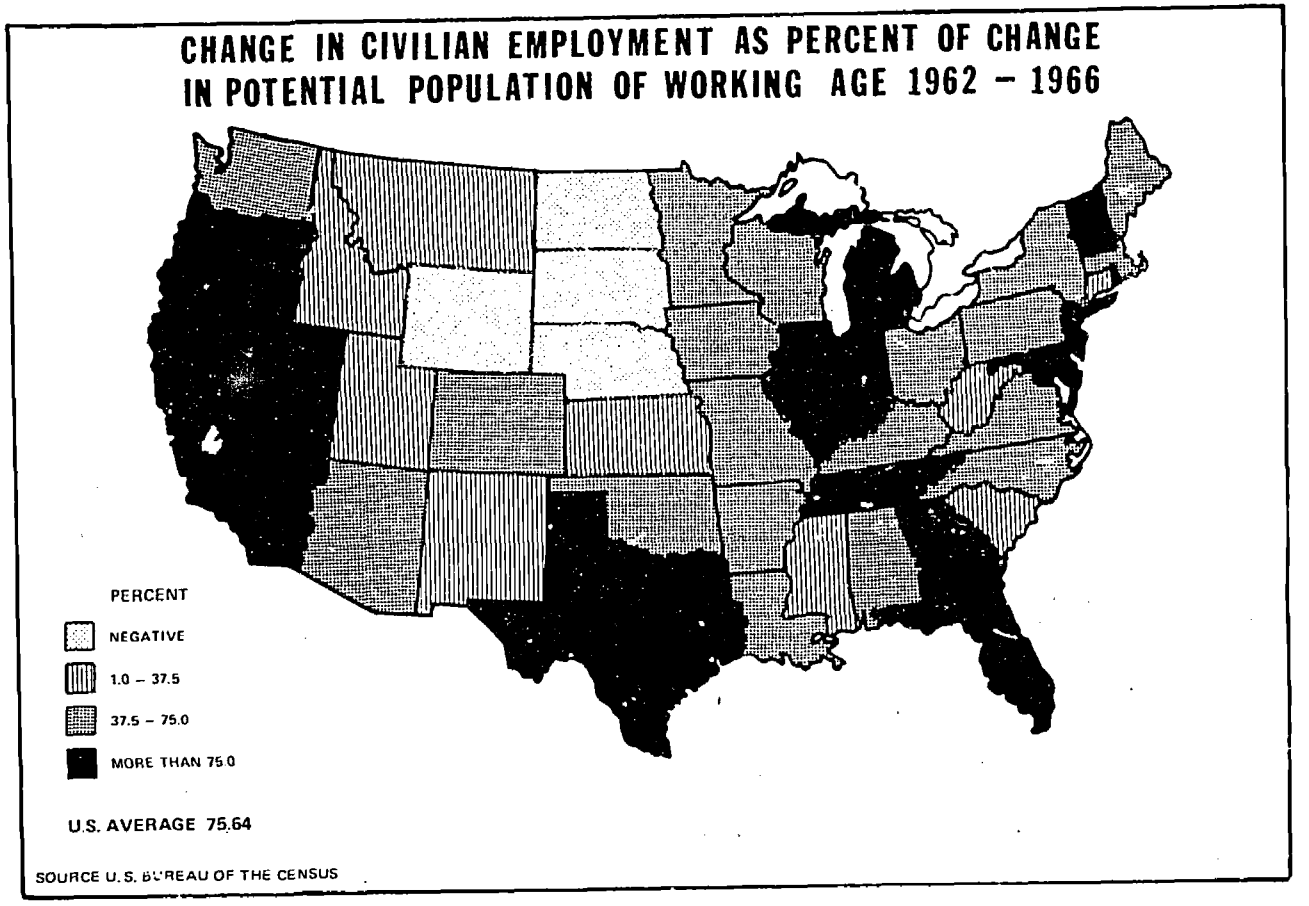

CHANGE IN CIVILIAN EMPLOYMENT AS PERCENT OF CHANGE
IN POTENTIAL POPULATION OF WORKING AGE 1962 – 1966
PERCENT
NEGATIVE
1.0 – 37.5
37.5 – 75.0
MORE THAN 75.0
U.S. AVERAGE 75.64
SOURCE U.S. BUREAU OF THE CENSUS

Figure 4

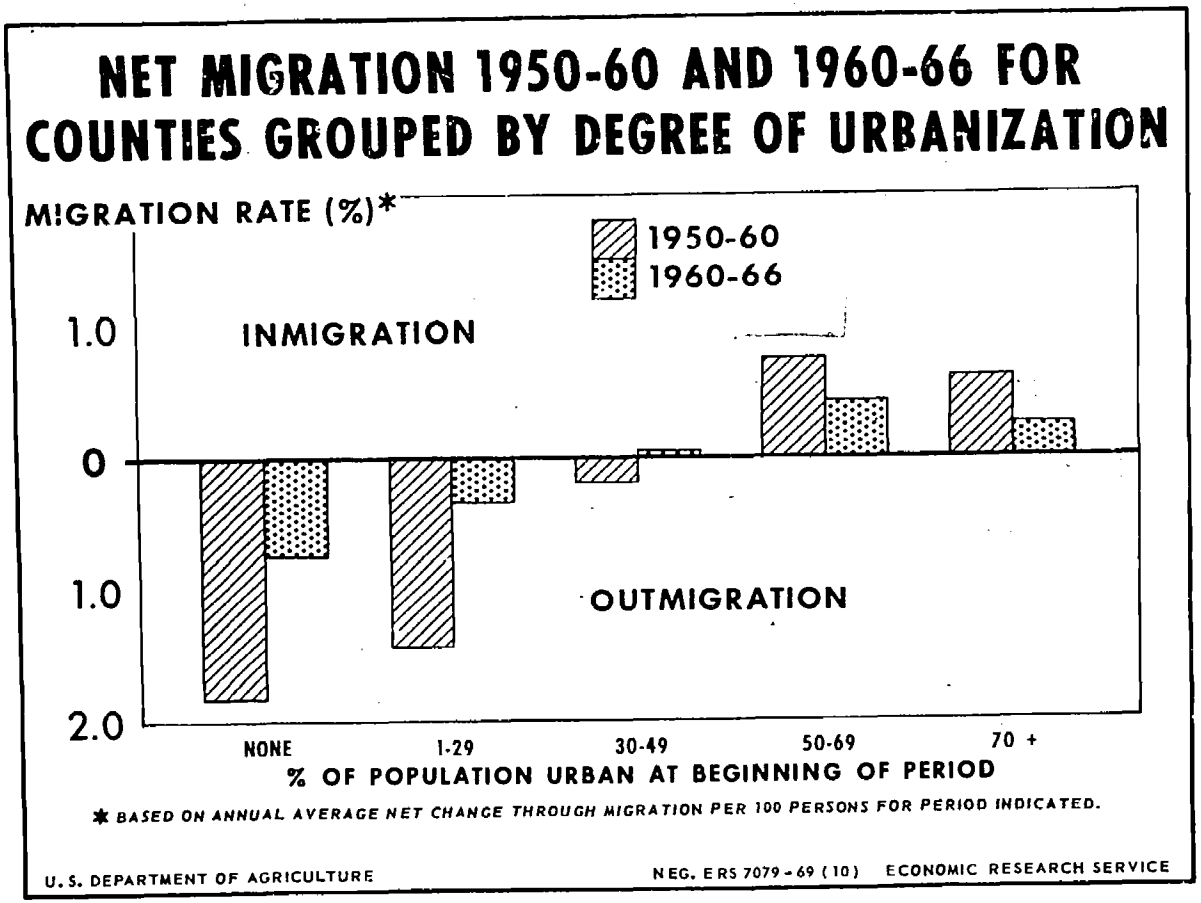

NET MIGRATION 1950-60 AND 1960-66 FOR COUNTIES GROUPED BY DEGREE OF URBANIZATION
MIGRATION RATE (%)*
1950-60
1960-66
1.0
INMIGRATION
0
1.0
OUTMIGRATION
2.0
NONE
1-29
30-49
50-69
70 +
% OF POPULATION URBAN AT BEGINNING OF PERIOD
* BASED ON ANNUAL AVERAGE NET CHANGE THROUGH MIGRATION PER 100 PERSONS FOR PERIOD INDICATED.
U.S. DEPARTMENT OF AGRICULTURE
NEG. ERS 7079-69 (10) ECONOMIC RESEARCH SERVICE

Figure 5

Although the counties where more than one-half of the population is urban are still gaining population through in-migration, the rate of gain dropped sharply during the decade of the 1960s.

The distribution of growth within North Carolina is shown in Figure 6. Between 1962 and 1966, in relation to each 100 potential natural increase in population of working age, the state generated 68 jobs. Thirty-four of the 100 counties in the state had growth rates in excess of 76, the national average. Even though 24 counties lost employment during this period, in comparison with the 1950s, improvement was quite pronounced in the non-metropolitan areas. As a result, migration from the state decreased sharply.

A more striking example of a state that experienced rapid growth of employment and a better distribution of that growth during the 1960's is Arkansas. During the decade of the 1950 technological and structural changes produced profound effects in Arkansas. Sixty-eight of the 75 counties in the state suffered a decrease in employment. Although 13 counties continued to lose employment during the 1960s, 34 counties generated more jobs in relation to the indigenous labor force than the national average (Figure 7). The slow growth areas in the state are concentrated largely in the northwestern and northeastern parts. Most of the western half of the state is growing more rapidly than the national average.

In contrast, Nebraska is an example of a state where employment is growing slowly in relation to the potential additions to its labor force. Although the data are fragmentary and do not cover as long a period as was used for North Carolina and Arkansas, they suggest that the distribution of growth in Nebraska during the 1960s was concentrated in a few growth centers. The pattern resembles the distribution of growth within North Carolina during the 1950s. Approximately two-thirds of the counties in the state lost employment. Only seven counties generated more employment in relation to the additions to the indigenous labor force than the national average (Figure 8).

Many rural counties are now experiencing more rapid growth in employment than they have for the past twenty to thirty years. The non-metropolitan population in the United States is large and it is increasing even though it is increasing more slowly than the metropolitan

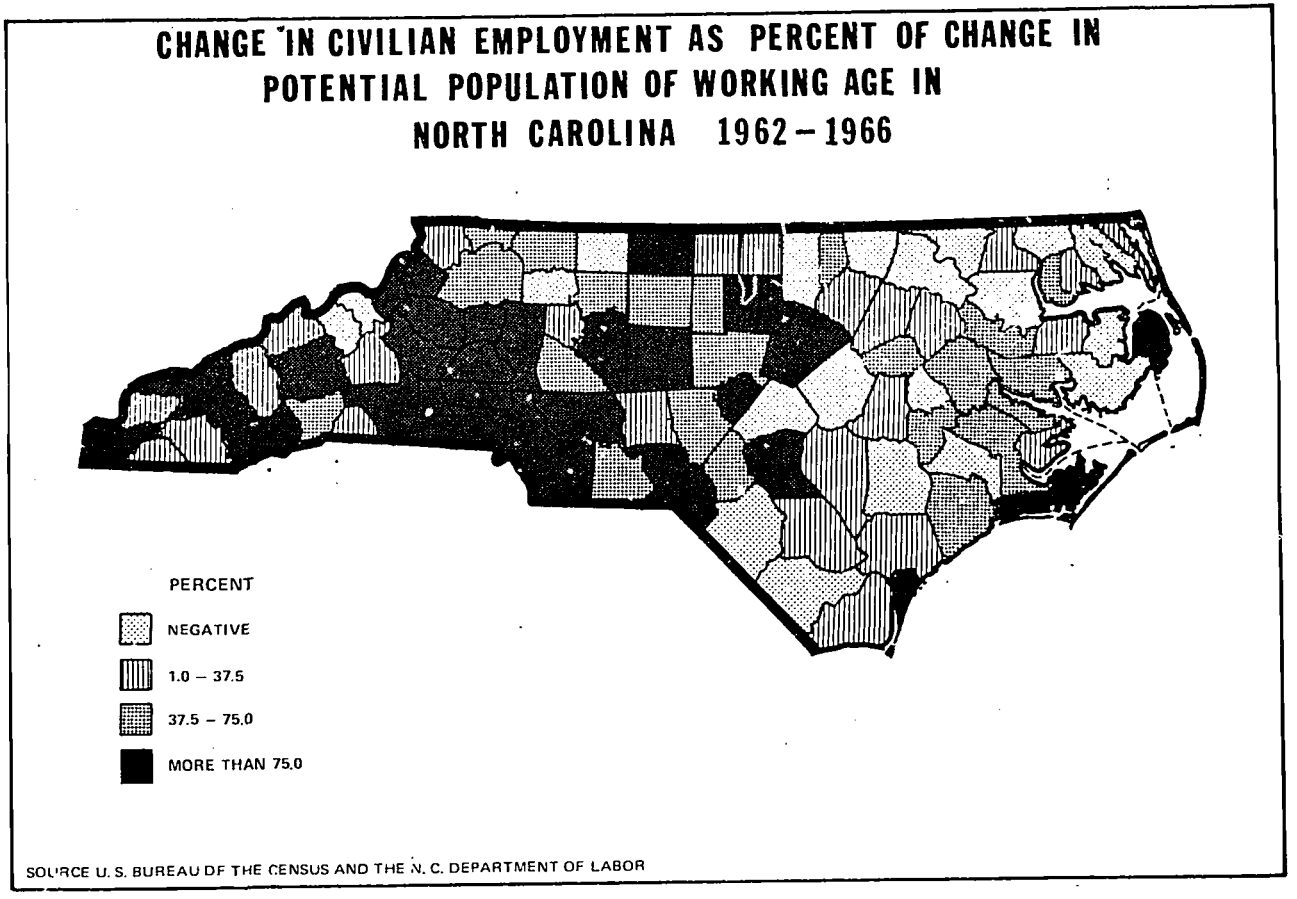
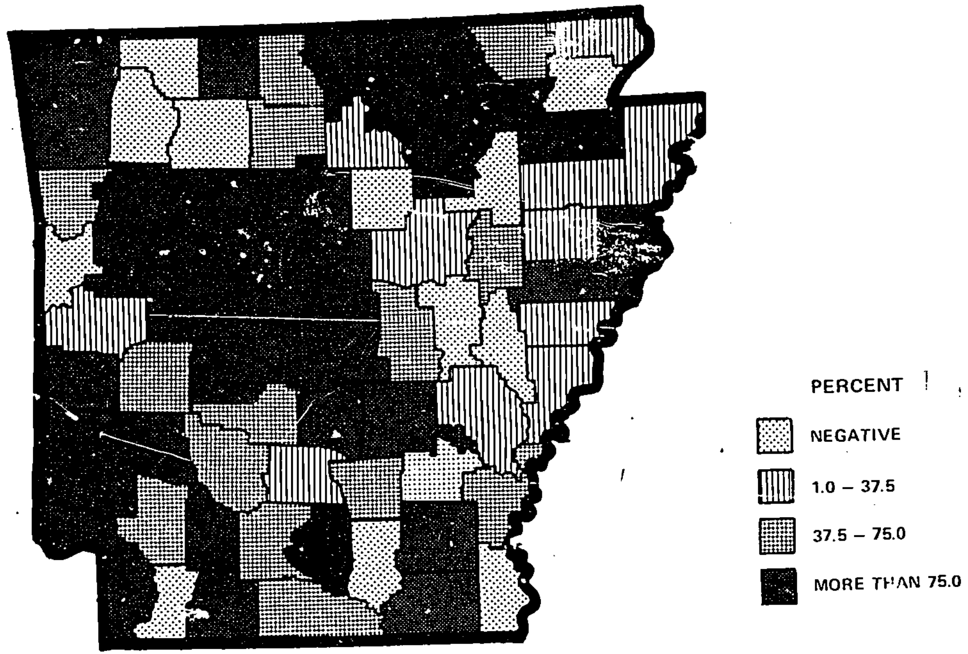

CHANGE IN CIVILIAN EMPLOYMENT AS PERCENT OF CHANGE IN POTENTIAL POPULATION OF WORKING AGE IN NORTH CAROLINA 1962 – 1966
PERCENT
NEGATIVE
1.0 – 37.5
37.5 – 75.0
MORE THAN 75.0
SOURCE U. S. BUREAU OF THE CENSUS AND THE N. C. DEPARTMENT OF LABOR

Figure 6

CHANGE IN CIVILIAN EMPLOYMENT AS PERCENT OF CHANGE IN POTENTIAL POPULATION OF WORKING AGE IN ARKANSAS 1962–1967



SOURCE U.S. BUREAU OF THE CENSUS AND ARKANSAS DEPARTMENT OF LABOR

Figure 7

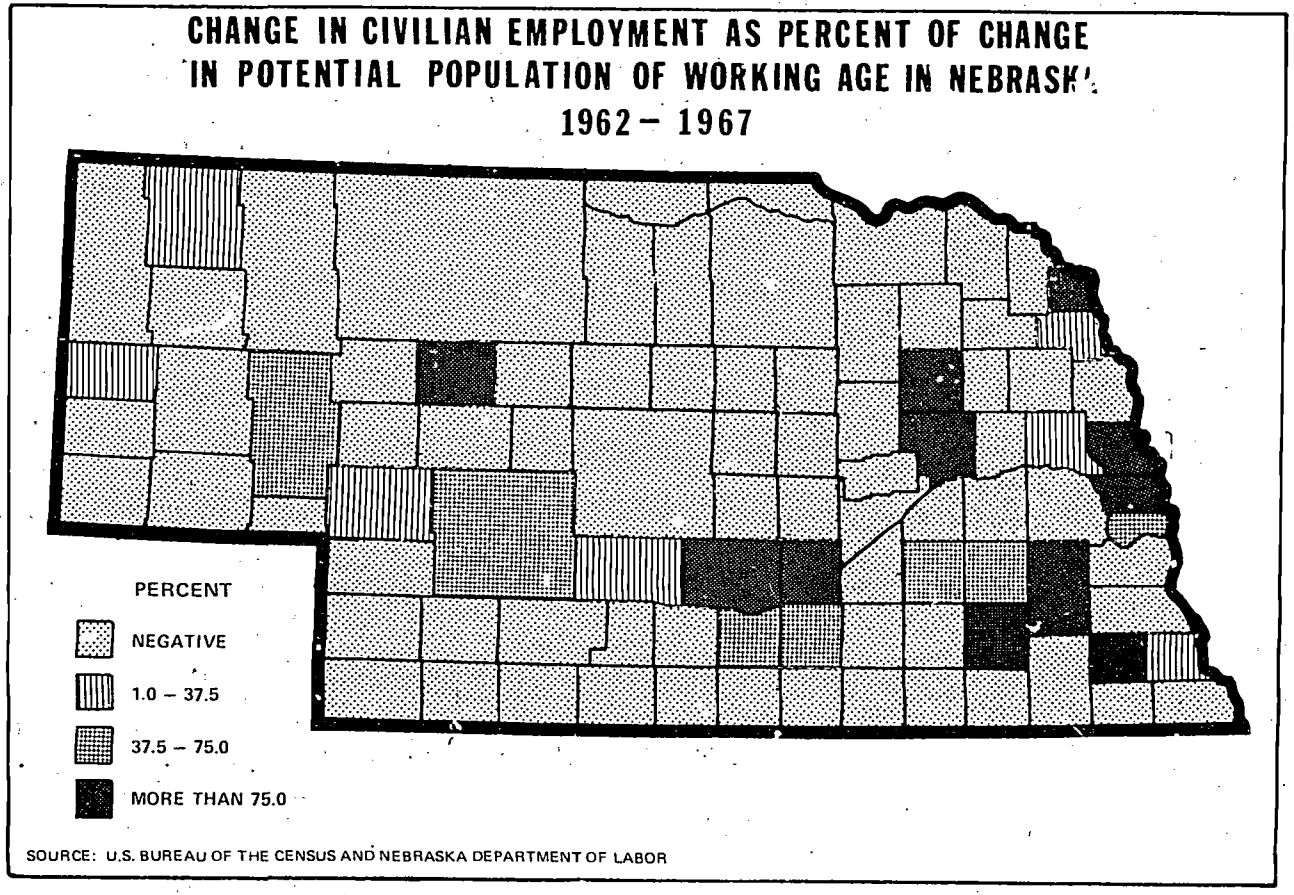

CHANGE IN CIVILIAN EMPLOYMENT AS PERCENT OF CHANGE
IN POTENTIAL POPULATION OF WORKING AGE IN NEBRASKA
1962 – 1967
PERCENT
NEGATIVE
1.0 – 37.5
37.5 – 75.0
MORE THAN 75.0
SOURCE: U.S. BUREAU OF THE CENSUS AND NEBRASKA DEPARTMENT OF LABOR

Figure 8

population. In 1968, 36 percent of the American people lived outside metropolitan areas. It should be emphasized that only one-seventh of the non-metropolitan residents live on farms. The vast majority live in small cities and towns, or in rural nonfarm residences. Most of the rural residents living in the eastern half of the United States are within fifty miles, approximately one hour's driving time, of a city of 25,000 or more population (Figure 9). In fact, it is estimated that between 85 and 90 percent of the total population of the eastern half of the United States lives within fifty miles of a city with 25,000 o more population. Therefore, most of the people in the eastern half of the United States who live outside the major metropolitan areas live within commuting distance of cities in which employment is expanding. These cities could serve effectively as centers for educational services, health services and other public services needed for the development and conservation of human resources.

