Area Development and Highway Transportation


With the passage of the Area Redevelopment Act of 1961, the Federal government expanded and clarified its commitment to assist economically distressed communities and regions. This paper is concerned with the effects of highways on distressed or redevelopment areas, especially in relation to objectives of the new ARA program. Particular attention is given to the past and anticipated effects of the Interstate Highway System on distressed areas.

The first section of the paper identifies the major types of distressed areas, such as the textile cities of New England, the mining regions of Pennsylvania, West Virginia, and Kentucky, and the marginal farming territories scattered in a broad belt across the Appalachian Highlands and the South. In each case, different effects can be anticipated as a result of the construction (or lack of construction) of improved highways.

The paper then examines some of the most important implications of the location and construction schedule of the Interstate Highway System. Examples drawn from experience in the Appalachian Mountain Region and in several parts of New England are used for illustration.

The final section summarizes findings, makes tentative recommendations for action, and suggests areas for further research in regard to the utilization of highways to assist in programs dealing with economically-distressed areas.

HIGH-QUALITY highways are one of the most important elements in economic development in modern American communities. Although good highways alone are not sufficient to insure economic improvement in competition with other areas, they are a necessity to any area seeking to insure its attractiveness to new industry, its ability to retain existing industry, and its overall efficiency as a place to live and work.

Highway transportation has become more important to the local and regional economy as construction of the Interstate Highway System and the extension of the ABC system has progressed. At the same time, another significant phenomenon of American life has gained greater recognition: the fact that many parts of the Nation have not shared fully in the general prosperity that has characterized the Nation as a whole in the post-World War II period. Despite periodic recessions that have resulted in temporary declines in the Gross National Product, and despite the fact that in recent years the National economy has suffered from higher rates of unemployment than are consistent with growth-rate objectives, the past decade and a half have been years of significant gains in the American economy. During this same period, a number of areas have experienced unemployment rates well above the National average and have seen their traditional economic bases eroded.

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These areas, which have frequently been referred to as depressed or distressed areas1, became the subject of special concern by the States and the Congress in the late 1950's. Federal legislation, the Area Redevelopment Act of 1961, provides special assistance in the form of loans, grants, and other aid to help such areas in improving their economies. The Area Redevelopment Act, which reflected an increasing degree of concern for such areas by the States as well as the Federal government, established official criteria for "redevelopment areas" and clearly stated a Federal responsibility for assistance to such areas.

It is not the purpose of this paper to examine the specific nature of the Federal Area Redevelopment program and the potential effectiveness of the wide variety of means that have been marshalled by the Area Redevelopment Administration and other Federal, State, and local agencies to help localities and regions in the transition to a sounder economy. Rather, the aim is to consider the extent to which highway transportation, and particularly the Federally-aided highway system, can be an effective instrument in assisting the kinds of economic development sought in area redevelopment efforts. Toward this end, the bulk of the paper is devoted to an analysis of the major varieties of distressed areas that exist in the United States and the role that highway transportation can play in solving the problems faced by each. For the most part, the analysis is based on previous work done by the authors as consultants to State, regional, and local agencies.

This analysis is intended more as a first than as a last word on the subject. The precise ways in which new highways can assist in area redevelopment will undoubtedly continue to be a subject of interest to persons concerned with the theory and practice of economic development for many years to come. In addition, the Federal and State programs in this field are still in the developmental stage, and the degree of utility of any specific form of aid is still largely a matter of conjecture, rather than of precise measurement.

MAJOR VARIETIES OF DISTRESSED AREAS

The significant differences among distressed areas have a vital bearing on the prospects for a solution to their problems. The role that highway transportation can play in the solution of the economic problems of distressed areas is also related directly to these differences. In the following sections of the paper, three main varieties of distressed areas are discussed: manufacturing centers, mining areas, and agricultural regions. A fourth section also considers briefly another set of distressed areas which are less widespread and are generally less significant in terms of their effect on the National economy.

This three-way division is relatively crude and generalized. Many regions of the Nation, and even areas as small as a single county, depend on manufacturing, extractive industry, and farming. In general, however, one of the three is the dominant element of the economic base.

Distressed Manufacturing Centers

Changes in the structure of the National economy that have not seriously impeded overall growth have had serious impact, in some cases amounting to near disaster, on particular urban centers.

