

which require rising levels of education and skill on the part of workers. This will result from increasing specialization in production processes and from rising per capita incomes of consumers.

Employment in agriculture is expected to continue to decline during the decade of the 1970's. It is quite probable that the rate of increase in manufacturing jobs will not be as rapid as in trade, government, and many types of professional and business services. Thus, past directions of change in the number and proportion of employees among groups of industries and occupations are likely to continue into the future.

Some geographic dispersal of employment will also probably continue. This will flow from growing public concern over problems of congestion and pollution, and rising public and private costs associated with the heavy concentration of population in metropolitan areas. It will also result from the emergence of new industries related to improving the quality of the environment and to producing low-cost housing, and from new and faster forms of transportation.

The underlying factors which have brought about past job trends among industries, occupations, and geographic areas have raised the general level of productivity of the economy. At the same time they increased the levels of living of most workers, and enlarged the opportunities of many members of the labor force.

However, shifting job patterns have not occurred without sizable private and public costs. Because of a lack of information about job vacancies and because of inadequate education and skills, many workers in rural areas have been stranded in dead-end situations.

At the same time, large numbers of Negroes, Puerto Ricans, and a few other minority groups who have moved into overcrowded slum areas of central cities are handicapped in many respects, including accessibility

to suburban areas where jobs around urban centers have been increasing most rapidly.

Partly as a result of these factors, welfare rolls have risen, and public costs for training workers to acquire new skills have increased. Many rural areas have lost large numbers of people, thousands of businesses in hundreds of small towns have disappeared, and many local governments are hard pressed to finance their activities.

Probably the most serious economic and social conditions exist in the older sections of our large cities, where the combination of employment and housing discrimination against Negroes and other minorities have created deplorable living conditions and explosive racial situations.

Clearly, the shifts in employment patterns which result from economic growth and development do not affect all groups equally. Most of us receive significant benefits. Others suffer real costs. Public policies need to take account of both types of effects.

Rural Areas And the People- Jobs Cycle

JOHN R. FERNSTROM and
RONALD E. KAMPE

PEOPLE go where the jobs are and jobs develop where people are. The people-job phenomenon is circular in nature and once started tends to continue for its own momentum—without regard to the interest of the individual or the nation.

Thus left to evolve by itself, the cycle continues and in many cities creates complex problems for city, State, and Federal governments to cope with. Congestion, clogged highways, smog, pollution of all types, crime, and other problems of a large metropolis beset them.

The bigger the city the more complicated it becomes to solve the social and economic problems. New York City spends for other-than-school costs half again as much per capita as the other cities over 1,000,000, nearly twice as much per capita as cities between 500,000 and 1,000,000, nearly three times as much as the cities under 500,000. But many of the other large cities are in trouble, too, with limited taxable resources and more than their share of poverty problems, school problems, sprawl problems, pollution problems.

Yet the cycle continues on, with more and more people moving to the cities. Many do not necessarily want to go but individually they are unable to change their fate, for they must go where jobs are.

In a recent study of 35 northeastern counties in North Carolina, employed residents in the region are projected to increase by 78,995 or 20 percent from 1960 to 1975, which is about seven times more than the increase from 1950 to 1960. Despite this projected increase in employment, the net emigration for the region from 1960 to 1975 will need to be about 46,000 to maintain the 1960 population-employment ratio in 1975.

The people left behind in rural areas suffer since migrations have weakened the local communities through loss of population that provides the local tax base, supports civic endeavors, provides the membership for local organizations, and makes up the local merchants' cus-

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tomers. A recent report summarizes the problem:

"The Nation's smaller communities outside of metropolitan areas will be increasingly bypassed by the economic mainstream and will also find it difficult to offer enough jobs for all their residents and those of surrounding rural areas. Many rural areas will suffer from a further siphoning off of the young and able work force with a resultant greater concentration of older and unskilled among those remaining, and a continuing decline in the capacity of rural communities to support basic public services."