Needed: A Plan for the Future

The geographic distribution of employment growth in the United States has changed dramatically during the last twenty years. The economic structure and the growth of rural areas will continue to be affected importantly by technological changes and by changes in market phenomena in the future. The effects will be manifested by changes in the industry-mix, occupational structure and in the spatial distribution of employment and population growth.

In our society, sufficient attention has not been given to the fact that production technology, industry-mix, occupational structure, and the pattern of growth of employment and population are interrelated. Neither has sufficient attention been given to the fact that the costs of providing public services for the people are related to the nature of the growth and distribution of population.

The structural changes that have taken place were largely made in an attempt to adjust to new production technology and, for the most part, do not represent changes that were planned. We have not endeavored to develop technology consistent with any particular pattern of social and economic organization. Instead, we have sought to develop technology to provide the most efficient production of commodities and

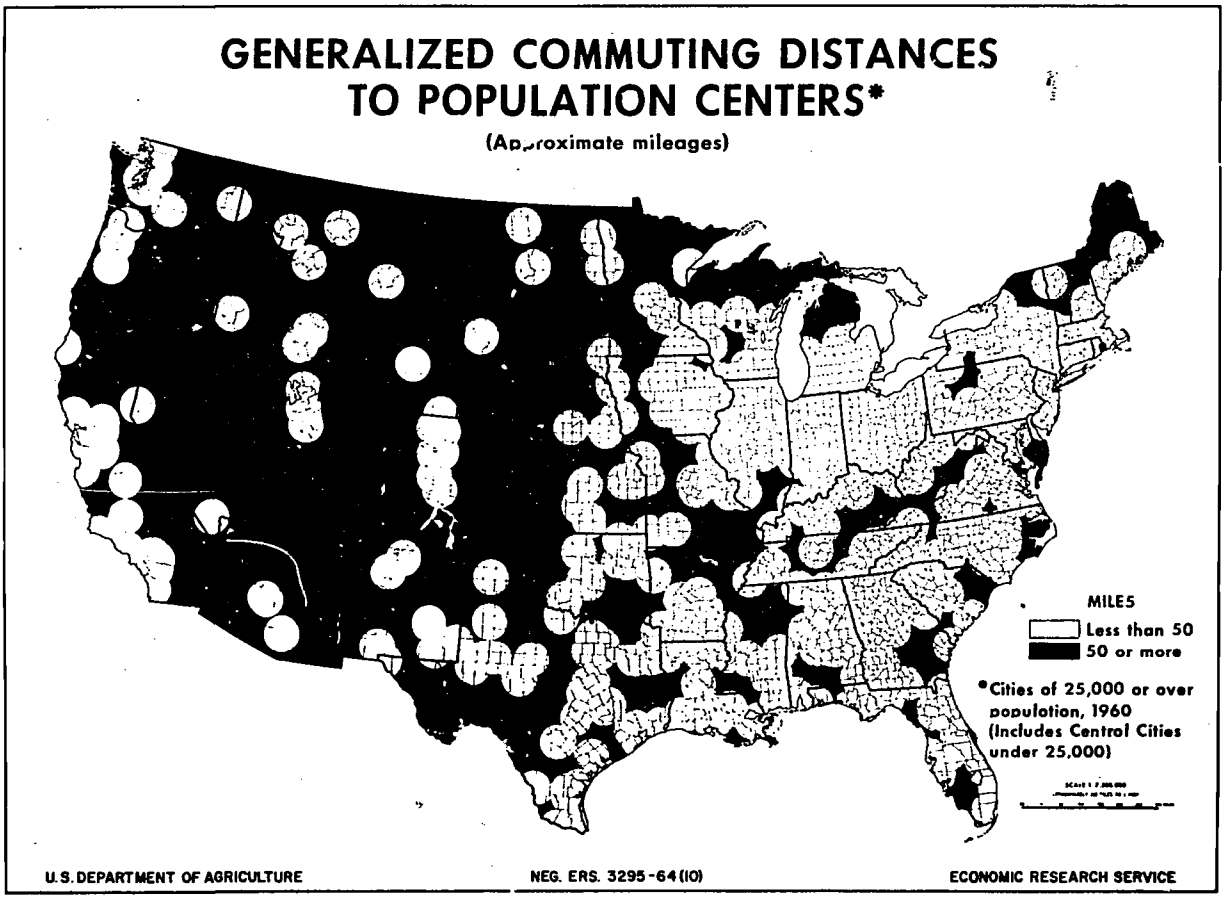

GENERALIZED COMMUTING DISTANCES
TO POPULATION CENTERS*
(Approximate mileages)
MILES
Less than 50
50 or more
*Cities of 25,000 or over population, 1960 (Includes Central Cities under 25,000)
U.S. DEPARTMENT OF AGRICULTURE
NEG. ERS. 3295-64(10)
ECONOMIC RESEARCH SERVICE

Figure 9

technology to provide the most efficient production of commodities and have left the pattern of economic and social organization to be determined indirectly by the state of production technology.

Perhaps it is time that we concerned ourselves with the kind of society that we desire for the future. What organization of society spatially and structurally would yield a reasonably efficient production of goods and services? How many cities does the nation need for efficient production of goods and services? What size should they be? Where would they be located? How should they be related in order to provide effective access to services? How can those living in the non-metropolitan areas obtain access to services that are comparable in quality to those provided metropolitan residents? Until these questions receive due consideration, we shall continue to treat the problems of social and economic organization as secondary to the problems of organization for the production of goods.

PROBLEMS AND ADVANTAGES OF RURAL LOCATIONS BY LABOR-INTENSIVE INDUSTRIES

Carl E. Annas[a]

Gentlemen, it is a pleasure for me to meet with you today to discuss industrial development in the Coastal Plains area of the two Carolinas, and to share with you some of our experiences in plant site selection. These experiences can easily be extended to and provide insight into problems of other rural areas of the Southeast.

The program topic, "Problems and Advantages of Locating in Rural Communities," is a timely one. We like small communities and as a matter of fact have found their advantages usually outweigh the problems encountered. This does not mean that they don't have problems -- any community has problems these days. But it has been a refreshing experience for us to grow with many of these communities, seeing them gain a measure of prosperity that only industrial payrolls can bring. We have shared their "growing pains" -- in matters such as water supply and waste treatment, in race relations, in work with the disadvantaged, in the advancement of educational, recreational and medical facilities, and in the development of cultural advantages.

Our experience in the Coastal Plains region goes back some 40 years, and while our operations in the area are not confined to what we would now call "rural communities," many were rural in the early days and through the years have developed into thriving towns and cities.

Most of our new plants erected in recent years are located in smaller towns. To be appreciated in any community, we realize we have

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[a]Area Manufacturing Executive, Burlington Industries, Inc.

to contribute over and beyond payrolls, in community service, in support of community programs, and in manpower for local leadership which makes for progress in communities large or small. Small communities afford unique opportunities for service in these areas.

Since most of you are involved to one degree or another in helping locate industry, it might be of interest to outline some of the things we look for in a community when considering it for a plant site.

First must be the availability of people in sufficient numbers to man the operation which we envision -- and enough potential for future expansion.

Finding trained but unemployed people is almost unheard of today, so we approach new plant locations with the assumption that we will largely train our own employees.

This emphasis on training in Burlington continues throughout the work experience of the employee, since equipment, product mixes, styles and machinery and work techniques change rapidly in the textile industry.

Generally, our employment needs for a new plant range from 100 to 400 persons. The ratio of male to female would average roughly 50-50, varying to some degree with the type of operation.

Once we have determined that a sufficient number of people are available within a 15- to 20-mile radius, we consider other aspects of the community.

For instance, does community leadership really want industry? This is a legitimate question and one that has considerable significance for us. Often a small group in a community may become enamored with the idea of getting new industry into a community, when the broader leadership may be less enthusiastic.

This underlying attitude shows up in many ways -- land prices suddenly sky-rocket; zoning laws rarely enforced are brought to bear; sentiment on the street suggests that the community is not ready to accept an industry, and in fact sees no reason for it.

Many times the industrial development group is so occupied with finding new industry that it forgets and forsakes industry the community might already have. It can be quite revealing for a community to tally up the new jobs created, the taxes paid, the capital spending put forth,

the community leadership provided by those industries which have been citizens for years.

Communities should make this sort of appraisal periodically and be sensitive to the needs of industry they now have.

It is Burlington policy to work with every facet of community life, not just the industrial development agent or perhaps a committee of the chamber of commerce. Therefore, full community receptiveness to new industry (and concern for the industry it already has) is important to us.

We have evoked some rather interesting comment to have a local industrial site salesman list existing industries and then ask him, point-blank, "What have you done for them lately?"

A third factor, related to some degree to the second, is the need for business-like, conscientious community leadership who play square, are honest and frank about the community's attractions -- and about its negative features as well.

An industry salesman who rides the prospect through the better residential neighborhood but skirts the area across the tracks is only fooling himself. Likewise, the salesman who does not give the community credit for anything positive and tries to tell you how badly it needs your payroll to help change the status quo is not being honest with us or the community.

We will learn all sides of the local story before we make a final decision, since our new plant site selection procedures call for several visits to a given community -- some unannounced and known only to ourselves. We also gather pertinent information about the community from a variety of sources -- state conservation and development boards, power companies, regional industrial development people and others outside the community. A final appraisal is usually a composite of these reports, coupled with eye-witness experience by Company representatives visiting the community.

Another factor -- available sites, either under option or with firm agreement on options at prices in line with other prevailing real estate prices in the community.

Utilities -- electricity, sewer and water service -- are basic needs. We prefer to obtain water and sewer service from legally

constituted utility bodies such as municipalities or districts, but in some types of operations where only domestic type water and sewer services are required, we will build our own water and waste treatment facilities.

In many instances we have built manufacturing plants outside corporate limits, and through agreement with the town, water and sewer lines have been extended to serve the plant. In each case, we have stressed the fact that we're interested in paying our way, either by financing the construction of the pipelines or agreeing to rates that will liquidate the cost of the lines over a given period.

We seek no preferential treatment in our search for plant sites. We normally prefer to erect our own buildings to our own specifications; we expect to pay a fair tax rate; we expect to bear our part of other expenses of doing business in the local community.

Realistic tax rates and property evaluation, zoning and planning ordinances are matters of interest to us. Of course, we want some assurance that we're locating in an area that will allow expansion without undue penalty through higher tax rates or other restrictions.

Other less tangible, but equally important factors include a constructive approach to race relations, support given to health, education and welfare programs at the local level, programs for youth, civic and church life in the community, cultural attractions and those other elements which mark the forward-looking, concerned community.

These intangible aspects of community life are of special importance to management personnel who might move their families into the community or, in their absence, seek residence in nearby communities which have more to offer.

By policy and practice we place considerable store by community relations, which requires participation by plant management in community affairs; so we look for avenues of service for them, and for the best possible educational, recreational, cultural environment for their families.

Related to these requirements is the need for suitable housing for the management team we would normally move into a community and for employees we might recruit. We have found that the lack of suitable

middle income housing, either rental or for sale, is an almost universal problem.

Solution to the housing problem poses a real challenge for groups such as yours. However, solutions are difficult to find. We prefer to stay out of the residential real estate business -- witnessed by the fact that we have disposed of thousands of company owned homes over the past several years. Yet, there remains the need for available houses, at reasonable prices, with local financing at reasonable rates, and reputable builders with whom to deal. Absence of available housing can be a most negative factor in any community seeking industry.

Good highway access is high on Burlington's plant location check-list. We expect that a large part of our work force in any new plant will live within a 15- to 20-mile radius rather than in the immediate plant environ. With today's good highway system, employees can travel the distance in the same time it would take to cross Raleigh -- and perhaps with less hazard. This is a distinct advantage of a rural plant location..

You note that emphasis is given to highway transportation. Rail requirements for new Burlington plants have all but disappeared from our criteria for plant sites. Why? Because practically all of our raw materials, goods in process and finished products travel by truck -- our own fleet or by commercial motor carrier.

Companies the size of Burlington depend more and more upon air for executive travel. For this reason, a good plant site near a commercial airport or usable local airstrip has much going for it.

The newest plant site chosen by Burlington -- chosen only last week as a matter of fact -- is in a Virginia community of less than 500 population which has no rail service at all, but which has excellent connecting highways and is within 40 to 45 minutes of commercial airports, which has a labor pool that turned out 2400 applicants in a two-day labor survey, and community leadership that has developed excellent public school facilities, has built a nine-hole golf course, clubhouse and swimming pool, and which has gone about attracting industry in a business-like, honest and effective way.

Our newest plant in Eastern North Carolina has just completed two full years of operation, now employs 300 persons, has a more than adequate labor pool to draw from and is located in a community providing the type of cooperation and support that has resulted in a most successful operation for us.

Negotiations with town leaders in the early stages of the plant's operation resulted in establishment of a human relations committee, the first in the history of the community. Racial harmony has prevailed. The plant employs in excess of 20 percent minorities and has one of the best production and employee turnover records in the Company. The plant manager, new to the community two years ago, now serves as president of the local chamber of commerce.

Our experience with the tier of counties that make up the Coastal Plains region has been a long one, dating back to 1929 when the seven-year-old Burlington Mills acquired what today is the Fayetteville Fabrics plant in Fayetteville, N. C. The plant stood idle at the time of acquisition; it was immediately renovated and put back into operation. We now employ more than 800 people at Fayetteville Fabrics and at its sister Lakedale Plant a few blocks away.

Today, Burlington operates 23 textile plants in the Coastal Plains region of North and South Carolina. These facilities employ some 11,300 persons and contribute approximately $65,000,000 annually in payroll to the various communities.

These operations have not been static by any means. Capital spending in the area for new and expanded plants has totaled $125,000,000 in the 10-year period, 1960-1969.

Seven of the 23 plants in the region have been built since 1960, creating almost 3,000 new jobs in the past decade.

It is interesting to note also that 11 of the 23 plants are located in communities of 5,000 or less population. The plants have an average of 25.8 percent minority employment, compared to Burlington's total 17.8 percent and the textile industry's 16 percent.

The textile industry in this and other regions has led all other industry in the rate of minority employment. Textiles have probably also done more than any other industry to provide jobs for displaced farm workers in the Coastal Plains.

Our employee turnover in the Coastal Plains region is considerably below that of plants in the Piedmont areas of the two Carolinas. Admittedly, in many of the heavily agricultural communities we have experienced the same difficulties other industry has met in finding sufficient numbers of applicants with basic skills and aptitudes required in the modern textile plant. But the employee's willingness to learn and his adaptation to the industrial production routine has offset much of that difficulty. This fact points up the need for continued emphasis on education and technical training for those people leaving the farm to join the industrial work force.

By and large, employees at our Coastal Plains plants are good employees, willing to give a good day's work for a good day's pay. Burlington plants have the reputation for work. We don't apologize for this; rather, we think the combination of employees dedicated to giving a good day's work, with a concern for efficiency and quality, operating modern machinery in a pleasant plant atmosphere at good wages and enjoying good benefits provides a competitive edge that makes possible our continued leadership in the textile industry.

In summary, Burlington's experience in the Coastal Plains region has been a happy one. With assistance from groups such as yours, intelligent planning and a good measure of local initiative, the region will continue to grow and prosper industrially.

THE IMPORTANCE OF INVOLVING THE BLACK COMMUNITY IN RURAL DEVELOPMENT EFFORTS

Felton J. Capel[a]

Before I comment on "The Importance of Involving the Black Community in Rural Development Efforts" here in North Carolina, I would like to analyze the status of black people in all of our southern states.

In 1960 the United States census showed that 60 percent of all blacks in America lived in the South. By 1968 estimates indicated that the 60 percent had decreased to 53 percent; since many blacks still left their native South in the belief that better opportunities existed elsewhere. Since 1940, 3.7 million southern blacks have migrated north in search of greener pastures, and they are still leaving at the rate of 200,000 a year.

Surveys show that a higher percentage of these migrating from our state were young people--some graduates from our high schools, technical institutes and colleges and universities, institutes established and financed by our tax dollars. This represents a tremendous loss to North Carolinians and to the South. Black communities lose their best potential citizens. The total community and state loses the skilled technicians because of limited opportunity.

The black youth of today are much better prepared than their forefathers to live and work in our society. They can make tremendous contributions; not only in the field of entertainment, athletics and education, but also in business, industry and other fields, if only the doors are open to them.

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[a]Regional Sales Manager, Presto Corporation, and Member, North Carolina Board of Conservation and Development.

In 1960 only 39 percent of the blacks in America completed high school. In 1966 this percentage was 50 percent and in 1968 it had moved up to 58 percent. These increases were made at a time when historical changes were being made in the social customs of our country. Changes were brought about as a result of the restlessness on the part of many people; which caused our nation to search its conscience and enact laws that were meant to have the effect of fulfilling the American dream for all people.