An example of this is the continuing employment declines that the New England textile industry has experienced since the 1920's, declines which have arisen in part from automation and relocation and in part from international competition. An overall National employment decline in the textile industry has been complicated by a shift in location of textile manufacture, from New England to the upper South, and more recently

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1 The description of such areas has been a sensitive subject. Federal legislation has generally used the term "redevelopment areas"; other words used have included "underdeveloped" and "labor surplus." The term most frequently used in this paper is "distressed area," which has a somewhat less unpleasant connotation than "depressed area" and at the same time indicates that the paper is concerned with a more generalized phenomenon than that dealt with in Federal legislation relating to "redevelopment areas."
from the upper South States such as North Carolina to South Carolina and Georgia, or Puerto Rico. The combination of employment decline and locational shift has resulted during the past decade and a half in drastic deterioration of the economic base of a number of New England cities, of which Fall River, New Bedford, Lowell, and Lawrence, all located in eastern Massachusetts, are examples.

Manufacturing centers dependent on other industries have also suffered sharp reverses, either as a result of the overall employment declines that often accompany technological advances and improved management techniques or from a shift in the location of industrial plants. New England shoe and leather centers such as Haverhill and Brockton have experienced serious job losses as their dominant industries declined; predominantly single-industry communities such as Gloversville, N.Y., have experienced similar declines. Some of the largest metropolitan areas have suffered from job losses in their dominant industry as a result of a combination of automation and production shifts to other areas. Pittsburgh, where the steel industry has sharply reduced its manpower needs, and Detroit, where the automobile industry has cut back employment, are the two largest metropolitan areas that have been classed as "redevelopment areas" under the Area Redevelopment Act.

Highway transportation has not been an important causal factor in the problems that have beset these manufacturing communities, although in many cases unfavorable transportation costs have played some part in the decline. For example, the desire for proximity to sources of raw material supply and to final markets has been a factor in the decline of the shoe and leather industry in Massachusetts. Intranational locational shifts in the steel and automobile industries have also been related to job declines in Pittsburgh and Detroit. In general, however, highway transportation, as such, has not played a significant part in creating distressed manufacturing areas.

Highway transportation can play a vital role in the economic improvement of some distressed manufacturing centers. This improvement usually requires a combination of a replacement of the former mainstay of the local economic base by other types of manufacturing industry, together with considerable improvement in many of the elements of the economic substructure. In addition, other action is generally needed to renovate neglected facilities and services. Retraining of the local labor force, provision of adequate utilities and structures for industrial development, renewal of blighted areas of the community, and a variety of other programs frequently are necessary before a distressed area can be made attractive to new manufacturing industries. An important element in the economic substructure is a good highway transportation system for the movement of goods and people within the area and between it and other urban centers.

This is, of course, a requirement that is not unique to distressed urban manufacturing areas; it is as valid for Boston and San Francisco as for Pittsburgh and Detroit. In the case of some distressed manufacturing centers, however, improved highway transportation can play a dramatic role in economic improvement. This can be seen clearly in the case of two economically troubled urban centers of the Merrimack River Valley in Massachusetts: Lowell and Lawrence. These former textile cities lie about 25 miles from the center of the City of Boston. The small metropolitan areas centered on the two cities abut the boundaries of the Boston metropolitan area.

In recent years, radial expressway connections have been completed linking Lowell and Lawrence to Mass. 128, the circumferential highway that circles Boston at a distance of about 10 to 15 miles. Now under construction is US I-495, the outer circumferential highway of the Boston area, which will pass directly through Lowell and Lawrence.

This recent improvement in highway connections has had two effects. First, the radius of easy commuting by automobile for workers living in the distressed cities has been significantly increased, enabling them to find jobs in the burgeoning electronics and research operations along Mass. 128 and in other locations inside the circumferential. Secondly, the improved highway system has made industrial sites in the Merrimack Valley more attractive to manufacturers in the electronics and other advanced industries who want to tap the sizable labor pool in the Valley but who also wish to retain close physical proximity to the many assets of the Boston area. The Massachusetts Institute of Technology and a large supply of skilled scientists and engineers are among the more
prominent of these assets. To a considerable extent, new sources of employment have offset the Merrimack Valley's heavy losses of textile jobs. Though the effects of high-
way transportation in this situation are difficult to isolate and measure with precision, one major indication of the contribution of expressways to economic improvement can be seen in the fact that, during the hearings of the Senate and House committees on area redevelopment legislation in the 1950's, the Lawrence area was frequently cited as being typical of the kind of area the bill was designed to benefit. By the time the bill became law in 1961, however, the economy of the Lawrence area had improved to the point where it was no longer eligible for assistance as a "redevelopment area" (1, 2, 3, 4).