In regard to the cities, the same report was equally pessimistic. The continuation of current trends, it was said, would bring about such consequences as the following:

- While the evidence is not conclusive, increased size and congestion may take a social and psychological toll in urban living conditions.

- Advantages of suburban areas in attracting new industry will continue to widen the gap between the economies of cities and their surrounding neighbors, deepening the problems of many cities. A most serious aspect of these problems will be the growing inability of cities to provide jobs for their residents.

- Continued concentration of urban growth in suburban and outlying areas foreshadows a prolongation of development practices creating "urban sprawl"—the disorderly and wasteful use of land at the growing edge of urban areas.

This vision of the future has become widely accepted among experts studying the problem. Some people believe these developments are probably inevitable; that they are the consequences of the industrial revolution or of natural social evolutionary forces, as well as the collective manifestation of individual preferences. The fact is, however, that if these developments materialize, it will be largely because of policy decisions or the lack of them.

But there are signs of change. Industry once located in large cities in order to enjoy a large labor force, local access to materials and services, and intercity transportation facilities. Now it is responding to new opportunities created by improved transportation facilities and the increasing ability of rural areas to support new economic growth.

Industry and other forms of business no longer need to locate in the heart of a densely populated urban area in order to obtain services and labor. For example, in 1970 at least eight major U.S. corporations moved their corporate headquarters from New York City to locations in nearby Connecticut.

The modern highway system makes it feasible to attract workers from a much larger geographic area. Thus areas that earlier might have been bypassed are now attracting industry.

Manufacturing industries spent more than \$31 billion in 1970 in capital expenditures. Of this, approximately 50 percent was devoted to

modern plants in rural areas where municipal facilities were provided and where labor was available.

We as a nation face some important policy decisions. Should we have public policies and programs that encourage or speed up this rural industrialization process, or should we support continued migration? Is it in the national interest to have industrial growth in all areas of the country or should growth be encouraged in just certain areas and discouraged in others?

Should we bring jobs to the people or people to the jobs? Should industry of a certain type be encouraged to locate in rural areas while others are discouraged? And if we decide on a



Right, besides horses and blue grass, rural Kentucky has a new crop—industry. Below, refinery on the Mississippi in St. James Parish, La.



certain policy, what about the people who may be adversely affected by the policy action? These are only a few of many complex and interwoven policy questions that we must face.

There appears to be a national consensus that recognizes our Nation must act upon these problems of unbalanced growth and population distribution which arise from our laissez-faire economic policies. Commissions appointed by two Presidents as well as a Senate Committee have all drawn such conclusions from their studies. But to arrive at what a national policy should be and what programs would best implement such a policy is difficult.

In considering the position of rural areas, let's first look at what's going on in rural America that is counter to popular ideas in both rural and urban America. The things going on today can be an aid in formulating national policy and point to successful programs for rural development stressing the use of rural space for jobs which can stop the cycle of job centralization.

For several decades now, the people who live in the open spaces and the towns and villages of rural America have been establishing new community identities. The boundaries are not marked by arbitrary political lines, but are established by the reach of modern communications and by the automobile and all-weather roads.

Commuting time by car sets the feasible limits on the choice of job opportunities, on access to health care and to education, on the participation in cultural events, and on the dimensions of the marketplace for the buyer and seller of consumer goods and services.

In reverse fashion, these same elements have made the streams and fields, the woods and lakes of the countryside into a potential source for greatly expanded outdoor recreation facilities for the town family.

Thus, an area that can support new growth has evolved by a process

of voluntary choices of both town and rural people.

A past weakness of our rural economy has been lack of an adequate structure of social and economic organizations, which in turn has resulted in little incentive for leadership development that is required to provide an adequate level of public service.

Nor has it been economical for every town or small city to attempt to provide a wide range of social, cultural, and economic services which are commonly associated with larger urban centers.

Yet the larger economic area, comprised of rural and town people together, provides a population base which can support a full range of well developed public services. The related interests of both town and rural areas establish the essential design and vitality of the area.