As a result of black and white Americans of good faith working together, the walls of the horrible institution of segregation which had kept parts of our country in a state of poverty and confusion for more than two hundred years began to crumble. This brought a period of high hopes, when poor people felt that things would get better; but instead of crossing over into the promised land of a better life, we find too many of our people still in the wilderness of hunger and despair.

Poverty is the enemy that we have not overcome, and so today we are still searching for answers to solve our most pressing problem. Despite our many achievements over the last two decades in education, space and technology, we have done very little toward eliminating poverty.

The education gap between whites and blacks is being closed, and blacks are demonstrating their eagerness and ability to handle effectively any position when given the opportunity. Blacks here in North Carolina, as in the rest of America, want the opportunity to move upward on the economic ladder.

If there is anything to be gained by the history written over the past two decades, it should be the total involvement of our people if our country is to prosper and survive. Our future success in America depends upon the freedom and dignity for all citizens. We must somehow find a way to get everyone involved. We must remove the look of hopelessness on the faces of too many of our citizens and replace it with the look of hope.

Black people today are much better prepared than they were two decades ago. But even with a better education, the opportunities are still too limited. Black people in this country are still three times as likely to live in poverty as their white brothers. We are twice as

likely to be unemployed and three times as likely to die in infancy or childbirth. The unemployment rate for unmarried teenaged blacks in this country is over 25 percent. In the South in 1967, the median family income for blacks was less than $4,000 a year, as compared with about $7,500 for whites.

As we look to the future, we see no bright hope of conditions getting better. The problems for rural blacks will not fade, but will increase in magnitude.

Projections by the United States Department of Agriculture indicate that in the next 15 years the need for farm labor in this country will decline by 45 percent, and in the South a large percentage of this farm labor is black. At the present, we have as many blacks living in rural areas with very limited or no opportunities for improvement in employment, housing or income as we have living in the large central cities of our country.

The responsible local leadership of our state has a challenging responsibility to begin involving all North Carolina citizens in industrial development. This should include the black leadership of the black community in all sections of our state; especially the rural areas. The doors to new frontiers of economic opportunity must be opened.

You may ask--Who benefits from increasing the earning power and economic status of the black community? The answer is--America will benefit, all of us. If in one year, the blacks alone, among all the poor, were brought above the poverty level, they would add 23.7 billion dollars to our gross national product.

Imagine, if you will, the untapped markets, the investment opportunities for both white and black that would exist.

You may ask if black leadership exists in rural communities? The answer is an unqualified "yes."

Another question could be--Why haven't black leaders been involved in most communities? The answer is simply because they have not been sought out. They have not been asked to serve. They have not been invited. For too long, we have had the so-called open door policy of boards, commissions and development groups; which mean nothing to the

citizens of the black community because they have been conditioned by years of having been excluded or made to feel unwelcome in situations of much lesser importance.

Now is the time for local industrial development teams to seek out the black leaders and say to them--"We want you, we need your help, we want your participation in the planning of industrial expansion in our community." Black leaders have every right to be invited, and can play a vital role in local development.

North Carolina, under our present administration, has initiated a policy on a state level that should serve as an example for all communities. I am very proud to be able to say today, that North Carolina, under Governor Scott and our Conservation and Development Director, Mr. Roy Sowers, has secured the services of the first black man to serve on our state industrial sales team, Mr. John Baker. John is doing a terrific job. His services as a member of the state industrial development team should serve as an example for communities and other government agencies throughout North Carolina.

Local sales development teams should have blacks helping to sell a prospective industrialist on what the total community has to offer.

Some of you may question whether or not the black leaders will serve. Again the answer is an unqualified "yes." Black leaders will welcome the opportunity to serve, but not in the capacity of window dressing. There must be direct involvement and meaningful participation.

The editors of Newsweek, in a recent article commenting on the increasing number of elected black public officials in this country said this, "The real issue is not just whether or not blacks can get elected, but whether they can be brought into full participation in our society."

You may ask what black leadership can contribute. What are the advantages in having black men serve on our local industrial development team? First of all, black leaders can encourage black people to become qualified so they may take advantage of job opportunities when they become available. Since most industries take 12 to 18 months to construct their manufacturing facility, this very important "lead time" can be used by the black leaders to get information to instructors in schools and to the black community about the required skills for career opportunity in the new industry. In the past, blacks have not been

informed as to the skills needed in order to gain employment, especially for career jobs. Usually they walk up on the day the plant opens and find that the only vacancy left is for a janitor, assistant truck driver, clean up man or common labor positions on the third shift. Black leaders directly involved on your local sales team can be informed of a new industry's hiring pattern. They will know when jobs will be available; also how and where to apply. This is valuable information for the black community, and coming from black leaders it can be of great help in securing good labor.

Who would know better or could do a better job of impressing a prospective industrialist on the feelings of the black community toward such things as: orientation toward shift operations, levels of skills, plus present and past relations between black and white workers in existing industry. Who would know better the whereabouts of higher skilled blacks who would probably return to the community if job opportunities existed.

Who would know better the feeling of the black community toward that all important water and sewer bond issue that must be voted on and could be the difference between a new firm locating or not locating in your community.

Black leaders involved in direct industrial project work are capable of, and should handle inquiries concerning the minority group.

What better example can any community set than that of white and black striving together to raise the economic standards of all its people.

If you are willing to meet these challenges--and your presence here today indicates a serious desire to do so--you will make an invaluable contribution to the industrial growth of our state and improve greatly the economic status of our people.

Your wise acts of direct involvement will have more long-range benefits for rural areas than any legislation, guidelines, or outside harassment.

THE NATURE OF THE FOOD PROCESSING INDUSTRY AND THE PROBLEMS AND ADVANTAGES OF RURAL LOCATIONS

Austin J. Hayden[a]

It is indeed a pleasure to join you in your two-day session "Rural Development." When Leigh Hammond called me on this matter, I was more than pleased to come since this is a subject close to my heart.

To set the stage I will first briefly review the nature of our industry and our company. Next I will review the needs for proper plant site selection and, finally, list advantages and disadvantages of rural sites.

In our company the major products are grown on farms of 80 to 160 acres as established originally by the Homestead Act. We harvest annually approximately one-quarter million acres of vegetables primarily over a 90-day period. This product is delivered to 28 plants across the United States, Canada, and Mexico. This covers mainly peas, corn, asparagus, and snap beans. In addition, of course, on a much smaller scale are the various cole crops, mushrooms, carrots, sweet potatoes, lima beans, and most recently rice and navy beans.

Approximately 100,000 acres of this land is directly leased, whereby we carry out all of the agricultural activities on that land. The remaining acreage is under signed contract agreements with selected vegetable growers to use large-scale, modern equipment most efficiently and to provide a continuous flow of product to our highly automated plants. Usually we agree to harvest all of these acres, since it is

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[a]Vice President of Corporate Development, The Green Giant Company.

necessary to utilize the latest expensive harvesting equipment and to maintain extremely close control over delivery to the processing plant.

In these contracts the price is established before planting based on maturity levels, and the company agrees to receive the entire crop at that price. In the case of peas and corn, if the crop is not harvested within a 6-hour period of the life cycle of the plant, less-than-maximum profits will result. The loss as a result of timing of harvest can vary as much as $100 an acre per day; and, of course, if the product is left in the field, many times this amount can be lost, especially if it causes us to go off the shelf after our overhead and advertising have already been committed.

In addition to pinpoint harvesting, most of these products should be processed within three hours of harvest. At the rate of 3,000 acres per day during the heart of the season on a 24-hour basis, it can be seen that there is a real need for razor-thin scheduling and the closest coordination of raw product deliveries between and among all locations.

The major purpose of all of this pinpoint scheduling and harvesting is to obtain the highest percent brand-name products in the package and to make full utilization of the equipment, the facilities, and the personnel on the payroll. Processing buildings and agricultural equipment equalling the value of the farmland on which the crop is grown are not unusual. Mobile pea combines alone cost from $16,000 to $25,000 a unit and generally harvest about 150 acres per year. Quite often as much as $150,000 worth of agricultural harvesting equipment is tied up in a given field. With this type of overhead, there is very little room for variances of opinions or serious changes in plans. There must be a detailed, agreed-upon plan that is completely coordinated at all levels, since without it either quality or profits will not be up to performance.

Behind our entire scheduling program is the heat-unit cropping system originally designed and developed by our company. Each and every vegetable that we handle is planted and harvested through the detailed utilization of this system. Cultivation, insect control, and other activities concerning the crop are also tied into it. Calendars are only used for developing plans. After that they are thrown away, and we work with the variables of the season.

Rainfall, of course, is not precisely predictable except that on the average in most of our Midwestern areas one to two heavy rains a week can be expected during the harvesting and planting seasons. Whenever this occurs, alterations in schedules must be made at all other locations; and crop varietal substitutions also are required to make sure that the total annual requirements are met and the facilities are fully utilized during the full length of the season.

To establish and carry out this program, accuracy of climatological data within 1^{o} is most essential, since 1^{o} can make a difference of three days at harvest.

Weather forecasts including 5-day, 3-day, daily, and 6-hour forecasts plus special radar forecasts are essential to maximizing adherence to preplanned schedules. A network of 300 two-way mobile radios and base stations does much to assist in following weather patterns, as well as continuously carrying out changing plans.

Even with the heat-unit system and all of its ramifications, we still check closely during the last several days of maturity progression to determine the final 6-hour period in which the crop is to be harvested, because of soil type variations, weather conditions, and field areas. This information is then placed in summaries including normal product maturity progressions with the latest weather forecasts to determine the final hour of harvest. Once the product is harvested and arrives at the designated plant, depending upon its maturity or other characteristics, it is still subdivided into the various items for profit maximization.

Harvesting machines of adequate size require full utilization -- not just utilization for a part of the season or on any given small unit. Full-season utilization and full-season professional maintenance are required. Full utilization of harvesting equipment and power equipment, of course, is further enhanced through the tying together of seasons with diverse maturities by going either north and south, east and west, or up and down hills.

In the matter of insect and weed control, the closest control of safety and reliability, as well as costs, is essential. This means a further step in performing a function that might have been done with a knapsack or a hoe at one time. As an example, the minimum economical

contract for a $40,000 helicopter today is 25,000 acres. This requires the closest in coordination of the various acreages, the personnel, and the weather forecasts to fully utilize that piece of equipment.

Full utilization of the crop at the optimum maturity requires the utmost coordination and timing. Complete computerization of this activity will be essential in the future. Economics will not allow us to produce anything but the highest quality food, nor will we be allowed to produce anything less than the maximum potential for every plant and animal. Much of the unique price advantage of new products and old products today comes from specialized seed strains, improved agricultural equipment, buildings, and patented processes.

In the future the link from the consumer to the producer will be shortened and direct. In other words, many food items in effect will be custom grown, processed, packaged, and shipped to specific markets at specific times.

We will not consider a break in this overall complete production cycle any more than an auto manufacturer will consider busting up his lines of production today. This closely coupled coordination will be accomplished through predetermined contracts, cooperative ventures, or full integration.

To provide greater precision in quality levels and supply, as well as to reduce freight, national and international organizations will grow and process crops in several areas. This will tend to minimize risk through offsets in weather patterns. When environmental factors can be controlled, certainly there will be a dramatic increase. Irrigation on light soils where water is available is an obvious application. This allows for the critical freedom of planting and harvest time for a continuous flow, as well as the timely feeding of plant nutrients and the absolute control over moisture.

In our mushroom industry complete environmental control to within a degree of temperature and a percentage point of bed moisture, together with controlled humidity and air movement plus air filtration to remove particles as small as two microns, provides a continuous flow of the highest quality product almost tailormade.

In our nation today, food manufacturing is big business. The food manufacturing industry is the largest segment of all American industry -- in excess of $100 billion annually.

Canned foods for human consumption have increased from 553 million cases in 1950 to approximately 800 million cases today. Frozen foods have increased from 1/2 billion pounds in 1940 to almost 18 billion pounds today.

It may come as a surprise to many of you, however, that the path of our industry is anything but an easy road. Rather than a mad dash toward opening up the cornucopia of plenty to a starving world or an outlet for scientific panaceas, we must fight for our lives to pick up a diminishing share of the disposable income of a very selective, sophisticated, independent, consuming public with ever-increasing living standards.

In recent years all of us have watched the percentage of disposable income spent for food diminish from 25 percent to 20 percent and now to 18 percent. We have watched food consumption drop from 1,620 pounds per capita in 1910 to 1,450 pounds per capita fifty years later. We have watched calorie consumption drop from 3,520 to 3,150 during the same period. Less demanding physical activities, improved diets, and preference for alternative areas of discretionary expenditures have developed these trends that will certainly continue.

Because of these trends the Stanford Research Institute projects that the sectors of agriculture, fisheries, and forestry will expand only at the rate of 1.4 percent annually versus a population growth of 1.7 percent and a gross national product increase of 3.5 percent per year. The processed food segment of agriculture, however, because of product innovations will continue as in the recent past at 3.5 percent. This is about 2.5 times the rate of the rest of the agricultural, fisheries, and forestry area.

The continuance of the new product innovations is expected to accelerate. In Lincoln's time there were about 100 products on the grocer's shelves. A few decades ago, there were about 1,000. Today the average supermarket has some 8,000 food items. Two-thirds of the items on the shelf today have been developed or improved in the last ten years. The field is moving so fast that the head of a large manufacturing concern recently stated that a product has either the word "new" on the

label or 7 cents off. New food products at the rate of 1,000 per year are now reaching the store shelves and the freezer cabinets.

During the next ten years, we will see the beginning of mass production of complete food fabrication through the structural modifications of basic food substances. Semi-synthetic meats are a good example. Aroma, appearance, flavor, and texture will be modified by the manufacturing.

The use of product or container-weight-reducing techniques to allow partial processing of food raw material in the growing area with final processing at the point of distribution will assist areas of production such as yours at the greatest distance from the large population centers.

The area of cost reduction, reliability of supply, and quality improvement will require the closest coordination from the development of seed to the product on the shelf in the case of crops and from the gene to the freezer cabinet in the case of meats. We are most likely destined to have specialized basic agricultural materials for direct and indirect consumption. Under the present economic structure with limited customers and relatively unlimited supplies of almost unthinkable needs, we as food processors are inevitably guided by the power in the market place -- power wielded by consumers, you and I, exercising freedom of choice, reflected back through market channels.

As the factors to be considered in plant sites, I might list some of the following areas of consideration.

(1) Absolute freight cost and rate structures to the intended market -- You certainly have an advantage to the south and the southeast. However, you are at a disadvantage to the concentrated northern and western markets.

(2) Raw product cost delivered -- In certain areas where land values are low, yields are high, and distance to plants is reasonable, you could have a competitive advantage for crops specially suited to this given area.

(3) Raw product quality levels -- Because of your longer season and the relatively high humidity in this area, certain disease and insect factors are significant. The cost and the reliability of controlling

these problems certainly challenge product quality levels. This is one disadvantage you have in comparison to the northern climates.

(4) Raw product recovery -- Each crop has its characteristic advantage in raw product recovery. Certainly the smoother, the more symmetrical, and the more normal the individual fruits and immature seeds are, the greater chance there is for improved product recovery. Also, under normal humidity, crop recovery is better than under excessive rainfall conditions.

(5) Consumer demands -- Make sure that the plant is properly sized for the product or products that will be required in the reasonably immediate future, since it is pretty hard today to predict what will be needed very far out in the future with the many substitutions for foods that are now coming up.

(6) Current economic conditions -- At least in the short term, your labor rates in this area are relatively lower than in most areas of the country. In addition, I believe that your tax rates and other costs of living are less than in many areas. These are at least temporary advantages.

(7) Population patterns and migration trends -- Certainly if you are going to invest in brick and mortar and equipment for a specific product, you must find out who your consumers are and where they will be located some years hence. If it is a specific ethnic group at a great distance, consideration should be given to a plant site not in this area but in an area adjacent to that group. If it is to feed a population that is moving in this direction, certainly this factor is to your advantage.

(8) Product mix and its effect on overhead costs -- An attempt should be made to match as many products as possible at an appropriate volume whereby they are complementary and provide maximum utilization of equipment, people, money, and time. This applies both to the agricultural operation and the plant operation.

(9) Labor -- The availability of adequate labor to supply your varying needs for perishable crops is the key toward the success of an operation such as the vegetable operation. Costs of housing, transportation, and payment for nonworking hours can be a serious disadvantage.

As I understand it, your labor supply is good, and the skills are available for this type of business.

(10) Risks of weather and plant site disaster -- Certainly if a person has only one plant and a tornado takes that plant out after you have contracted for the crop, as well as for delivery to the customer, it could provide an economic disaster for the venture. In this area you do have heavy rainfall patterns. Tornado belts and hail belts can be pretty well defined ahead of time, and this should most certainly be studied.

(11) Availability of water, utilities, and waste disposal -- There is no doubt about your obtaining the first two items -- water and utilities -- at a reasonable cost. However, waste disposal could be a problem except where you are adjacent to extremely sandy soils. This can be a substantial cost if you are not located in such an area.

(12) Size of minimum economic unit -- In order to assimilate a modern, well-managed working unit, whether it be a plant organization or an agricultural organization, you must have size in order to attract the best people -- people who see a future and who can manage the operation with specialists who assist in their learned areas. It must be large enough so that a logical work day and work week can soon be developed with changing shifts of key people.

(13) Availability of complementary industries -- Certainly a plant site in which utilities, equipment, and seasonal personnel, as well as specialized personnel, can be used in conjunction with another industry provides an extremely advantageous situation for development of a more economic year-round operation.

(14) Taxes -- Long-term advantageous tax rates for both the industry and the individuals working in this industry are essential in order to be competitive with other areas of the country where many tax incentives are provided to attract industries, especially in rural areas.

(15) Availability of storage facilities -- Over and beyond needed facilities that are fully utilized during the entire year, there is the need for temporary storage to handle peak loads because of the nature of the variable supply of vegetables due to varying weather patterns.

(16) Degree of urban encroachment -- Since there is a substantial investment in the modern processing plant and there is the need for

expansion and the placement of service facilities, as well as environmental insulation from population centers, you must make certain that the closest urban area cannot close in on your site at a later date. For instance, I think we have plenty of examples of housing projects near major airports to note the unusual situation that develops through lawsuits by persons who position themselves near runways long after the airport has been in operation.

These are but a few of the areas that you should consider in plant site selection, and certainly all of them cannot be fulfilled completely. For instance, if it were freight alone, we would produce most of our vegetables in the downtown areas of the great metropolises. It is obvious that this is not practical since many other factors force us into the mountains of the West, the deserts of Idaho, the plains of the Midwest, and, yes, I would hope to the plains and mountains of North Carolina.

As to type of products, the slides I will present later show that there are many areas in the specialized and higher standard foods that are expanding rapidly whereas much of the commodity-type product is leveling off or going down. These specialized products should be given the highest priority.

Obviously, you have an advantage in this area for the so-called "southern vegetables" because of the climate for those vegetables, as well as the proximity to the market. Sweet potatoes also are a rapidly developing, specialized product that fits in well with many of the other vegetables on a complementary basis. I would question very much corn and green peas, since areas to the north are much more economical and much less subject to insects and disease. High elevations on somewhat level land should give you the most advantage. Because of this disease and insect factor, early season crops should be favored in the low southern areas. Later crops possibly can be concentrated at the higher, cooler elevations.