An interesting contrast to the effect of new highways on the Merrimack Valley can be seen in the case of two other distressed Massachusetts cities: Fall River and New Bedford. These also were former textile centers, and have also been linked to the Boston area by radial expressways (Mass. 24 and 140). However, they lie 40 to 50 miles from the central city, roughly twice the distance that separates Lawrence and Lowell from Boston. This greater distance has diminished the spillover of industries and suburban residents and other favorable impacts of the larger metropolitan area. Commuting is possible, but arduous, between the Fall River-New Bedford area and the Boston area. The distance between the growth areas along the western and northern segments of Mass. 128 and the Fall River-New Bedford area is an obstacle that good highways can only lessen, but not overcome. The situation is made more difficult for Fall River and New Bedford by the presence of a large number of potential industrial sites closer to Boston and Mass. 128. Another factor that might have benefited Fall River and New Bedford is their proximity to the larger Providence metropolitan area; however, the Providence area itself suffers from severe employment problems. To date, industrial development and other economic improvement efforts of the Fall River-New Bedford area have been noticeably less successful than those of the Lawrence-Lowell area (5, 6, 7).

To summarize, good highway transportation is at least as important in distressed manufacturing centers as in any other urban area; in addition, there are a number of instances of smaller urban centers so located that their economies can be directly stimulated by an improvement of their connections to a nearby, larger metropolitan area with a stronger, more diversified economy. Improved highway transportation is a potentially vital factor in combating the effects of economic decline in this major type of distressed area.

Distressed Mining Areas

A second major variety of distressed area is the community or region dependent on mining for its economic base. The mining of bituminous and anthracite coal is characteristic of most of these areas, but communities dependent on other types of mining are also included in the distressed area category, such as the iron ore region of northern Michigan and lead mining centers in the Southwest. Areas depending on other types of resource extraction, such as forestry, can also be included in this category.

The problems that have befallen mining and forestry areas arise in some instances from resource depletion, in others from competition with other raw materials (coal vs gas and oil, for example), and, almost always, from the effects of increased mechanization and automation on the demand for labor. Coal employment in West Virginia and Kentucky, for example, has been drastically reduced by mechanization even though the annual volume of coal produced by these States has not declined significantly and in some places has increased.

It has become painfully clear that even sharp gains in the consumption of the raw materials produced by distressed mining areas will not begin to resolve their labor surplus problems. A shift to a different economic base appears essential if a reduction in population through outmigration is to be avoided. In most instances, the new economic base that offers the best prospect of meeting the requirements of such areas is manufacturing, and in the growing National competition for the relatively small number of new manufacturing establishments seeking locations each year, the mining areas are seriously handicapped. Other economic bases, such as forestry or tourism,
cannot provide jobs in the numbers that are needed. Many mining areas, including those in eastern Kentucky and West Virginia, face serious problems in improving accessibility, due to their mountainous topography. In addition, most of these mining communities are small, and lack many of the urban facilities and services that are considered essential to modern manufacturing industry. Scattered successes in attracting plants have only served to highlight the difficulty of resolving the economic problems of most distressed mining areas short of a readjustment in the relationship between job opportunities and labor force (8, 9, 10).

To a limited extent, improved highway transportation can assist in the redevelopment of mining areas, but in the vast number of cases the role that can be played by better highways is limited, as is the potential of almost any other kind of capital investment. The key problem that must be faced by most mining areas is that their economic possibilities are reduced by competition from the many alternative places for investment elsewhere in the Nation, where problems of accessibility and the lack of urban facilities and services are far less evident.

A word of caution is necessary, however. As with manufacturing centers, there are significant differences among mining areas. In some, such as Scranton and Wilkes-Barre (which also have substantial amounts of manufacturing employment) in the anthracite belt of eastern Pennsylvania, the fact that the cities are located within reasonable proximity of the major east coast belt of metropolitan development indicates that improved highway connections can play a considerable role in helping to resolve their economic difficulties. Distressed mining areas that offer a reasonably complete and sound urban community structure and are close to major metropolitan centers have substantially better prospects for economic development than isolated mining hamlets.

Thus, there are selected instances of distressed mining areas where highway transportation can be a major factor in reducing economic distress. In a greater number of cases, however, the large investments involved in pushing expressways through mountainous terrain offer the prospect of small return. Other types of assistance appear to be necessary. It may in fact be necessary to give serious consideration to programs designed to aid the population of such areas in voluntary relocation to places where their job prospects are greater. Difficult as acceptance of this fact may be for the residents of many mountain mine towns, the clear evidence of population migration data for the northern Appalachian mining region is that the harsh reality has already been accepted by many people. What appears needed in such areas is a greatly expanded program of assistance in improving human resources, such as is foreshadowed by the Federal Manpower and Training Act of 1962 (11, 12).