The mere existence or recognition of these functional communities has not solved all the social and economic problems of those who live within their boundaries. But people working together on an area-wide basis are providing a dramatic new dimension to the rural economy.

Using the area-wide organizational concept, most areas have a labor force large enough to provide workers for new plants locating in the area.

Further, many rural workers display certain attitudes which are beneficial to industry. Most rural workers maintain a stance of rugged individualism. They will commute long distances before accepting unemployment.

Rural people identify strongly with their employer for they are now, or were recently, closely associated with the management of a farming operation or a small rural business. They know of struggles to make a profit and tend to be sympathetic to the problems of the manager.

Many industries that migrated from traditional centers of production to areas possessing no "developed skills" show a net increase in productivity.

Although special skills may not always be found in rural area workers, most can be developed. Also, "skills" can be broken down into a group of related "semi-skills." Many highly integrated products can be reengineered to simplify and reduce specialized labor requirements.

The rural area, then, offers a highly productive labor force for a new industrial plant. Cost savings, as a result, are being achieved for each unit produced.

Many of the national corporations already understand the economic advantages of a rural location. Because of the competition in urban centers for workers and the rapidly increasing wages that result, industries frequently are selecting rural areas for plant locations.

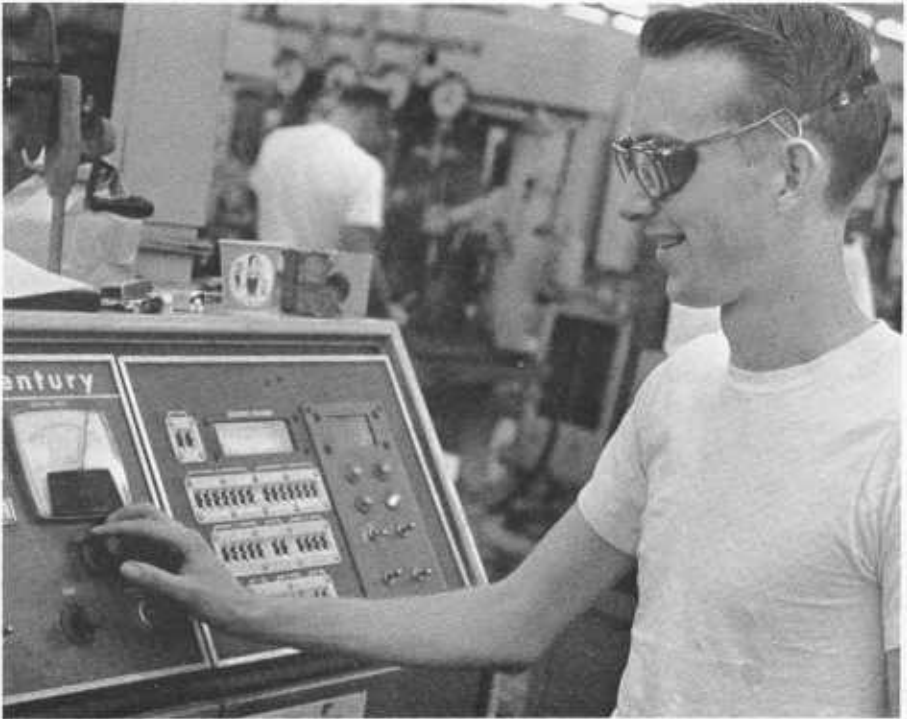
Location of plants in areas with little competition for labor also mini-

mizes the inflationary spiral caused by competition for workmen in the areas where labor shortages exist.

It is also important to realize that providing higher incomes in the rural areas broadens the base for consumer goods. Therefore, industries will have more prosperous customers if they locate their plants and provide the wages where the wages are really needed.

Providing jobs only in large urban centers will offer a temporary cure for one of the problems created by population migration but will create others. But providing jobs in or near the hometowns of the workers will help change the pattern of migration, strengthen the local communities, improve their tax base, and revitalize the economic life within these communities. This will help in balancing the economy of the Nation.