I do not want to appear overenthusiastic; on the other hand, I would like to present you with a balanced picture.

(1) There are plenty of processed vegetables of a commodity nature in this country today. There are new plants for sale at a substantial discount in almost every area of the country because of current

overproduction. Only those areas with the least cost and the highest quality will win.

(2) The market must be assured long before a plant is even designed. The surest route for reliability is to be tied into a national label. This will require the highest quality with a minimum of product falling below top quality levels. This requires heavy promotion and a very tightly controlled organization from the farm to the grocery store.

(3) Consumption per capita on most commodity items is holding or going down. It is the new product area or the products from specialized crops that hold the key to future success. Therefore, these should be given the highest priority.

(4) If old standard-commodity-type items are to be produced, they must be mass produced with the highest possible volume not only of that product but of complementary products for full utilization of buildings, people, equipment, and money.

(5) Concentrate on products that can be sold in the local area first. These can be lower value products. If you must sell to distant areas, concentrate on high-value products for those areas.

(6) Create understanding as to the ultimate impact of the processing industry on your area. The degree of money returned to the farmer versus the money returned to the total community depends very much upon the upgrading of the product from the farm to the customer. Many times the product that returns the least as a percentage of the sales dollars to the farmer returns by far the most to the local community. This is the trend in our modern society where packaging innovation and sophisticated products are demanded by our higher standard of living. Remember that every dollar that is added to the local community is multiplied several times with the added services that are demanded by the workers and the industrial complex itself.

(7) Finally, obtain the best brains you can find to initiate a given pilot activity on the smallest possible scale until you determine the true potential of a given product or a given line in the marketplace. In addition, take time to feel out the processing techniques, the areas, and the skills of the people in your agricultural areas, as well as the skills of the management and the personnel involved in your processing operations.

The consumers are crying for something new. It is something new that they are willing to pay a price for. Processing facilities and agricultural production must follow -- not lead -- that demand for the product.

Once again, I would like to advise you to search the new product area -- the commodity areas are saturated.

Now that we have determined the product and the site requirements, I would like to state some of the problems of locating in a rural community.

(1) It is sometimes difficult to draw key executives to small communities.

(2) A large plant with many employees in a small town can create many political problems.

(3) The demand for utilities and waste disposal can cause a severe financial strain on the smaller town.

(4) Finally, quick major expansion plays havoc with the increased financing required for churches and schools.

The advantages of the rural community for our type of industry far outweigh the problems.

(1) Minimum costs are developed when you are closest to the bulk supply because the product is concentrated.

(2) In the handling of perishable products, uncongested roads and short distances to processing plants are essential. This can only be made available in a small community.

(3) Employees from the small communities and the farms are much more loyal and skilled than those from urban areas.

(4) Seasonal employees closer to the operation are much more flexible in fitting into the variable schedule needed to handle a product so heavily dependent on the weather.

(5) It is essential that good communications between the grower and the company are continuously maintained. Close proximity in a rural community makes this possible.

(6) Cost of equipment rental is usually much less in rural communities due to lower labor rates, a minimum of regulations and complementary usage with the local farmers.

(7) The most practical method of disposing of seasonal waste water is through lagoons or sprinkler irrigation. This requires a large acreage. Land in rural areas is much less costly than in urban areas.

(8) Saleable waste material such as silage must be close to the users since it is a low-value bulk product.

(9) If there are potential pollution problems--whether it involves air, water, or other problems--you can be more assured of a minimum urban encroachment in a smaller community.

(10) Finally, and very importantly, employees can lead a more normal life in a rural area. They spend a minimum amount of time traveling to and from work and quite often they can eat all their meals at home. This saves money as well as creating high morale among the organization.

In summary, I would say that in the type of business in which we are engaged, the rural location is essential. In fact, if urban encroachment takes place, eventually the plant must be closed.

PROBLEMS AND ADVANTAGES OF RURAL LOCATIONS OF HIGH TECHNOLOGY INDUSTRIES*

P. R. Milroy[a]

As a beginning point for my discussion, let me remind you that Hendersonville, the city in which the plant which I manage is located, has a population of 7,000, and has long been known as a center of tourism. Notwithstanding its rural setting, it has many cosmopolitan characteristics.

The plant in Hendersonville is the headquarters and the only GE plant to design and manufacture lighting fixtures and components for worldwide markets. Last year we shipped products to 76 foreign lands and to every state in our nation. We have approximately 240 professional people who devote their time to engineering and design work, marketing strategies, and sales efforts.

What is it that we look for at General Electric or in any other corporation or business as we seek a site to locate a plant? Very quickly let us review these business climate factors.

First, we seek honest and efficient government supported by alert and well-informed voters who have the interest of the entire community at heart.

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*Editor's note: The presentation which Mr. Milroy made at the conference involved the use of numerous visual aids which could not be reproduced in the conference proceedings. Therefore, this paper is a highly condensed version of his original statement.

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Second, we look for fair taxes for both business and individuals without restrictive regulations or discriminatory financial burdens.

We look for conscientious, impartial law enforcement which protects the rights of all citizens both corporate and private.

Next, we seek qualified and responsive people to fill employment needs. Obviously we need outstanding schools to help people develop themselves both for job opportunities and personal progress and to provide for an excellent basic education for employees' families.

Next, we want good community facilities, such as banks, stores, utilities, transportation, hospitals, hotels, health facilities and commercial services.

We look for adequate zoning to protect the investment people make in their homes, increase their land values and to improve the quality of the industrial sites.

Next we look for a social and cultural atmosphere in which people enjoy living and working, including schools, churches, libraries, theaters, a responsible press and healthful recreational resources.

We look, on the part of employers in the community, for a serious-minded assumption of their responsibilities as business citizens as evidenced by consistently good employee relations and courageous leadership in both civic and political affairs.

In the light of our primary concern, which is an environment that meets the needs of a highly technical industry, let's look at some of the problems in our area.

Here are the problems that we find technically oriented people are expressing as they speak to us of moving into this area from another part of the country or as we speak to employees about their own development to assume more responsible jobs.

First, there was a distinct lack of technical education facilities.

We are beginning to attack this problem. Last year, for example, many of us participated in the promotion of a 6 million dollar bond election which will provide for us a technical institute in our county, upgraded city schools, upgraded county schools and an improved hospital facility. So we are developing a new look at technical education which will help the high school student as he crosses the threshold of high school graduation and decides that he can enter technical work.

We also lack advanced study opportunities for scientists and engineers.

We must also register our concern over a lack of professional minority members; and here I refer to the Negro and the Jew in engineering and management positions. We simply do not have the properly trained or available people in those minority groups. Yet our company is dedicated to providing equal employment opportunities to all.

Now another problem you're faced with in a rural environment for highly technical people is a lack of association with other technical people outside of your own company. I know that this has been quite a problem for many of our engineers and scientists who need the fresh viewpoint and discussions which are provided by association with others in their field.

Perhaps another problem is the lack of entertainment. Although we have the Brevard Music Festival, the Flat Rock Playhouse, and other forms of entertainment, we do need a wider variety of opportunity for cultural and social programs.

We also face limited shopping facilities. Meeting year-round needs... as contrasted with peak demands in the tourist season...is a serious problem to our merchants.

I am an optimist, and even when I recognize the disadvantages of an area, I do it with something less than a "doomsday" philosophy.

We all ought to search for the problem areas and recognize them... and then work on an evolutionary basis to remove those disadvantages.

There's evidence of such concerted teamwork in our city, county and area. Industry and other community leaders have locked elbows to tackle many problems. Let me just briefly tell you about several milestones of progress we've witnessed and been a party to over the past 15 years.

There were no technical institutions in our area, and almost no place from which to draw technically trained people. We trained our own, and "imported" highly skilled people from other GE locations. We initiated our own apprentice training program for tool and die makers and for craftsmen. But we did more: we helped initiate a technical school in Asheville. And today, our community has worked and taxed itself to provide for a new technical institute right in Hendersonville.

We had no degree-granting college within 30 miles of Hendersonville. Now, we have an arm of the University of North Carolina at Asheville.

Schools in our city and county need physical updating and enlargement. These improvements have been provided for in a recent bond referendum.

Our hospital facilities have been in need of upgrading. This, too, will soon be accomplished.

We recognized early the need to work with both races to help bring about integration within the schools. As a result the system is working smoothly. And we are today seeking better dialogue and understanding between the blacks and whites throughout the county.

When we came to Henderson County, there was no county fire protection. Industry has helped, along with others, in establishing nine new volunteer squads.

And we've worked with the Chamber of Commerce on many projects including better highway systems in our area.

Working together, we can turn disadvantages to the plus side of our business climate ledger.

Now that I have given you some of the major problems which confront a highly technical industry and shared some progress we've made, let me give you in capsule form a recapitulation of the advantages of our particular rural environment.

First, there is the warmth of the people. They are friendly by nature, willing and cooperative, and very pleasant to associate with. This may not strike a native so much as it does those of us who have seen labor climates at the other end of the scale. It surely makes an impression on our customer visitors. As such groups tour our factory, employees show pride in their work and actually enjoy talking to customers to explain their jobs and the importance of their work.

Second, the work habits of employees here in a rural environment have to be a very high plus for us and I think this is so in almost any agricultural community. You will find a contrast to this in some of the larger, industrial locations where you see employees working against standards in a very lax form. They know what the schedule is and they aren't about to put forth any extra effort to get the job done. We see

just the opposite in the rural environment. The work habits of the people are strongly in favor of doing as much as they can when there is a challenge put before them. I have seen phenomenal manufacturing results come from lines that would be considerably above the work achievement standard when the employees knew that a contract was in the balance or that there were penalties involved for late shipment.

Then another advantage of our kind of area is the opportunity to participate. No matter what your interests are you will find a willingness on the part of local people to accept you, and to allow you to work with them to solve mutual problems which all of us in the community face.

The link with the community is indeed strong. We encourage it. For instance, our county's representative to the State Legislature is a financial specialist at GE. And another of our employees is county political party chairman. Our people are associated with virtually every organization in the county...on school boards and in many other volunteer and elected posts. We find that local citizens recognize our problems, and we c n depend on positive action and real support from the electorate.

These are the major pluses and minuses as I see them. Of course, there are others which could be applied to our situation or to one which others may be facing.

As you obviously know, not every rural environment can provide adequate business, social, and generally well-balanced opportunities. But there is a challenge which says "it can be done." A tough assignment to be sure, but we can work every day to improve the situation.

PROBLEMS AND ADVANTAGES OF RURAL LABOR FOR INDUSTRIAL OPERATIONS

A. Wade Martin[a]

It is a privilege to participate in a conference examining one of the really great issues facing our nation. Along with other participants I, too, believe that many of the major problems facing our nation today can be traced to the lack of development of rural America. Dr. Bishop tells us of rural conditions as they exist and pinpoints the need for development. The Fantus Company, by their scientific, logical approach to plant location, can enable us to compare our region with other areas of America and the world. Perhaps the only resource I can bring to the conference is the experience of working with large numbers of industrial prospects looking at our region -- and living with many of the people problems of these industries as they go through their plant start-up.

In rural development, I would be remiss not to indicate that many factors should be present for development to occur. These things include such basics as healthy growth attitudes on the part of community leaders, adequate industrial sites that are fairly priced, accurate information on the community and area, labor availability, and wage and practices information. Other basics include a strategy to get prospects to an area. The most basic of all considerations is, however, looking after what you have. Sound long-range development is built on the principle of a satisfied customer already located in the area who knows his industrial enterprise is appreciated by the community concerned with having a good, healthy business climate. One dissatisfied customer can more

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[a]Executive Director, State of South Carolina Committee for Technical Education.

than offset all the good which can be accomplished by development groups. Too, expansion of existing industry holds economic promise.

For the purpose of these remarks, I will refer to rural export base development; by that, I mean creating the basic income flow into a community and still further limiting to manufacturing and its support services, agriculture, and tourism. In a rural area, however, processing or manufacturing industrial development appears to offer the quickest and easiest path for development.

I suppose it must be said that any rural area can be industrialized because, after all, industrialization itself dates back only a few centuries. All industrial, urban societies were once rural.

The British, at the beginning of the Industrial Revolution, are credited with saying that "It takes three generations to industrialize a community." One reason is the attitudes and disciplines of the labor force. Rural people, who have not become accustomed to the discipline of regular hours of work, must be given time or a reason to change their habits. At times, even when they have learned a better way of life economically, they are often accustomed to working only as much as necessary to buy the basic requirements of life. Another reason for the time required to industrialize an area is the necessity of building a reservoir of skilled and semiskilled people. High skilled plants find it difficult to locate in an area where all of their manpower would be unskilled.

During my years in the Carolinas, I have been privileged to work with perhaps more than 2,000 industrialists who were considering investment of risk capital that would generate new jobs and economic promise in our economically backward region. In addition, we have assumed a responsibility of the start-up problems of recruiting and training a labor force for almost 1,000 new industries. This includes big corporations and little corporations with all the shades of bigness or smallness between. In working with investors, many times I have watched industrial prospects turn from a declining area and locate in urban area. Why do they do this and what can be done to reverse the trend? There is no easy answer. I do not recall ever working with two industrial prospects with identical problems. Some may have similar needs, but they invariably have different levels of support they can provide

for a new operation. Because of these differences, we can safely conclude that most industrial plant locations are far from an exact science. Admittedly, there are many factors which influence the decision of investment capital, but manpower characteristics and the community environment are the most important.

The education of manpower necessary to reduce the risk for investment capital is a vast and complicated subject. It is complicated because it represents preparation for many types of industries and it also requires development of many levels of skills. Properly planned, it recognizes the total labor force, from top management to the training of operators. Properly done, it represents on-the-job training, institutional education, out-of-area recruiting and the development of new attitudes in a community. States need the flexibility to provide these services if education is to aid economic development.

If we make the assumption that it is possible to meet all the criteria for industrialization except for the human factors, then we should look at some of the human problems of rural industrialization. It would be impossible to list all the considerations, but let's look at the more common reasons investors give for not putting industries in rural areas. Quickly they could be put into two categories: (1) the unknown characteristics of the labor force, and/or (2) the absence of "livability" which attracts the highly technical in-migrants necessary.

Many statistics on the composition of the labor force are available for the urban centers, but few accurate statistics can be found for the rural areas. Industrialists are frequently concerned at the prospects of staffing a plant with unskilled persons who have had no industrial experience or with large numbers of unemployed people. Absenteeism and the turnover rate are reportedly higher for the first three or four years. The actual adjustment to the blowing of a factory whistle, the strangeness of the new environment, or the requirement to be at a certain place at a certain time -- all these factors and many others do not fit easily into the moral fibers of some underprivileged rural people.

A lack of self-confidence in unfamilar surroundings also may affect the practical output of a person who has spent all of his days in the less sophisticated layers of our society. A southern football coach, now retired, has capsuled this pretty well when he said in the 1930's

and 40's, he never failed to identify a boy who came from a textile mill-village. According to this coach, the boy simply didn't think he was as good as other people. As a result, the coach would shy away from these boys and recruit in northern states because they had the competitive spirit without having to get mad to play football.

What is the implication of this attitude to rural development? Perhaps none, but the textile mills in our earlier wave of industrialization used the idea of a type of new city. They provided jobs and houses in a mill-village. The rural worker would move to the mill-village and pay rent weekly. If the worker proved undependable, he was fired and asked to vacate his house. The fact that his job and the roof over his head were one and the same quickly solved the problem of adjustment. Apparently, companies had little problems with turnover and absenteeism.

The point which sticks in my mind was made by an industrial psychologist on our staff. Combining the house and job, the psychologist reasoned, might solve problems for the employer but it destroys aspirations and self-confidence in the employee and may affect further development.

Our organization has probably done as much labor research on absenteeism, turnover, and labor availability as any other, yet we find few industry records which indicate what, if any, effect company houses had on employee retention. Most industrial leaders of that time indicated they over-hired by about 20 percent and made the workers come in every day, knowing some workers would be sent home to "rest" one day of every week and without pay. With modern management practices, this is no longer done. I would submit that mill-villages and over-hiring are not necessary to solve absenteeism and turnover in rural areas. I would point out also that textiles has served us well in the past, but they alone cannot provide all the jobs needed for a balanced economy.

The other major factor affecting the industrialization of rural areas is livability. Moonlight and magnolias do not meet the needs of people. It is sometimes difficult to entice people from urban areas in other sections of the nation to move into a small southern town -- first, the person might have preconceived images of the area as filled with poverty, ignorance, and prejudice. More importantly, many of

these people are influenced by the availability of schools, hospitals, housing, social and cultural activities and other factors found in urban areas.

The urban trend can be reversed if all groups who are interested in the problem work together. At the federal level, in addition to the well-established programs, I believe the new regional commissions hold great promise because they bring a new dimension to federal-state partnership. Under this arrangement, the states have an equal voice in the order of priorities, which is a far cry from the typical categorical aid programs. Also, by looking at the problems of the region, the states may be led to realize that we will grow as a region and not as an island within the region. Perhaps these commissions can exert a leadership role in changing programs of education and training which always assume there is something wrong with the worker rather than job demand. If this is done, then more emphasis can be given and federal funds now available can be used to more effectively coordinate education and economic growth.

At the state level, political leaders and state agencies can educate the populace to be more responsive to change and to make the efforts required for economic growth of rural areas. More importantly, state agencies can stop competing among themselves and begin cooperating for the good of the state and its people. The concerted resources of the states could make our South an equal economic partner with the rest of the nation quicker than we might think.

Locally, many things can be done to assist in economic development. Again, education of the people to accept change and to attract industries is necessary. Local assistance and support must be present not just in wining and dining prospects, but also in providing training opportunities, securing sites, identifying and recruiting workers, tailoring training programs, providing housing, and in making the community attractive to in-migrants.

One thing is certain. There is proof-positive that many plants have compared very favorably with urban plants in profitable start-ups. Rural industries can be profitable, with no more initial absenteeism and labor turnover than in urban areas. State and local leaders need to design and implement plans, including education and training, to

insure that every rural plant start-up is successful. A purpose is to make sure that these industries tell the next prospect that they were successful.

There are many factors involved in successful rural plant start-ups. In the amount of time available this afternoon, I can mention only some of the more important ingredients and explain South Carolina's approach.

The industrial developer is frequently criticized for locating a low wage, low skill industry in a rural area by people who do not understand the problem. Most high wage and high skill industries have a high percentage of indirect labor who must be recruited from the national labor market and moved to the area. The absence of housing and other factors make out-of-area recruiting more difficult. What I am trying to say is that underdeveloped rural areas apparently must go through a low skill industrial cycle to become a high wage and high skill area.

Rural workers are in rural areas because they want to be there. They usually know they can earn more money in urban areas. They remain rural because they choose to remain. One of the reasons they choose to "stay on the farm" is their close ties to the land. Often a plant requiring several shifts of work each day does well in a rural area because it allows the people to work their land for a part of the day and to maintain a shift in the plant so as to earn a regular paycheck. Rural workers are generally enthusiastic about learning a new job. They also enjoy praise for the work they do. It's almost as important to them as the paycheck they are earning. One of our problems is to convince investors that most of the stories they have heard about tragic rural locations are either exaggerated or frequently were caused by management.