Because Chrysler Corp. placed a factory in Bowling Green, Ky., Windle Harmon, a resident of the area, was able to stay home, and learn skills that will earn money for him in the Chrysler plant.



Quality of education need not suffer from the rural environment. Again, the use of the larger community is the key. Rural school systems regularly graduate students who perform exceptionally well in institutions of higher learning, and many can provide local industries with vocationally-trained labor.

Post secondary vocational education is increasingly being provided in rural regions. Such programs upgrade and diversify the labor forces of rural areas continually. Clearly, then, non-urban areas are not necessarily educationally deprived.

Available industrial land abounds in many rural areas. Often the land is available in the form of community-sponsored industrial sites or parks, thus insuring its sound development.

This land is universally available at rates below the prices of urban areas—decreasing the fixed real estate investment by a manufacturer, and at the same time increasing funds available for working capital. On the basis of demand in the recent past, planning for industry locating outside metropolitan areas should provide at least 15,000 to 20,000 acres of new plant sites every year.

Many rural communities extend municipal water systems to industrial tracts, while others erect water towers. Communities also extend municipal sewerage to these industrial sites.

Railroad lines and waterways traverse a surprisingly large number of the tracts—insuring complete transportation services to industries locating there. Consequently, more desirable industrial land frequently may be obtained for less money by locating in a rural area.

The Interstate Highway System links rural and metropolitan in a way that was never possible before. Many States construct limited access, high-speed secondary roads to complement the Interstate System along with development of more and more regional or local airports.

The P. R. Mallory Company, Inc.,

of Indianapolis, Ind., provides an example of how well a rural location works. The firm makes products for a wide variety of consumer, industrial, and government markets. The company announced plans in 1970 to establish a 35,000-square-foot plant at Camden, Tenn., to be used for manufacture of electronic parts and assemblies.

The Camden plant is Mallory's fourth manufacturing facility in Tennessee. One at Cleveland produces primary batteries, the Waynesboro operation makes AC oil capacitors, and the Sparta plant manufactures sequence timing devices.

At almost the same time another manufacturer of timing devices, the Scott & Fetzer Company of Cleveland, Ohio, announced a new plant in Smithville, Tenn., to make timing controls.

Illustrations of this kind of trend toward decentralization of industry into nonmetropolitan America can be cited from across the Nation.

Rural areas are becoming less isolated and need not be considered culturally deprived. The same expressways that support rural industries bring businesses, services, shopping, sports, and cultural facilities nearer the smaller communities. Recreational facilities are located in even the smallest community. Cooperation among civic leaders has led to community sports programs, swimming pools, golf courses, ski lifts, public parks with tennis courts, badminton courts and equipment for juvenile play.

Personal amenities are not always manmade and found within the big city. More and more of our affluent society is learning to appreciate the pleasures of the wide open spaces. The rash of campers on our highways, the growing fleet of pleasure boats on our waterways, and the sale of camping and hiking equipment confirm that rural areas have much to offer our pleasure-seeking society.

Communities actively seeking new industry recognize that making the

family of the employee contented leads to happier employees and higher productivity. Personal amenities of all types, then, are more and more considered vital by smaller communities.

The basic solution to the problem of air pollution is simply not permitting excessive quantities to accumulate in the air. How can this be done?

Not allowing pollutants to be expelled into the atmosphere would be one way. Dispersing pollutants to a low level of accumulation would be another. And the latter can be accomplished more readily in rural areas.

Managers seeking new plant sites must consider the special relationship between the problems of air pollution and the climate, topography, and industrial density of an area.

Putting plants where the climate and topography of the area is conducive to a natural air flow will aid in dispersing pollutants. Building tall stacks to vent the emissions at high atmospheric levels will also help. And locating in a less dense industrial area where pollutants are not already at a dangerous level will do much to lessen the national problem of hazardous accumulation of polluted air.

The same principles apply to water pollution. Pollution problems are compounded when several industries, even with highly treated effluent, attempt to concentrate their discharges into limited receiving waters. The environmental health of the nation will demand the decentralization of pollution sources to avoid toxic concentrations.