State efforts must insure that industry work with the labor force to make it work for them. The labor force in rural areas is not unlimited. Even so, South Carolina, by working with the existing labor force, and fitting the industry to the people, has, since 1960, led the region in percentage growth of value added by manufacturing, mostly into rural areas. Those totally rural, very basic areas are now more sophisticated and can now support more sophisticated types of industry. Those areas, those people are now paying their fair share of America's upkeep--

and the industrialists who located in those areas are making a profit. Profit is the name of the game to most industries who provide jobs and economic promise.

Often, states or areas of states go pell mell in their quest for industry with the result that several industries are half-heartedly contacted and conflicting promises are made which cannot be kept. Those which are located in that manner remain to scare away all future investors.

Some of you may be aware of the unique program we call technical education in South Carolina, of which I am privileged to serve as Executive Officer. The program was created for the purpose of using education as a tool for economic development. The long-range manpower training requirements of industry and business are met primarily through twelve permanent technical education centers and three residential technical centers. These institutions provide a wide spectrum of programs, ranging in length from a few weeks through the two-year associate degree curricula. Basic literacy and low-skill training is also available.

We are proud of the above programs, but the truly unique activities in South Carolina are our special industry schools. These temporary schools recruit and train the initial work force for new and/or expanding plants. At the state level, our Industrial Services Division has engineers who work with the company to plan and operate the training program. The engineers visit a similar plant, if necessary, to analyze manpower and training and recruiting needs. They ask a few thousand questions and return home to plan the start-up. If necessary, a cinematographer will visit the plant to photograph the production processes for use in the subsequent training program. At this moment, one of our engineers is in Europe, temporarily living there and designing the requirements of a giant chemical firm.

The engineers then formulate a complete plan for identifying, recruiting, selecting and training the workers. This "master plan" contains a complete study of labor availability, skill requirements, wage rates and fringe benefits for the needed job classifications.

A comprehensive lead time schedule pinpoints all recruiting, testing, selecting and training activities according to the specific

requirements of the firm. By working backward from the start-up date, we schedule all activities so that the training is completed prior to plant operation.

The engineers secure instructors locally or borrow them from the industry, with the state paying their total salaries for the instruction. Training equipment is either purchased by the state if it would be needed for future special schools, provided from our warehouse, borrowed from one of our centers, or borrowed from the company. If the firm provides the equipment, we return it at the conclusion of the training program.

On the staff of another division of our office are experienced recruiters and researchers who provide a number of services. We assist in the recruitment of trainees, and also the supervisory or management personnel if the firm desires. We conduct labor availability surveys to determine essential characteristics of persons who desire better employment: age, sex, draft status, educational level, industrial experience. We conduct semi-annual wage and fringe benefits surveys. One group is now working on a training program to be conducted in Ohio for the wives of management being transferred to a new operation.

Our engineers and technical writers prepare individual training manuals that incorporate analytical methods training techniques. Each training program is tailored to the specific needs of the firm. Excess fat is cut out of the program, and the trainee learns only what he will be expected to do on the new job. Consequently, there might be as many as 10 to 20 different training programs for one particular plant, depending upon the number of skills required.

Trainees attend on their own time without any training allowance or other compensation. The training program provides the trainees with an opportunity to look at the company and vice versa. Experience has proven that, in 95 percent of the cases, both sides are pleased with what they see.

Normally, trainees hold down a regular job at the time they are undertaking training at night and/or during weekends. We seek to recruit underemployed persons for training, because they have developed

certain work habits not possessed by the chronically unemployed. We believe a new industry has enough problems without asking them to fill their jobs with the unemployables.

One must remember also that the trainee has no promise of a job upon completion of the program. The firm interviews him at the end of the program and is free to accept or reject the trainee without obligation.

A critical factor in education and training with public funds is building in the capability to stop a program once it meets the needs for which it was designed. Our special industrial schools stop when the needs are met.

TEC's special schools are but one example of a method of training that has been successful in rural areas.

It is a proven fact that industries can operate efficiently and profitably in rural areas. It is the responsibility of each of us to convince investment capital that rural locations are profitable. Further, there must be a concerted effort at all levels to attract risk capital to rural areas and to enable the industries to operate in rural areas.

One of our most pressing needs is research which will help us better understand the motivation drives of the rural worker, so that he will strive harder to prepare himself for his rightful share of America's affluence.

In summary, we need to look after what we have, increase prospect flow and effectively work together in solving problems of sites, water, housing livability, education and training and, above all, realize that investors are usually more interested in a profitable operation than in solving an economic and social problem in our region.

OPPORTUNITIES FOR STATE LEADERSHIP IN RURAL DEVELOPMENT

Robert W. Scott[a]

I would like to welcome our many visitors to North Carolina from throughout the nation and especially those of you from our sister states in the South.

The subject of this conference is of vital concern to our southern region, as well as to the entire country.

I hope this conference will result in more than just another forum for discussing our problems. The time for action has arrived.

I hope you will return to your individual states with a renewed commitment to making our rural areas a more desirable place for clean industries to thrive and for people to live and work.

It is not necessary that I recite a lot of statistics to set forth the reasons for our concern with rural development. You have heard a great deal of this during the earlier conference sessions today.

Although we generally think of ourselves as an urban nation, we must remember that 30 percent of our people still live in rural areas. The problem of rural development is compounded by the fact that 40 percent of the nation's poor -- about 14 million people -- live in rural America.

To emphasize the need for the South's concern, we need only cite the fact that nearly half of the poor families in the nation live within the borders of the southern states.

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[a]Governor, The State of North Carolina.

The total number of rural poor would be even larger had not so many of them moved to the city.

And yet, this mass migration to the urban centers has created an extremely difficult situation. We have sent people in search of urban employment who have critical vocational and educational handicaps.

The resulting urban problems have awakened the nation to the fact that we can no longer think separately in terms of rural and urban America.

Both government and industry must approach today's critical social and economic problems with the full realization that the welfare of both city and county are closely interrelated.

Another important realization is that rural development must involve all citizens--both black and white. We often fail to realize that two of every three poor people in our rural areas are white.

The success of realistic programs to improve and increase employment opportunities in our rural areas will go a long way in helping to solve many of our social problems.

Turning now to the question of "Opportunities for State Leadership in Rural Development," I want to set forth, in rather broad terms, my ideas of how the State plays a key role in helping local municipalities prepare themselves for development.

Then, I will review some of the things we currently have under way to improve the efficiency and capability of State Government.

And finally, I want to point out some new directions where we can do a much better job of delivering the various governmental and educational services to our people.

I am convinced that State Government must assume an increasing role in economic development activities. State Government can perform a valuable service in translating local needs to Federal agencies and in informing local governments about various national programs and activities.

More importantly, the State can serve as a mediator in those situations where Federal agencies take too broad a view of development problems and local units view their problems and potentials too narrowly.

There seem to be four major avenues for State Government to influence and support development activities: through direct actions of State agencies, by providing back-up assistance for local people, by influencing the actions of others, and by creating an overall atmosphere for growth and development.

Our State agencies can have a direct impact on development depending on the types of people we employ and the types of things that we ask them to do.

Local governments are often financially unable to support the necessary staff to deal adequately with their many problems. Our State agencies and educational institutions can take up the slack here by providing back-up capabilities in analyzing local problems and planning programs to deal with those problems.

The State Legislature can, through enabling legislation, influence the course of events by removing legal barriers and expanding action opportunities of local people.

Perhaps, most important of all, I feel, is that it is the responsibility of State Government to provide an atmosphere for growth and development.

This involves establishing a basic philosophy of government that is conducive to the achievement of our full potential.

It involves a total commitment to a quality educational opportunity for all citizens, to adequate housing and health services, to public safety, and to the many other things that go to make up a quality environment.

Now, let me mention briefly a few of the things we are doing in North Carolina to make State Government more responsive to the needs of our people.

The new Department of Local Affairs was created to help city and county governments take full advantage of the many State and Federal programs for public facility improvements and manpower development.

Within the Department of Administration, we have strengthened the role of the Division of State Planning, and we will continue to tie planning activities more closely with the budget of State expenditures.

The Department of Conservation and Development has strengthened its programs for industrial development, especially for small towns and rural communities. We have recently initiated the concept of local industrial development teams.

These teams consist of several local leaders prepared to meet with industrial prospects and answer questions involving industrial sites, construction, utilities, labor, taxes, financing, marketing services, transportation, and livability.

We have found, in looking at our past experience, that the most successful communities in North Carolina have just such a group of local citizens who have accepted this responsibility.

These citizens have developed the ability to relate, very effectively, the facts and capabilities of their community to an industrial prospect.

The working relationship between our local communities and our Department of Conservation and Development is a perfect example of State Government providing back-up assistance to local communities.

We have also established the Governor's Award Program for those towns, with a population less than 15,000, whose citizens achieve goals set forth that will place them in a stronger competitive position for attracting new industry.

A system of multi-county regions covering the entire State is now being considered. A tentative scheme has been circulated widely, and comments have been invited.

Once we are able to evaluate these comments and settle on a system that is suitable for most of our local units, I am convinced that these regions will serve as a focal point for local, State, and Federal planning efforts.

Looking to the problem of rural development, many of the public facilties and services available to urban people and business simply are not available in rural areas.

The availability of quality schools, health and medical facilities, libraries, transportation facilities, and water and sewer facilities is essential for new and expanding industry.

The problems facing local governments in providing these services and facilities are complex. Most rural communities and small towns do not have adequate public revenues, not a sufficient population base to provide all the needed services and facilities.

County boards of commissioners do not have the mechanisms or legal authority to cope with many of the problems.

The multi-county regions should provide a sound basis for more realistic planning and programming of public services and facilities.

Again, I emphasize that the rural and urban officials must recognize that neither can get along without the other. An expansion in employment in a small town or major urban center will directly and indirectly improve employment opportunities in the surrounding countryside.

One of our most promising State programs is the North Carolina Housing Corporation. When we get this program of helping low income people become homeowners in full swing, the impact will hit both rural and urban areas of the State.

These examples demonstrate how we are attempting to bring government more closely to the people. The goal of the proposed reorganization of State Government is to combine and consolidate the 317, or so, agencies, boards, and commissions into not more than 25 cabinet-level departments. This streamlining should result in much more economy and efficiency in State Government.

We are proud of our accomplishments. But, there are still some opportunities for the State's leadership to develop our resources to their fullest potential.

We need to be sure that we make more effective use of existing programs in rural development before we ask for more money to be spent on still more programs.

In the past, there have been many Federal programs charged with the responsibility of helping improve the quality of life in rural communities.

Most of these programs, I feel, have resulted in little, if any, real reorientation of the many Federal programs which affect rural life. In fact, I fear that many of these programs just continue to stir the same old pot of stew.

Now, the U. S. Department of Agriculture has established in each state a Committee for Rural Development.

Serving on the North Carolina committee are the heads of the U. S. Forest Service, the Soil Conservation Service, the Farmers Home Administration, the Rural Electrification Administration, and the Agricultural Extension Service.

In addition to these, I have named five men in State Government to serve on this committee.

These representatives from State Government should provide added direction and leadership to the committee in its effort to expand employment and income opportunities in rural areas and to make living in non-metropolitan areas even more attractive.

We must face the fact that government expenditures account for about 30 percent of our Gross National Product. Decisions about how that much of our national product is spent can have a profound influence on where development occurs. Clearly, we need to be more careful in setting our goals and priorities.

We are gradually accepting the idea that public expenditures on schools, highways, parks, utilities and public services can be used to give shape to both rural and urban development. A system must be developed to assure that publicly-debated and agreed-upon goals and objectives guide these expenditures.

Too many of our programs, both on the Federal and State levels, are operating independently and often at cross purposes. If states are to assume the leadership in rural development, they must have well-defined goals and policies.

These goals and policies should be structured so that the role of each element of State Government is evident. Then we might achieve an interagency approach to common problems.

For example, the university community could be much more involved in helping educate our small businessmen and small local governmental units to understand the social and economic forces which are shaping their existence.

When our State was basically an agricultural economy, the universities did a commendable job of helping small and large farmers alike adjust to new technological forces and new economic forces.

We have seen the transition from small farming operations to large operations. North Carolina State University, with its Agricultural Extension Service, helped prepare farmers for this transition. Being a farmer, I have a deep appreciation for what they did.

Now that our State is moving through a transition from an agricultural to a more industrialized economy, our small businessmen and small governmental units are confronted with technological and economic problems that parallel those faced earlier by the nation's farmers.

I am convinced that our universities and our Federal and State agencies should join together in a partnership to serve this need.

This brings me to a subject that I have given a great deal of thought to during my term as Lieutenant Governor and my campaign for Governor. Since I have been in office, it has been even more present in my thoughts.

The subject I'm talking about is the need for an organization to assist the Governor in placing the total operation State Government into a better perspective of where we want to go and how we can best get there.

We need to think of development in the broadest sense of the word.

In the past, we have concentrated, at different times, on education, or on highways, or on health, or on some other aspect.

The time has come to pull all of our efforts together into a unified approach.

Therefore, I propose the establishment of a Governor's Council on State Goals and Policy.

This Council would be a high-level advisory body to consider, across the board, all activities of State Government that relate to the full development of our State.

It would include health, education, housing, economic development, transportation, environmental programs, and all other State functions which influence the type of future we create for our people.

I want this to be a continuing council. And, during the next session of the General Assembly, I will seek statutory authority for its establishment.

This Council would enable the Governor, and the General Assembly, to view our overall State goals and our ability to achieve these goals in a more balanced perspective.

A full-time professional staff would serve this Council on State Goals and Policy. The members of this staff would be attached to my office, through the management function of the Department of Administration.

This staff would work closely with all State agencies and institutions, particularly with the Division of State Planning.

This Council, I am convinced, would help us marshal our full resources to the tasks of planning and directing the expenditure of local, State and Federal funds to achieve the good life for our citizens.

In a new era, in which there is much dialogue about the quality of our environment, the need for a clearly defined State policy on growth and development is apparent.

It is essential that short-range and long-range State goals and policies be determined.

I have stated time and again that I want my administration to be known for its concern with planning for the future of North Carolina.

Now is the time for us to streamline and modernize governmental institutions to provide a unified effort for the people of our State and nation.

PROBLEMS AND ADVANTAGES OF SELECTING RURAL AREAS FOR PLANT LOCATION

Maurice Fulton[a]

So many people in high places are wringing their hands over the problems of U. S. cities that the real picture of America is becoming more and more distorted.

The fact is that the geat majority of Americans live in communities where it is safe to walk the streets at night, where one can enjoy life and trust his neighbors, where schools are not deteriorating, where traffic is not snarled endlessly, where air is breathable, where race war is not threatened, and where there is no talk of burning down the community.

If those who are stewing so much about the problems of the cities would take time to look around America, they would see a land with elbow room to spare. A flight across this country from Atlantic to Pacific reveals vast open areas that are beautiful and unspoiled.

This view of America is borne out by facts. The 30 U. S. cities with population of more than a million in their metropolitan areas hold 38 percent of the land in the country's population. These cities occupy only 3 percent of the land in the continental U. S. between the two oceans, even when much wide-open space within their urban areas is included.

If big-city dwellers would drop down off the superhighways that carry them from one megalopolis to another, they would find thousands of communities where the quality of life is in sharp contrast to the

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[a]President, The Fantus Company, Chicago, Illinois.

fears and frustrations of big-city living. In these communities removed from the teeming urban areas, crimes of violence are the exception rather than the subject of daily headlines as in big-city newspapers.

Yet much of the nation's money and brains are devoted to stop-gap solutions of problems in megalopolis while the possibility of spreading population more evenly across a spacious countryside gets relatively little attention.

Billions flow from the U. S. Treasury to rebuild center cities, aid metropolitan schools, boost welfare benefits. Some mayors and big-city Congressmen talk in all seriousness of spending a trillion dollars on the cities over the next decade. That would mean outlays at the rate of 100 billion dollars a year -- most of it from the Federal Government.

Thus far, heavy spending on U. S. cities seems only to have brought a greater and greater concentration of unemployable people into their crowded confines. At the rate of 500,000 to 600,000 a year they come, many of them completely unprepared for a useful role in big-city life. New slums spring up as fast as the old ones can be rooted out, or faster.

You might ask what will stop this greater and greater big-city concentration. People are going to move where they want to and the mobility of the American people is well-established. If the jobs are available in the metropolitan areas, the people are going to those jobs. By the same token, if jobs are available in the thousands of small towns and cities away from the metropolitan areas, I think most of the people in these rural areas will not move. They will prefer to live in the circumstances in which they were raised. People everywhere can read. They see television and they read the papers. They know about urban crowding and the urban crimes. They also know that smaller places are friendly. They know that in the small town or city it takes only five to fifteen minutes to travel between home and work. Generally, parking is not a problem. For those who golf, the golf course is near enough to their place of work to permit nine holes before dinner. If one likes to hunt and fish, the hunting and fishing frequently are quite handy also. If one runs into trouble, the neighbors will help and not look the other way.

Of course, those of us who travel a good deal find much of this industrial decentralization going on right now. Industrial plants are springing up in many places throughout the country, but they are also still springing up in the metropolitan areas as well and in greater proportion. At the present time, we have a continuation of the trend to greater and greater big-city crowding.

For the most recent ten-year period for which figures are available, the number of business establishments of all kinds, manufacturing and non-manufacturing combined, that had over 100 employees, increased from 50,900 to 57,000. Over 48 percent of that increase took place in the already overcrowded 164 counties that represent metropolitan areas.

To place this in another perspective, by the latest figures available, the number of people employed in manufacturing plants in the rural counties is about 1.1 million and has gone up only 450,000 in 20 years. The number of people in manufacturing plants in metropolitan areas is 8.5 million and has gone up 3.4 million in 20 years, over seven times as much as in the rural counties; so 5 percent of the land and 5 percent of the counties have had seven times as many new jobs as the rural 60 percent land area. This is concentration and overcrowding with a vengeance.

If manufacturing were to schedule a fair share of their new plants to the small places distant from the metropolitan areas as suggested here, this could well bring down the wrath of the metropolitan chambers of commerce and metropolitan real estate promoters, but it shouldn't. Even if there were no more manufacturing plants built in the already overcrowded urban areas, there is still more cleaning up to do, more building expansion, more growth in the urban centers than probably can be handled well.

The fact that there is considerable unemployment in the poor sections of big cities would seem to argue for concentrating new plants in such areas. This seems to me to be a superficial conclusion. There are plenty of job opportunities now in the big cities for trained people.

The principal problem of the unemployed is lack of education. Educated people do not have trouble getting jobs and this applies to all nations and all races. Our unemployment is heavily concentrated in the ages of 16 to 25 and primarily among those without good education

or training. Motivate these young people to want an education, to want to work and to want to be trained, and the vast employment opportunities now existing in big cities will be available to them.

If most of the new manufacturing plants are loaded into the metropolitan areas, this won't solve the unemployment problem of the uneducated, but it will cause millions more from the rural counties to drift to the big cities to look for jobs.

I have already suggested many reasons why the smaller community is frequently so much more appealing than the big city. Now let's look a little more closely at the specifics -- the specific pros and cons. Let's start with advantages -- first, labor.

The small-town boy outdistances the big-city boy every time. This is not necessarily a matter of union vs. nonunion plants. It is a matter of attitude toward work in big cities vs. that in smaller towns where people are used to tackling a day's work for a day's pay.

We have one client with a plant in a big city and a new one in a small community. Both plants have the same machinery and both make the same product. All employees are on a piecework basis. But the plant in the country outproduces the one in the city by one-third. Why? The answer is that in the city you have a built-in attitude of job protection -- don't produce too much, because it might hurt Joe who is a slow worker.

Parenthetically, let me point out that U. S. government studies repeatedly point out the differences in labor rates between small and large cities -- for identical jobs. Industries in smaller cities tend to experience lower costs -- and that isn't a north/south phenomenon, but a large-small function, regardless of sector of the country.

As the freeway network has been expanded, additional communities have been brought to closer proximity, timewise, to their markets than was formerly possible. It is not unusual for a community 20 miles away from the core of a metropolis to be closer in time to the city center than sections of the larger city located some distance away from a freeway.

It can be generalized, then, that the marketing areas for many producers have been expanded in recent years. This has been particularly true in the case of those who have a perishable commodity. Not only has

transit time been reduced, but more dependable railroad refrigeration equipment and better handling methods have made what might formerly be considered a remote location not nearly so remote.

The expansion of air freight both from an availability and frequency basis, and the subsequent reduction in rates has made many former rural sections of the country able to compete in the major markets.

Utility services, which were not formerly available in many small towns, are now obtainable in the same quantity and quality as in larger communities. Such services as sewers, dependable water supplies, electricity, telephone, and natural gas are available today to potential users in smaller communities as they have been for many years in larger.

Many smaller communities have recognized the personal considerations of plant executives. Both the physical plants and the teaching standards in schools have been upgraded. In addition, recreational facilities are located in even the smallest community. Cooperation among civic leaders has led to community swimming pools, golf courses, public parks with tennis courts, badminton courts and equipment for juvenile play.

Recognizing that a business is only, in essence, a group of people assembled together in a physical facility, communities which are actively seeking new industry recognize that making the family of the employee contented makes for happier employees and higher productivity. The personal amenities, then, are more and more considered vital by smaller communities.

Business expenses in smaller communities often can be less than in larger cities. In one smaller town, commercially zoned land with all utilities to the edge of the property can be obtained within the city limits for under $1,000 per acre. This is level ground which would need a minimum of preparation prior to building. Certainly, such prices are unheard-of in larger communities. While no generality can be true in all cases, nonetheless the property tax rate in many smaller communities can be substantially less than in larger cities. This can be a consideration to some site seekers.

Perhaps the most important factor is that property for unusual developments may not be available in larger communities. Examples are plants which might require large acreages for waste disposal or have

smoke or noise problems which can be best handled in wide open areas. These, of course, are more readily available in or near smaller communities.

Many who have located in smaller cities feel strongly that the labor relationship has a high attraction. People recognize the value of a business to a smaller community and, therefore, are ready to expend extra energy to assist in making the business succeed. In addition, the majority of the employees will live only a few minutes from the plant which should mean fewer problems with punctuality, delays due to weather, and/or transportation breakdowns and congestion.

Due to the short travel time involved, and the fact that residential sections of small towns are sometimes relatively close to business facilities, businessmen have discovered that there is an availability of housewives on short notice for seasonal assistance. In general, then, it is conceded by those who have both small town and large city plants that many factors of the labor market are highly favorable for a small town operation.

Lastly, a positive consideration is the fact that small communities recognize fully the value of every business. They cannot afford to make a firm unhappy and thus risk the loss of that company to some other community. Jobs are precious to them and minor problems with water supply, sewage disposal, zoning, street maintenance, and adequate fire and police protection are generally handled rapidly and satisfactorily by the city fathers in order that the facility can be retained.

Of course, there are some obstacles to operating manufacturing plants in small cities and towns. The difficulties might be considered to be these: lack of management and executive personnel -- reluctance of some company executives or their wives to take assignments in small communities -- lack of trained mechanical workers -- inadequate utilities -- poor housing supply, not only rental -- lack of construction work forces.

Being the main industry in a town has many advantages but also I suppose has the disadvantage of being constantly in the spotlight. However, an industry that deals fairly with its neighbors and employees has lots of friends. This can be important during critical periods.

Small towns cannot compete with large centers for cultural activities -- the theater, museums, concerts, lectures, etc. -- but I don't think this is a critical matter. There are fast airplane services, national magazines, national newspapers, and national radio and television, but most of all, the fast and frequent means of travel permit those who live in small places to visit large cities with great ease and at low travel cost. And, I suppose, we might put forth the advantages of communing with nature as being a cultural advantage favoring the small town.

Obviously, every business doesn't belong in the small community. It happens that there is an enormous segment of the business complex that can't be disassociated from the greater population of the metropolitan centers. I refer here to the services industry which includes retailing, wholesaling, utilities, transportation, construction, entertainment, banking, insurance and all of the other types of services that are necessarily indigenous to the population. They must be located where they are needed. It also happens that the services part of our economy is our fastest-growing portion and now exceeds in employment the manufacturing part.

The metropolitan areas will have their hands full adjusting to the growth in the services industries without further massive manufacturing plant loads.

In the manufacturing area there are also many industries which find more conducive conditions in the large city. Broadly speaking, they are those which:

(1) Employ 1,000 or more people and need the big labor pools of a metropolitan area for proper staffing of the plant;

(2) Require skilled workers at the outset;

(3) Have customers who must have easy access to their plant;

(4) Require varied or unusual forms of shipment (particularly air freight or barge shipments);

(5) Require significant numbers of technical people (big cities may not be breeding grounds, but are points of concentration);

(6) Require detailed technical advice from suppliers;

(7) Must ship to a large proportion of customers who are within the metropolitan area switching district;

(8) Use equipment which requires frequent technical service;

(9) Rely upon inventory buying (some firms locate next door to the wholesaler's warehouse in an effort to cut inventory costs);

(10) Use the physical presence of the plant to generate sales to a large proportion of the population;

(11) Require a short-term lease or may wish to consider reselling their building within a few years;

(12) Require manufacturing to be next door to engineering, sales, and top executives; and

(13) Require large-scale financing (on amounts over $1,000,000 the big city is an easier place to find the funds on an attractive basis).

On the other hand, there is an even longer list of characteristics of firms that can flourish in the smaller town. Remember that each characteristic is independent and that rarely would one firm possess all of those mentioned. Generally, however, firms which can best profit by location in the non-metropolitan area look like this:

(1) Require fewer skills at the outset;

(2) Are willing to train a large part of their work force;

(3) Are more oriented to the assembly of purchased parts rather than to the fabrication of those parts;

(4) Are faced by necessity with low profit margins in their industry and hence must keep out-of-pocket labor costs down;

(5) Use mostly catalogue-ordered or standard raw materials;

(6) Are able to keep inventories on hand for production runs, rather than relying upon hand-to-mouth purchasing;

(7) Deliver to customers largely at either end of the one or two main rail, truck, water, or air routes which serve the town;

(8) Have customers who do not normally visit the plant;

(9) Have utility requirements which are no unusual in any way;

(10) Do not find it necessary to have professional men such as engineers, physicists, and mathematicians attached closely to the manufacturing facilities (major exception: a university town);

(11) Can profitably sign up for a long-term lease or a lease-purchase program; and

(12) Prefer the benefits of hiring employees who live closer to their work and who have more free time than can be provided in the large city.

From what I have said here today it should be pretty obvious that we at Fantus have a healty respect for small town manufacturing advantages. In our fifty years of experience, we have located thousands of plants. Better than 75 percent of these have gone to the smaller city. I firmly believe that the next decade will see a continuation, probably an acceleration, in the pattern.

PROGRAMS FOR DEALING WITH PROBLEMS AND ADVANTAGES OF RURAL AREAS

M. I. Foster[a]

The term "rural" has a wide range of meanings. To the New Yorker it may mean any place smaller than Philadelphia or maybe even Philadelphia. For purposes of this discussion it means small towns and their surrounding market or service areas. If I have any credentials for being here at all, it is my experience with TVA. The programs I know about are TVA's or are TVA related.

In order to deal with this subject in terms of my experience, I will have to sketch out for you the characteristics of the TVA region's economy.

The 201-county Tennessee Valley region is an area of about 92,000 square miles with a population of nearly 7 million people (Chart 1). It includes all of Tennessee and portions of six other states. In addition to Tennessee, more than a third of Mississippi is included, along with about a fifth of Alabama and Kentucky, an eighth of North Carolina and Virginia, and about one-fourteenth of Georgia. Altogether, the region comprises about 28 percent of the combined areas and 25 percent of the populations of these seven states.

Charts 2 through 4 show the standard indicators of economic activities. In 1969 the Gross Regional Product originating in the Tennessee Valley region reached 24.45 billion in current dollars, or about

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Chart 1

THE TENNESSEE VALLEY REGION

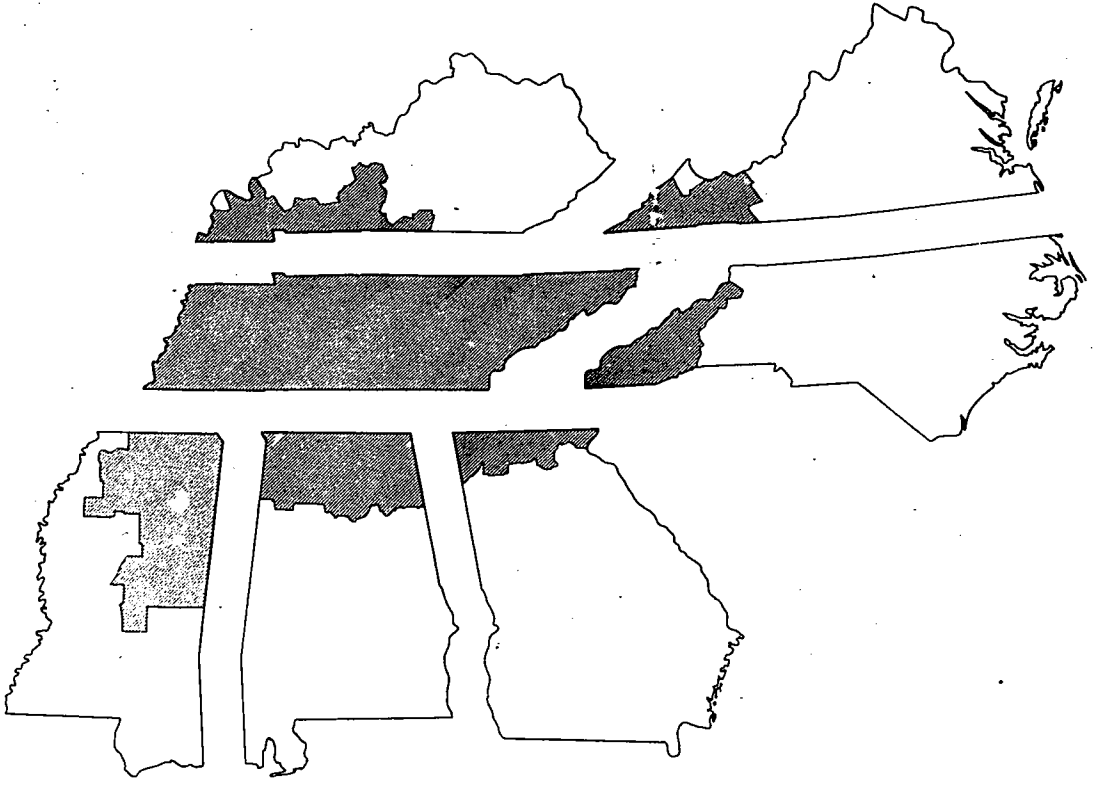
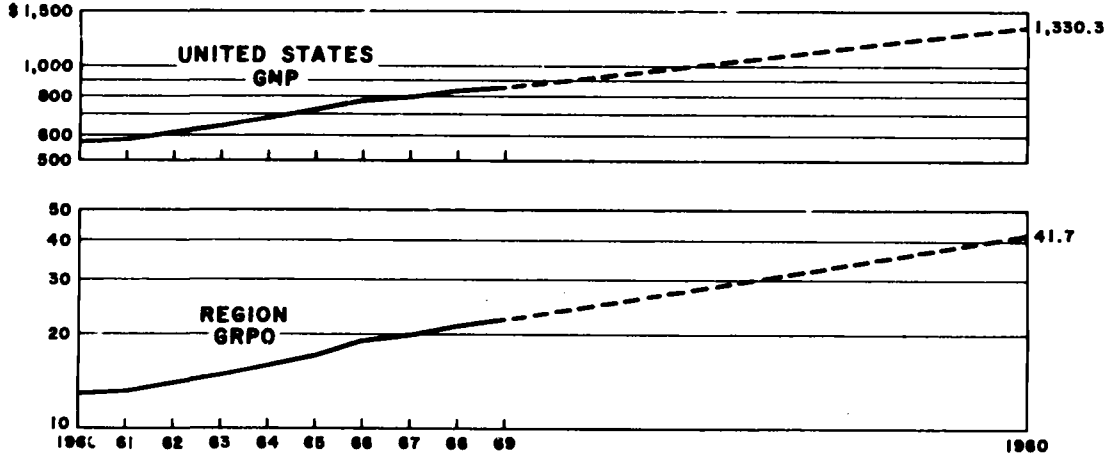


Chart 2

GROSS NATIONAL PRODUCT AND GROSS REGIONAL PRODUCT ORIGINATING

(IN BILLIONS OF 1967 DOLLARS)



	U.S. GNP	REGION GRPO AMOUNT	REGION GRPO % U.S.
1960	$570.5	$12.9	2.26
1961	581.5	13.2	2.27
1962	616.5	14.0	2.27
1963	646.1	14.9	2.31
1964	681.5	16.0	2.35
1965	724.8	17.3	2.39
1966	773.1	19.1	2.47
1967	793.5	19.9	2.51
1968	834.0	21.4p	2.57
p1969	855.3	22.4	2.62
1980	1,330.3	41.7	3.13

Chart 3

POPULATION AND EMPLOYMENT IN THE TENNESSEE VALLEY REGION

(201 COUNTIES)

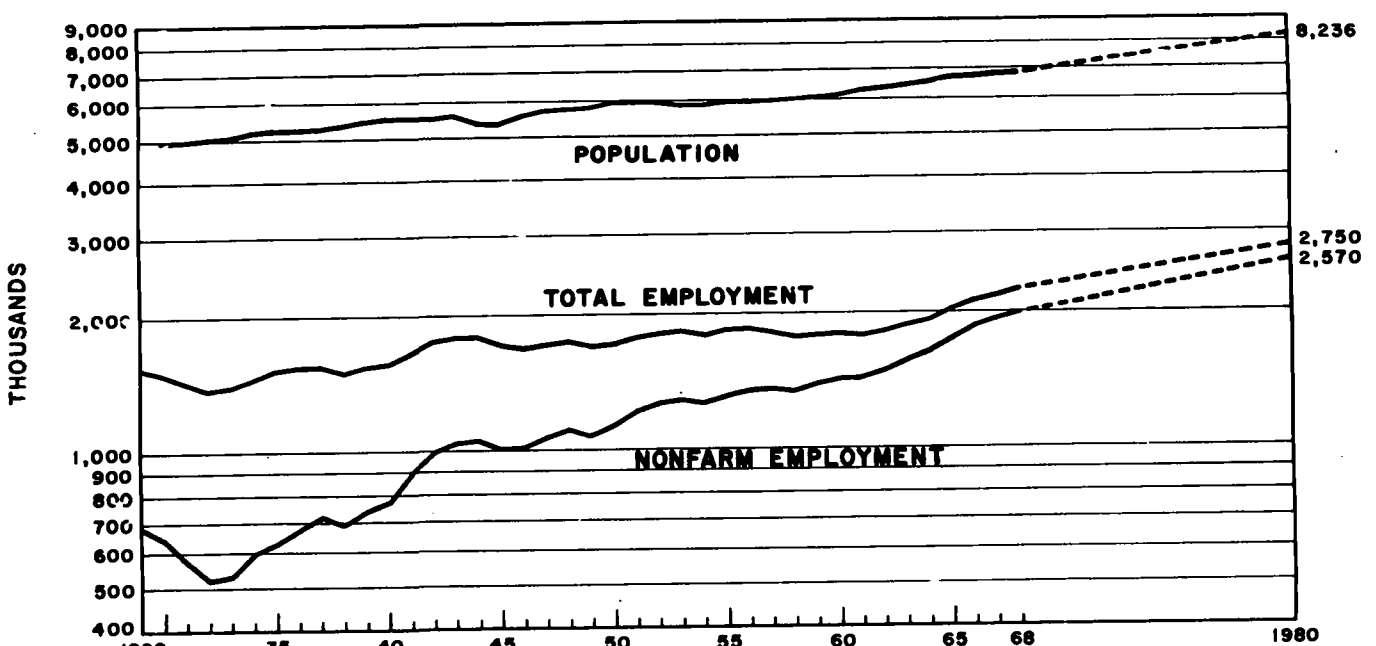
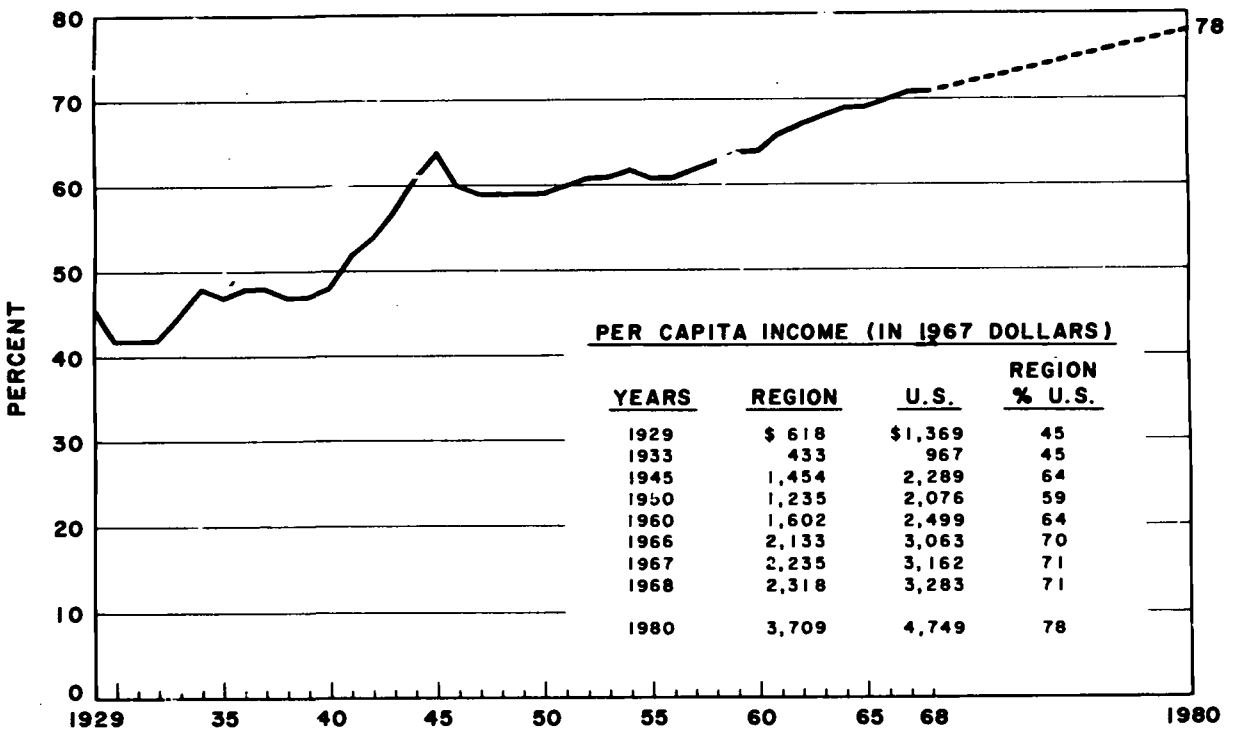


Chart 4

PER CAPITA INCOME IN THE TENNESSEE VALLEY REGION

(PERCENT OF UNITED STATES)



PER CAPITA INCOME (IN 1967 DOLLARS)

YEARS	REGION	U.S.	REGION % U.S.
1929	$ 618	$1,369	45
1933	433	967	45
1945	1,454	2,289	64
1950	1,235	2,076	59
1960	1,602	2,499	64
1966	2,133	3,063	70
1967	2,235	3,162	71
1968	2,318	3,283	71
1980	3,709	4,749	78

22.40 billion in 1967 dollars. This represents an increase of about one billion dollars over the previous year after allowing for inflation.