There are rivers in the rural areas of America that can accept adequately treated effluents and recover with minimum disturbance to the existing aquatic life. There are open spaces where adequately controlled industrial emissions can be absorbed into the atmosphere without danger to the environment.

As industries seeking new plant sites begin to recognize the need for increased dispersion of their plants, there will be more opportunities for smaller communities seeking industry. New

plants can constitute an opportunity, if the community knows its environmental capacity to tolerate the impact of these plants. Understanding and wise planning can minimize and limit the pollution potential of new industry and at the same time produce desirable job opportunities for rural Americans.

We have discussed features of rural areas that should attract industry. But is it in the national interest for rural areas to grow, and if so should all areas grow or only selected ones? If we assume a national policy to provide adequate social services to all citizens, then it may be in our interest to encourage industry to locate where the economy must be strengthened.

Forestry and mining industries are dependent upon available resources. Farming is a seasonal industry and an industry where, as the result of modern technology, the number of farmers has declined and will continue to decline. There will be one million fewer farmers by 1980. Industries in rural areas can complement agriculture by providing employment, and perhaps more importantly provide the means for a more orderly adjustment of personnel in the agriculture sector.

But some areas may lack the resources, both physical and human, to develop into a larger functional economic area necessary to sustain economic growth. It may still be in the Nation's interest to encourage out-migration from these areas and subsidize the social needs of those who wish to remain.

The question of people and jobs is not easy to resolve. If left unchecked, densely populated areas gain in population while sparsely populated areas thin out, and the results are problems specific to both. We as a nation must look at the space available and our responsibility towards our citizens and adopt a population policy that will put this space to its best use.

There is no doubt the urban planners can provide for larger cities, that the highway engineers can provide for

more complex highway systems, that the architects can build taller buildings, and that modern science and technology can solve the problems of the cities. But there is considerable doubt that the money will be provided to pay for the complex solutions required if the problems are allowed to escalate and compound much further.

Some urban planners tend to feel that in order to provide urban services at reasonable tax rates, the ideal size of a city is one with less than a million people. They view pyramiding taxes in rapidly growing States such as California or in New York City as proof that social and economic costs rise out of proportion to population increases. Breaking the people-jobs cycle through decentralization may now be necessary for economic, environmental, and human survival.

How a Town Can Attract Industry

G. W. F. (DUTCH) CAVENDER and
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INDUSTRIALIZATION continues at a rapid rate in the United States but with little planning to encourage balanced population growth. Industry and jobs in rural areas are basic to population dispersion. Efforts toward this end should materially influence the pattern of living for the additional 100 million Americans or so expected by the turn of the century.

This chapter discusses what we have learned about mobilizing resources to attract industry, some techniques that

have been used successfully, and some reasons for failure.

Rural industrialization is the placing of job-producing enterprises in small cities, towns, and rural communities. It requires the cooperation of local citizens, businesses, industry and government at all levels. Communities successful in rural industrialization are likely to change their citizens' attitudes from doubt and apathy to progress and hope.

Much rural industrialization in the past occurred through development of agribusiness. Such development came about because of the interdependence of agriculture and industry. Our effort now is to demonstrate that rural areas are good places for industry regardless of the product.

The economics of plant location probably had the greatest influence on the initial location of many rural industries in our country. Industries that depended on natural resources like timber, coal, water, minerals, or agricultural products were started when the economics of processing pointed to a plant location close to the source of raw materials.

As processing and marketing became more specialized, many industries found it to their advantage to locate close to the consumer, and as our country grew in population, more and more close to, or in, the cities. At that time, cities could more ably provide the skilled labor and services industry needed.

By 1917, a Nation that had been rural and agriculturally oriented since its birth had more people living in urban areas than in the countryside.

Over time, advancement in agricultural technology caused large pockets of rural unemployment. This has resulted in a continuing outmigration to the cities in search of job opportunities.

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