Here is a region where the production of goods and services is growing a little faster than in the Nation as a whole. The trends indicate that GRPO by 1980 will reach 41.7 billion in 1967 dollars--a little more than 3 percent of the National Product for the same year.

Population estimated to be 6,835,000 in 1968 is also growing a little faster than for the whole country. About one-third of the region's increase since 1930 occurred after 1960. During this period in-migration began to offset out-migration consistently. Growing economic opportunity in the region's small towns must be credited with a significant portion of progress.

Chart 3 that shows the population also shows a long-range projection for employment in 1980 of about 2,750,000 workers. Nonfarm employment is expected to reach 2,570,000, or 93.5 percent of the total. The region has had greater relative gains in nonfarm employment than the Nation for many years, but because of heavy losses in farm employment, the gains in total employment for the region have been less than for the Nation until the Sixties. Data for the period 1960 to 1968 show an increase of 54 percent in total employment for the region, compared with 46 percent for the Nation--the first extended period in modern history that the region has outperformed the Nation in this respect.

Per capita income in the region was only 45 percent of the national average in 1929. It has now reached 71 percent, a substantial improvement, but still leaving much to be done. And much of the progress will have to come in the small communities and their service areas.

Since 1960, per capita income in the region has increased relative to the Nation. The projected 1980 per capita income for the region anticipates continued growth, but at a slightly slower rate than in the Sixties, to 78 percent of the national average. To attain this the region will be heavily dependent on continued growth in manufacturing employment.

The charts (5, 6, and 7) depicting the employment indexes show that the region has outperformed the Nation in nonfarm employment increase. It has also outperformed the 11-state Southeast, particularly in manufacturing. In this category of employment the region has had a

Chart 5

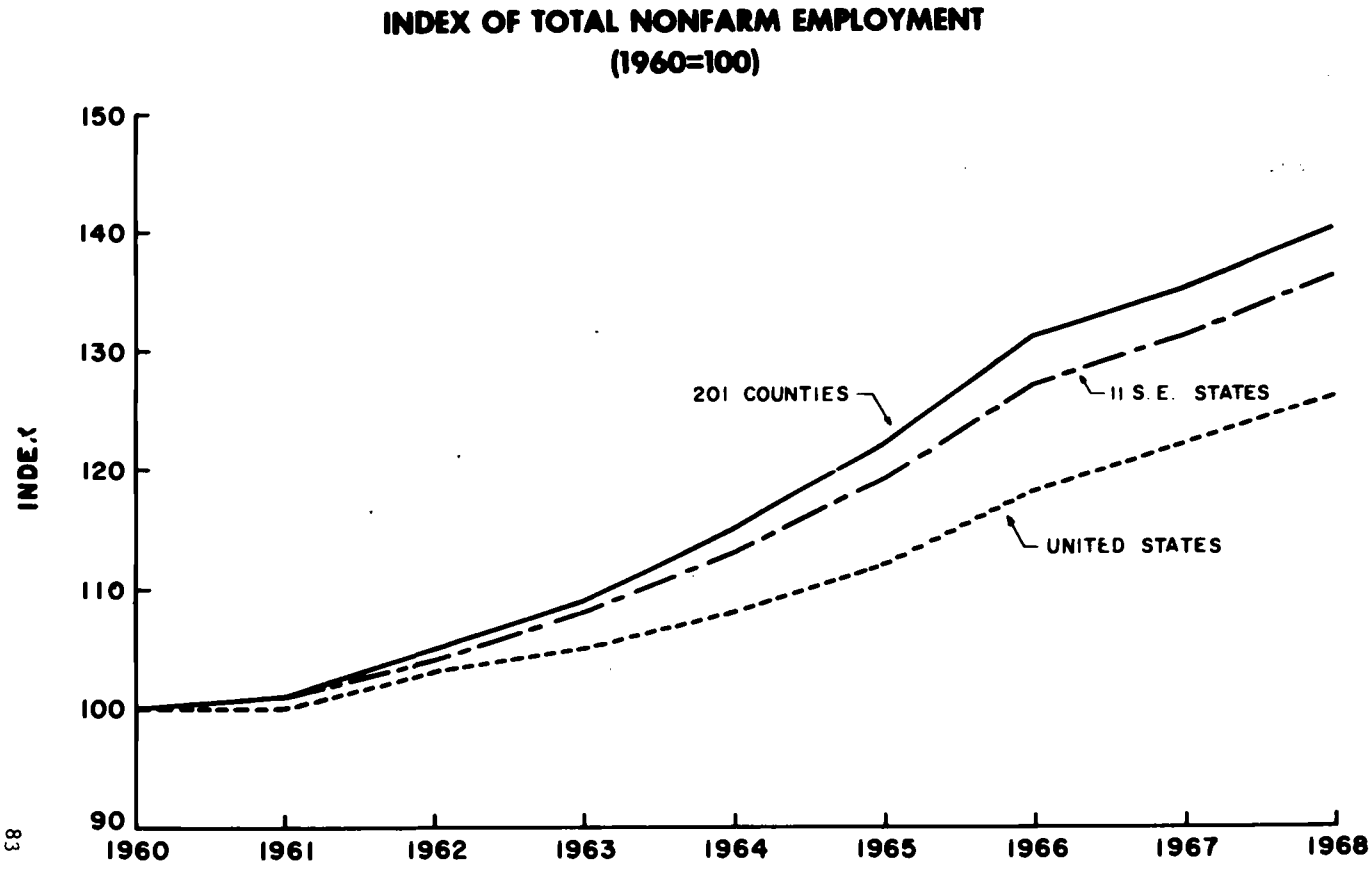

INDEX OF TOTAL NONFARM EMPLOYMENT
(1960=100)
INDEX
150
140
130
120
110
100
90
1960
1961
1962
1963
1964
1965
1966
1967
1968
201 COUNTIES
11 S.E. STATES
UNITED STATES

Chart 6

INDEX OF MANUFACTURING EMPLOYMENT
UNITED STATES, SOUTHEAST, AND TENNESSEE VALLEY REGION
(1960 = 100)

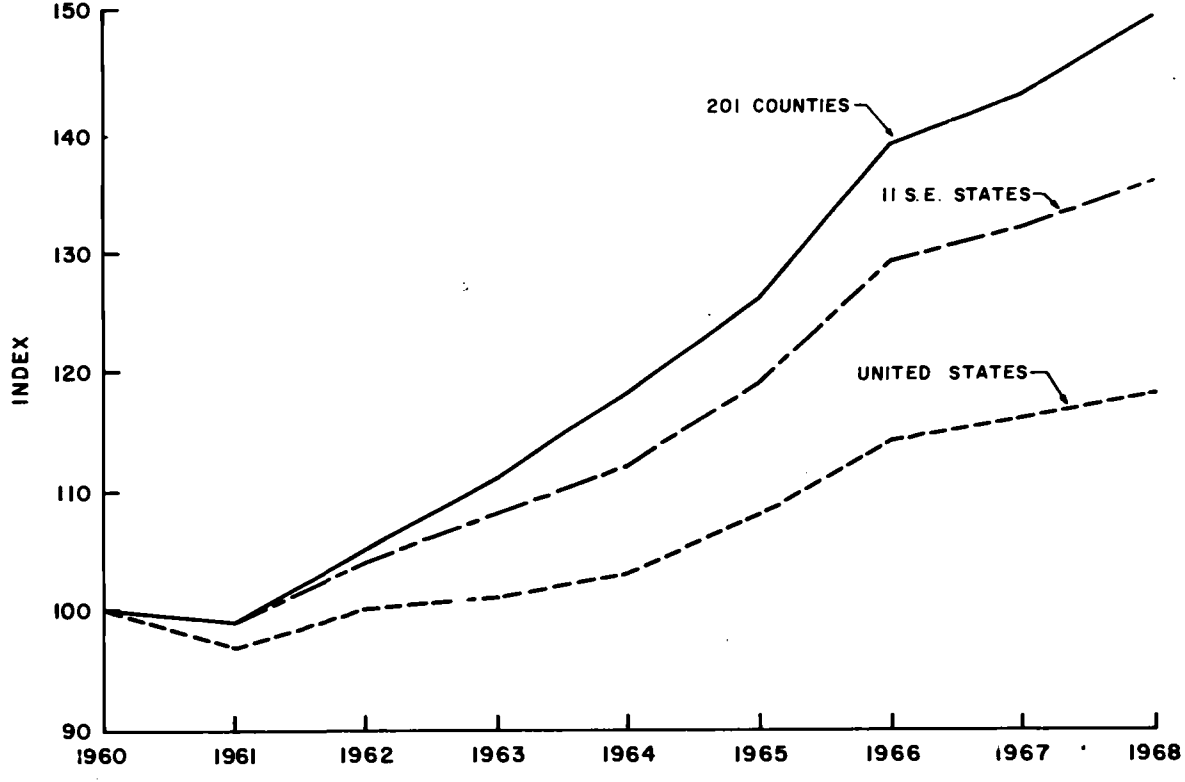
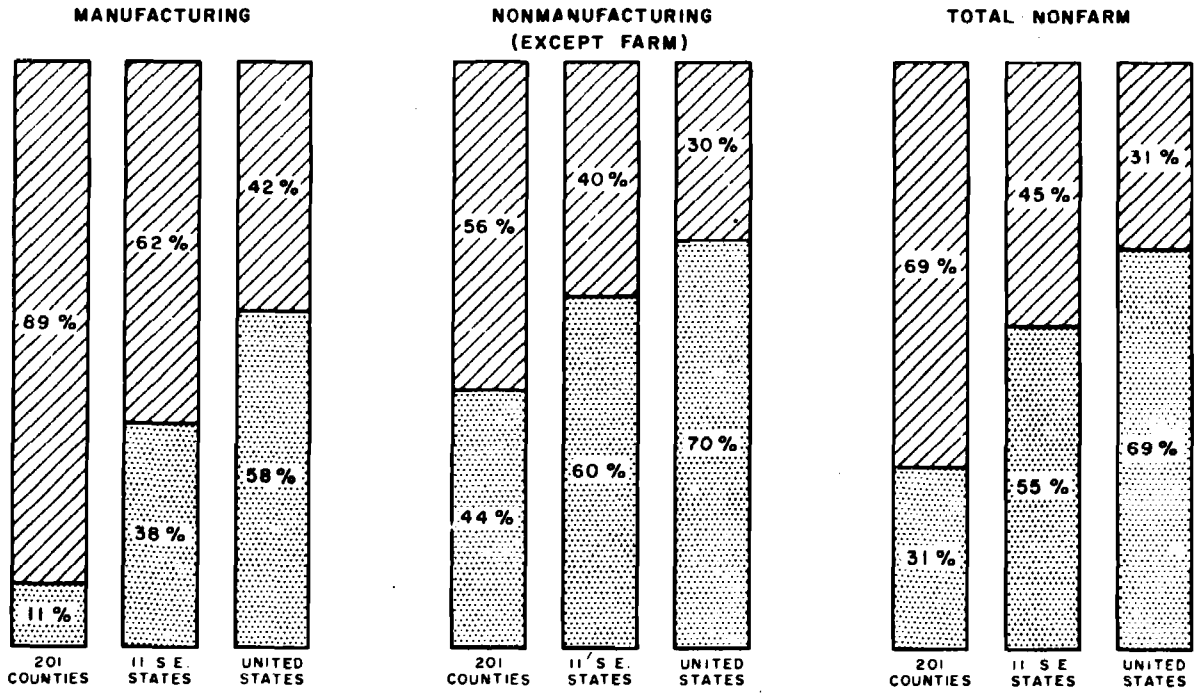


Chart 7

PROPORTION OF THE 1966 TO 1968 NONFARM EMPLOYMENT INCREASE OCCURRING WITHIN AND OUTSIDE SELECTED METROPOLITAN AREAS*



*THE METROPOLITAN AREA DATA ARE FOR THOSE AREAS REPORTED BY THE US-BLS AND INCLUDE 191 OF 253 AREAS IN THE NATION; 42 OF 52 IN THE SOUTHEAST; AND 5 OF 7 IN THE TENNESSEE VALLEY REGION (ASHEVILLE AND GADSDEN EXCLUDED)

49-percent increase since 1960, compared with 36 percent in the Southeast and 18 percent in the Nation. Industrialization has been the primary stimulus of growth in the small and medium-size towns of the region. Between 1966 and 1968, 89 percent of the increase in manufacturing employment occurred outside the metropolitan areas of the region. This is significantly more than occurred outside selected metropolitan areas in the Southeast or the Nation. Growth in nonmanufacturing employment was much more concentrated in the metropolitan areas, both regionally and nationally.

In total, almost 70 percent of the increase in nonfarm employment in the region occurred outside the metropolitan areas, compared with about 45 percent in the Southeast and 31 percent in the Nation as a whole. The importance of nonmetropolitan areas to growth in the Tennessee Valley region is quite clear. The exact amount of this dispersion of development that is due to TVA's planning and programs is not clear because, as in most economic relationships, cause and effects are difficult to trace. However, the planning and the actions of TVA were and are in the direction of the results noted. For example, regional economic development requires the securing of the necessary physical resource base. The programs to secure this base in the TVA region had a direct impact on the small towns and their surrounding area.

We tend to think of these basic programs as Navigation, Flood Control, Power, and Recreation although it is true the activities do not always fall so neatly into these pigeonholes. The Tennessee River waterway extends from Paducah, Kentucky, to Knoxville, Tennessee, a distance of 650 miles, with navigable tributaries adding another 125 miles presently used by commercial tows. Large industries that require barge transportation usually locate in previously undeveloped areas where several hundred acres of open land are available. The payrolls from these plants benefit the surrounding small towns and communities, as well as the nearby cities. By locating near the lakes, these industries, in addition to being on the 10,000-mile interconnected inland waterway system, are able to obtain large quantities of process and cooling water; and in many instances, the problem of disposal of waste is minimized. These large basic industries also influence the

location of other plants not on the waterway. Last year nearly 25 million tons of commercial freight moved on the Tennessee River, and preliminary estimates indicate that transportation savings on this freight amounted to about $40 million.

Small towns and communities, as well as rural farmlands, have benefited from TVA's flood control program; and although there may not be as many dollars' worth of damage averted in small towns and communities during a large flood, the effect is just as real and important for it makes the land base usable. TVA also has a program for local flood control directed primarily at small towns and communities. When a small town in the Tennessee Valley region has a flood problem and asks for TVA help, a team of engineers studies the problem, determines the flood history of the area, identifies the areas where extensive flood damage is most likely to occur, and recommends solutions. Solutions may include zoning ordinances, subdivision regulations, and other measures to guide the town's growth away from the danger; or they could involve some flood protection works, channel changes, or a combination of some or all of these solutions. One hundred twenty-six small communities have taken advantage of this TVA program, and more than half of them have followed through with zoning and similar action. In 1959 TVA sent to Congress a special report and recommendation for a national program of flood damage prevention, based on TVA experience. A Presidential Commission was set up to implement it. Today Federal water resource development agencies are working with communities throughout the country.

When TVA began work in the Valley, one of its primary concerns was that of providing electric power to rural areas. When the first TVA-built dam was completed in 1936, only 3 out of every 100 farms in the Tennessee Valley had electricity. Today, practically all the farms use TVA-generated power distributed through cooperatives and municipalities. The availability of electricity to perform a number of household chores and to pump water under pressure for washing machines, hot water heaters and bathrooms has transformed the homes of farm families so that they are no different in this respect from those of their city cousins. The availability of this electricity has also made

it easier for industries to locate in these rural areas and has made the towns that serve these areas, around which the industries cluster, more attractive and efficient.

TVA's system of high dams and lakes has created a number of benefits that were not fully visualized in the original TVA Act. Recreation resources is the most dramatic example--recreation is big business throughout the Tennessee Valley. TVA has transferred more than 200,000 acres of lands adjacent to the lakes to Federal, state, and local agencies for development and operation as public recreation areas. Most of this land is in rural areas. There are 95 state and local parks along TVA lake shores and more than 54,000 acres are managed by the states for wildlife and waterfowl. TVA is constantly seeking ways to improve public facilities and to increase public access to the lakes. A large number of public access areas have been improved with launching ramps and picnic tables. Commercial investors have built 339 boat docks and related facilities along the shores catering to fishermen and recreational boaters. These have a total estimated value of $72.5 million. These developments improve the rural communities not only by adding jobs, but by adding to the local tax base and providing an opportunity for metropolitan area dwellers to recreate in rural areas. The availability of water for contact sports and community water supplies is indispensable in developing small towns, communities, and rural areas.

In addition to these programs and the obviously rural related agriculture and forestry development programs, other assistance is needed if the small towns are going to attain their potential. In TVA we think of these as mainly in two categories--community and industrial development. Community development is a means for securing more attractive and efficient small communities. To be effective, however, the development process in small communities requires attention to both general planning which can give direction to development and a strategy and program to carry out the general plans. In most parts of this country, states, multi-county agencies, and the communities themselves are tooled up to do some part of the job. In many areas there is also a regional agency that can fill in functional gaps and, more importantly, do those things that are more efficiently done on a multi-state base. This, of course, is the role TVA plays in its region.

The general planning effort should produce an understanding of the place of the community within the region of which it is a part. It provides a means for dimensioning community problems and opportunities and how both may be approached. It includes consideration of residential, business, and industrial needs; and it sets a broad strategy for the community in determining the specific actions needed to achieve overall community goals.

The action program deals with the specific things the community can do this year and next to assure sound community development. It may involve, for example, the identification of specific industrial sites and the preparation of these areas for use by industry. At this point the advantage of having a central staff engaged in research for industrial development becomes obvious when it is able to point to industries which fit community plans and resources. Other specific actions which a broad planning effort might suggest include programs to secure an adequate supply of housing to meet the needs of present and future citizens of the community. The action program might take into account the problems of its commercial areas and how these areas might meet competition which it will expect from larger cities. An example is the TVA Townlift program, which helps small communities to understand the economic problems facing their business districts and, by working with businessmen and official planning commissions, helps to prepare a program of business district improvement. Recommendations include things that can be done now, such as the improvement of parking and improved appearance and, through educational agencies, more effective retailing in general.

Finally, the action program must include attention to the services required in all present-day communities. This includes water, sewerage, solid waste disposal, recreation, and health facilities, including hospitals and clinics. While all of these cannot be built in one or two years and while there are many Federal programs offering financial assistance to help communities make progress in these service fields, there are usually functions a regional staff can do, or assist with, that provide that little something extra to get things started or make them work better.

This gap filling or sustaining function requires a broad range of technical skills which normally are not available to communities. However, there are many technical assistance programs available from state agencies, state universities, private organizations, and Federal agencies. The key starting point is to build into the community the leadership and the will to solve problems and to plan and strive for a better future.

As a very basic input to our efforts to aid community development and to enable towns and their surrounding areas to remain or to become attractive, we have been engaged in a program of retail trade analysis (Tables 1, 2, and 3). The need for such studies and the development programs they support comes into sharp focus when we consider the changes that are taking place in the retailing and services sector of the region's economy.

In 1958 retail sales in the Tennessee Valley region, in 1967 dollars, were a little less than $6 billion. This was 65 percent of the region's personal income compared with 56 percent for the Nation. Regional sales rose to $8.5 billion in 1967 and are expected to reach more than $15 billion by 1980--almost half of the region's projected personal income. On a per capita basis, in 1967 dollars, sales are expected to increase from $1,250 in 1967 to more than $1,800 in 1980.

Developing areas, such as the Tennessee Valley region, have fewer owners of large accumulations of wealth and thus typically spend higher percentages of their income on retail sales than do more affluent areas. In 1967, 57 percent of the region's income went for retail sales, compared with 50 percent in the Nation. However, from the standpoint of the retailer this different consumption pattern is not enough to offset the effect of lower income levels. Sales per worker, which includes proprietors, are somewhat lower in the region than in the Nation, but sales per employee are about the same in recent years. This points to the likelihood of too many small proprietor-operated units.

Sales per establishment are much lower in the region than in the Nation, but the number of establishments per 1,000 population is about the same. Thus, the lower income of the region is reflected primarily in smaller establishments, which presumably are less efficient than their larger counterparts. Therefore, in addition to considering the location

Table 1

RELATION OF RETAIL SALES AND PERSONAL INCOME

	SALES IN MILLIONS OF 1967 DOLLARS		SALES AS PERCENT OF PERSONAL INCOME	
	201 COUNTIES	UNITED STATES	201 COUNTIES	UNITED STATES
1958	$ 5,879	$231,421	65	56
1963	7,124	266,180	62	53
1967	8,468	310,214	57	50
1980	15,051	489,300	4[illegible]	44

Table 2

PER CAPITA RETAIL SALES (IN 1967 DOLLARS)

	U. S.	201 COUNTIES	PERCENT OF U S.
1958	$ 1,329	$ 972	73
1963	1,411	1,095	78
1967	1,568	1,250	80
1980	2,089	1,827	87

Table 3

SELECTED RETAIL TRADE STATISTICS

		UNITED STATES	201-COUNTY REGION	
			AMOUNT	PERCENT OF U. S.
SALES PER WORKER (1967 DOLLARS)	1958	$ 23,694	$ 22,012	93
	1963	26,836	25,783	96
	1967	28,188	27,179	96
SALES PER EMPLOYEE (1967 DOLLARS)	1958	$ 27,307	$ 26,035	95
	1963	30,209	30,243	100
	1967	31,466	31,426	100
SALES PER ESTABLISHMENT (1967 DOLLARS)	1958	$ 128,944	$ 102,723	80
	1963	155,849	119,679	77
	1967	175 926	139,766	79
ESTABLISHMENTS PER 1000 POPULATION (NUMBER)	1958	10.0	9.3	93
	1963	9.1	9.2	101
	1967	9.0	9.0	100

and types of stores in retail marketing studies made to assist communities planning for improvement, one can also consider the operating unit in terms of feasible or optimum size.

In the comments on community development, there was brief mention of centralized research for industrial development. TVA has engaged in such research as a necessary and basic step for laying the groundwork for solid economic growth.

We conduct continuing analyses of long-range trends and current indicators of the manufacturing sector of the national, southeastern, and regional economies to determine the industries or product groups which have the greatest growth potential. We analyze the markets and input needs of industries as well as the comparative importance of community size, water (process, cooling, and condensing), various modes of transportation (rail, highway, air, and barge), electric power, natural gas, and other locational factors of interest to various industries. Market studies identify the value or volume of the consumption of a product compared with its production in a state or region. Where consumption exceeds production, there may be a need for additional production facilities. Where production is greater than consumption, this may indicate that aggregation or economies of scale are taking place and suggest the opportunities for additional production facilities or other types of industry that would supply inputs or utilize outputs. This kind of research enables the regional industrial development associations and state agencies to focus their economic development efforts and realize a higher payoff from these efforts. Knowing that the industrial development mechanism is using such a blueprint for its promotional efforts gives confidence to small town leaders as they urge community development planning based on the same research results. They know there is a sales force working to make the planning assumptions come true.

For physical resource development for community and industrial development, a central staff providing economic studies, including the projections of economic indicators, also provides useful information to plan for orderly and balanced economic growth that can make the best provisions for the protection of the environment.

Such a regional service permits the formulation and consideration of local plans and projects in perspective of regional trends and projections. With an effective delivery system that induces communities to ask for help, a centralized staff backed by facts from good research can stimulate local efforts to plan for and invest in the future and serve as an aid in efforts to minimize the impact of development programs on the environment.

If the projections for the 70's for our region are to be attained, the small communities will have to provide facilities and services that are economic in a small town. And such services must be at least as good as those available to larger cities. It must provide an environment for living, working, and playing that will be a positive attraction to a growing number of people. Those services and facilities available only in large communities should be easily available through a system of transportation to small town residents.

TVA's style of working emphasizes the close relationship between state agencies, multiple county groups, and local officials in providing for well-balanced area growth. This includes development of both the large cities and the smaller communities. While parts of the job can be done by the staffs of state agencies, multi-county agencies, and TVA, it has been clearly demonstrated time and time again that the success in most small communities depends primarily upon the interest, concern, and leadership within the communities themselves.

One of the most important attributes of good rural development programs is that they help community leadership create and maintain citizen interest and involvement in efforts to formulate, strengthen, and bring to realization local development programs and goals.

GENERAL STRATEGIES FOR ECONOMIC DEVELOPMENT AND REGIONAL REVITALIZATION

George R. Herbert[a]

As anchor man today for this concluding event of your conference, I feel very much like a courtesy runner who has been allowed to enter a track meet only because the other, and better trained, members of his relay team have built such a sizeable lead that he can't possibly lose it. Certainly I cannot pretend to come close to the degree of professionalism or experience that has been exhibited in your technical discussions, but I will try not to drop the baton.

What I can and will try to do is to highlight some of the purposes, objectives, and methods of general regional development programs by calling attention to examples of specific strategies and where they lead.

Nearly all of the data and ideas contained in my comments necessarily are based on circumstances and events that have occurred or are taking place in North Carolina. Few of them are unique to North Carolina, however, and by far the greater number are generally representative of considerations that must be taken into account in regional development strategies anywhere.

In this connection it is worth pointing out that regions are more alike than they used to be.

Distinctive character remains through climate, terrain, mineral or agricultural resources, other fairly visible features of geography, and a little bit of pride.

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Equally visible, however, is an increasing sameness in the conditions and requirements of regional development as each region's economic, political and social institutions, and above all, educational levels, converge towards a homogeneous, national whole.

Evidence of the changing ground rules for regional development are everywhere.

For one thing, we no longer are in a rush to fill up our states and our country with people. Indeed, one of our acute and inescapable challenges is to find acceptable means of slowing down the rush of new people as well as the migration of people. The unrestricted immigration that built so much of what is fine and strong about America has had to be the subject of restrictive legislation and control for twenty years. I predict that, for the next twenty years, family planning and the limiting of new births will be supreme issues of our national life.

A modern corollary, all but unthinkable to any previous generation, is that we no longer leave it up to each individual to sustain his own and his family's existence as best he can. Instead, we now accept it as a national responsibility and obligation to improve and to enrich his existence through public investment and the expenditure of public wealth.

Looking back into history, regional development was decisively linked with access to a coastal port or inland waterway. In the not-very-distant past, economic activity and development followed the routes of railroads to new resources and new markets. Today our transportation and distribution systems are built on airports, interstate highways, and urban-rural road networks.

In the competition for industrial development, an abundant supply of cheap, unskilled, and, therefore, exploitable labor is no longer the attraction it used to be. Technological displacement is one reason, but the new requirements of successful business are even more important. The advanced, expanding industries of the 1960's and 70's put a higher premium on skilled labor, on a manpower pool adaptable to new training, new methods, and new kinds of jobs. Companies seeking new locations now use yardsticks other than cheap payrolls. They seek locations that can provide adequate housing, that offer a pleasant living environment, good schools, and an equitable tax structure for supporting high standards

in other community services such as health facilities, recreation, water, sewers, and road maintenance.

While there is no "best" strategy for economic development that can be applied to every region, a good strategy for any one region will contain many of the elements required by all. Prominent among these are a clear-eyed and hard-headed view of a region's assets and liabilities and an objective assessment of its potentials and its limitations. (Needs must be matched by resources. Ambitions must be balanced by opportunities. Attainable objectives and timetables must be identified.)

Perhaps as good a place as any to begin being clear-eyed and objective is with a definition of what a region is and with an understanding of what regional development implies.

A region, I believe, can be described very briefly as a geographic complex of common interests. Consequently, the size of a region to which the concept of development is applied can range from a small, local community to a multi-state area such as our coastal plains.

Except for purely political purposes, however, no region, regardless of size, can be regarded as an independent, isolated chunk of real estate. This is not for lack of individual characteristics, or virtues, or shortcomings. It is because there is so much interdependence, so much mutual support, such a melding of common interest, common need, and common enterprise that no geographic entity can be separated from the context of the greater area within which it lies.

An understanding of what regional development is all about can also be expressed broadly but simply. In my own mind, the aim of sound regional development is to promote economic vitality and social well-being

-- by encouraging full use of human, natural, and financial resources,

-- by stimulating commerce and industrial growth,

-- by enhancing opportunities for new and existing enterprises,

-- and by raising educational standards, employment standards, and living standards for all its people.

Even with these as guideposts, however, the processes and effects of regional development often involve degrees of change which are

difficult to predict and that are hard to accommodate when they occur, but which seem incredibly obvious when viewed in retrospect.

The Research Triangle of North Carolina, where I work, has become a national standard, even an international standard, for a region's ability to reorder and realign an existing but hitherto unrecognized resource -- in this case the priceless and very contemporary resource of education -- into a capital asset from which to create a new dimension for scientific enterprise. What a fortunate resource it was to uncover. And what a fortuitous realignment. When the Research Triangle was just beginning to be a factor on the State's economic horizon in the mid-fifties, agriculture was still, by far, North Carolina's biggest employer, but the mixture of elements which comprise the State's economic base were beginning to change, as were employment patterns.

The flight of cotton had become a stampede. In the twelve years, 1955 to 1967, cotton fled North Carolina to the tune of a harvested acreage drop of 844 percent. To a discerning eye -- the kind of 20/20 vision that leads tobacco companies to diversify into dog food and whiskey -- the dangers for the big-money, bright-leaf crop were visible on the horizon.

From 1950 to 1960 employment in the agricultural sector fell by nearly half, from about 24.8 percent of the State's total to just over 13.4 percent. Research Triangle Institute economists now estimate this has again been cut in half, with a drop to approximately 6.7 percent of the work force employed in agricultural pursuits. In another five years the figure will descend even farther to a projected 5.6 percent.

These are economic dislocations of the first magnitude, but in effect they are only symptoms of change throughout the entire region. Of the Coastal Plains states, North Carolina, historically, has had a higher percentage of agricultural employment than others, but the same declining trend holds true for all.

Not so quickly apparent, but with perhaps more lasting significance, are accompanying changes in population mix -- age, sex, and so on. Here in North Carolina, for instance, the white population is increasing at twice the rate of nonwhite population, but the birth rate among nonwhites is higher. In all parts of the region the shifting pattern of rural to

urban residence is unmistakable, bringing with it precipitous changes in life style, employment classifications, production and consumption balances, political demands, and social mores.

A much-quoted figure here a dozen years ago was that native North Carolinians living in other parts of the country in 1950 totalled one-fifth of the State's population. A more recent estimate raises this figure from one-fifth to one-fourth.

This out-migration is irreplaceable in terms of energy and youth and training, although we do manage to get some of it back. Too often those compelled to leave have been the seekers and doers unable to find either the challenge or the opportunity to match their ambitions in the state that reared and educated them.

Despite absolute gains in basic economic indicators, our Coastal Plains region is showing little, if any, improvement against advances registered in other parts of the country. The trend may not be immediately reversible, but it can be slowed and eventually stayed by thoroughly planned and resolutely executed approaches to regional revitalization. It will also take some luck, but that is one of life's constants.

For several years now the Research Triangle Institute has been directly engaged in basic data gathering and program planning aspects of some of these development efforts. Out of the experience that Institute economists and systems analysts have gained in working with state, federal and local agencies and regional associations, we can identify four distinct approaches to the goal of a revitalized regional economy. These are, and I will list them briefly here as reference points:

1. Upgrading of human resources,
2. Creation of new job opportunities,
3. New and better utilization of natural resources, and
4. Improving the quality of the environment in which both employing institutions and their personnel will live.

None of these factors is new or startling to you professionals in the regional development business. However, some of Research Triangle Institute's findings and conclusions may put certain of their aspects into new perspectives that are worth just a few moments of elaboration.

While the first approach -- upgrading human resources -- encompasses several endeavors including health services, on-the-job training, greater productivity, and others, the most important, by far, is education. An educated populace is a populace readily trainable to the skills desired by new industry. At the high school, technical institute, and community college levels in particular, it is a prime inducement to the kind of new industry that can pay, and expects to pay, wages and salaries that are sufficiently high to raise local per capita incomes significantly.

Under joint sponsorship of the Coastal Plains Regional Commission and the State of North Carolina, Research Triangle Institute is forecasting the occupational skills required in the State's economy through the current decade and is identifying the educational attainments that must be available in the work force to meet them. The analysis is being made for each of twenty occupational groups. Its results are seen as having an important influence on the scope and direction of high school and post-secondary education and vocational training programs. It goes without saying that another result, an available supply of trained manpower, will have a powerful effect on industrial location decisions.

Incidentally, our forecasts show that, from a present statewide employment of a little over two million, industrial expansion will require 400,000 more workers by 1980, and that an additional 524,000 will be needed as replacements for workers leaving the labor force.

The second approach, that of creating more jobs, is more direct and traditional. It calls not only for growing and attracting new industry, but also for expanding existing businesses.

A not-so-traditional variation, on which Research Triangle Institute is working with the State's commerce and industry and planning divisions, is an analysis of supplier and buyer patterns. It seeks to identify links and relationships, that might otherwise not be seen, between North Carolina and other regions in terms of raw materials supply, processing, end product, and market.

This fairly sophisticated kind of input-output analysis, as it is called, and the more-than-usual emphasis North Carolina is giving to specialized education are both good examples of the benefits that can come from having to make a virtue of necessity. North Carolina cannot hold out loss-leader inducements to potential new industry such as

revenue bond financing, guaranteed loans, or exemption from taxes. Also, the State imposes relatively stringent air and water pollution regulations. Insofar as these alleged competitive handicaps exist, however, they are more imaginary than real. In the long run, and even in the short run, they enhance the State as a good place in which to do business and assure us of a sounder, more stable employment and investment base.

I might add that in professional basketball the Carolina Cougars can also match the competitition both in the size of the players and the size of the players' salaries.

Going back, in conclusion, to touch on the last two of our four-item list of approaches to regional development, making new and better uses of existing natural resources is by now a litany familiar to all of you. The Coastal Plains states have more going for them in this regard than most other areas. In the development of our ocean resources and wetlands areas, we have opportunities that are very likely unrivalled anywhere else in the country. (And in the scientific and research capabilities we can bring to the task, I think I can say flatly that we are unrivalled.)

Another industry relatively new for us and just coming into its own as a giant in this region is the booming travel-tourist-recreation complex. Our states here in the Coastal Plains are so magnificiently endowed and so advantageously located, even if it is only luck, that, after scarcely a decade or so of real development, travel and recreation are already bidding for the number two spot in industrial dollar volume.

The final approach, environmental quality, I have already touched on. It includes housing, schools, municipal services, taxes, roadway litter, transportation, pollution control, health services, and all the other bits and pieces of day-to-day existence that add up to quality of life. Bits and pieces they may be, but put them all together and they have a high degree of visibility. And we all know that first sights and first impressions do count.

I have left myself just a moment or two to remind you that you are sitting at the edge of one of the most spectacular and successful ventures in regional development strategy in all the history of the United States. I mean, of course, the Research Triangle.

The area has its points in the university campuses of Raleigh, Durham, and Chapel Hill. In the center is the Research Triangle Park, a 5,000-acre tract that only ten short years ago was useful mostly for holding three counties together. Today it is a science center without parallel, the model for scores of research-based regional economic efforts being planned, prayed for, or dreamed about by scores of industrial development groups and by community and State agencies all over the nation.

The eighteen research-based organizations now in the Research Triangle Park have buildings in being, under construction, or in the design stage that are valued at some $120 million. They have created 7,000 new jobs just in the Park alone. Their combined payrolls are now skyrocketing towards $70 million annually circulating through the State and region.

All by itself the Research Triangle is a two-word definition of economic development and regional revitalization.

But that is another story which, exciting as it is, must be left for another day.

Quoting statistics of economic growth, as I have just done with an obvious tone of local pride, triggers a little warning bell in my own mind. Every year we each roll out our tabulations on investments in new plants, additional jobs created, tax revenues, etc. and -- in our concentration on numbers -- seem to imply that industrial, or economic, development is a competitive sport for the sake of the game itself. "Look how much more we scored than our neighboring states," we say. "Look at our rating in the southern and southeastern conference."

This fascination with statistics must never blind us to the real objective of our economic development efforts. It is not simply to pile up numbers for the sake of the score. Rather, it is to increase per capita income and the standard of living and to improve the quality of life for all of our people. That is the real name of the game.