**Distressed Agricultural Areas**

The third major variety of distressed area is composed of territory dependent on agriculture for its economic base. There are two main causes for the distress that is characteristic of some of the Nation's rural areas. The principal reason is related to the astonishing success of American farmers in increasing productivity through the use of mechanization and advanced techniques of farming. Growing surpluses of produce in almost every sector of the agricultural economy can be created by fewer farmers. A concomitant of this success story is the fact that many farmers, unable by virtue of poverty or lack of training to keep up with the pace of change, have lost their chance for obtaining a reasonable livelihood from agriculture.

A second, and parallel factor, has been the inability of whole regions to remain competitive in the National agricultural economy. The hill country of the southern portion of the Appalachian Region, including portions of Kentucky, West Virginia, Virginia, Tennessee, and South and North Carolina, is characteristic of this category. The land in such areas is useful for forestry and grazing but is not as adaptable to mechanized farming as is the more level, fertile territory of the Midwest. Because a large agricultural population is attempting intensive cropping, this region is characterized by low incomes and severe economic distress (8, 9, 10).

The prognosis for marginal agricultural areas is at least as poor as that for most mining areas. If such areas are to sustain their populations at anything approaching the National per capita income level, they require sweeping changes in their economic
base that appear extremely difficult, if not impossible, to achieve. The alternative is a continuation of rural poverty or even higher rates of outmigration and population decline than have characterized such areas in the recent past.

Only a very small role can be played by improved highway transportation in meeting the enormous needs of distressed agricultural areas. These areas generally have very low densities, small urban centers, and frequently, topographic obstacles to accessibility; as a result, only low benefit-cost ratios can be found for expressways in such territory. Improved access roads built to less than expressway standards may, however, be worthwhile undertakings in some of these areas.

Again, as in the case of the distressed mining areas, there are exceptions to the general rule. Some predominantly agricultural areas near metropolitan centers have good prospects for economic development as centers of manufacturing or tourism. Parts of the Great Valley of the Southern Appalachian Region are in this category. But the number of these areas is small, and the remaining marginal agricultural areas appear to need other kinds of assistance which is directed more at aiding the displaced farm population than at creating a new economic base.

Other Varieties of Distressed Areas

In addition to the three main types of distressed area already discussed, there are a number of less widespread varieties. One of these consists of communities formerly dependent on the railroad industry whose economies have declined as that industry has cut its employment requirements or shifted operations. Another group is made up of communities that relied heavily on a military or other government installation which was subsequently closed or experienced cutbacks in employment. Indian reservations constitute a special class of distressed area identified in the Area Redevelopment Act. There are a number of resort and recreation centers which provide employment for local residents for only a few months of the year.

Each of these minor varieties of distressed areas has its own peculiar problems, but all have in common an urgent need for adjustment to a new economic base, which may or may not be associated with an alternate form of growth.

The importance of highway transportation, either as a causative factor, or a potentially ameliorative factor also varies. It is unlikely, in the case of the railroad community or the resort center, to be a sufficient stimulus to development to replace the former economic base, but good highways may play a part in aiding a transition to a new situation. Nor do better highways offer any necessary aid in either replacing a closed government installation or relieving the dire poverty characteristic of most Indian reservations. These are problems whose solution requires a wide range of techniques, which may or may not include highway improvements.

ROLE OF HIGHWAY TRANSPORTATION

The problem discussed in this paper—the need to find solutions to the problems arising from economic decline in distressed areas—is not new to the United States. Although the principal pattern of this country has been one of growth and new development, history offers numerous instances of communities that have been faced with the need to find a new economic base to replace one outmoded by economic change, transportation developments, resource depletion, or population shifts.

Some successful transitions have been made in the past. For example, the city of New Bedford, which grew as a center of the whaling industry, made a highly successful transition to reliance on the textile industry. With the decline in local textile manufacturing it is now faced by the need to make another major transition. Cumberland, Md., has passed through periods of reliance on coal mining, the railroad industry, and textile production, and is presently once again seeking a new economic base.

In other cases, no transition has been possible. Ghost towns of the West, which boomed in gold-rush days, stand today as mute witnesses to testify that economic transition is not always possible. Overgrown town sites in New England, not yet reached by the spread of the suburbia which may yet redeem their early promise, offer the same sort of testimony.
With the apparent acceleration of the rate of change in the structure of the National economy which has been characteristic of the postwar period, the need has arisen for more serious consideration of the distressed area problem than was the case earlier in the Nation’s history. The scope of the problem, and the range of possible solutions that must be tested, is far broader than can be considered within the framework of transportation analysis. It requires no less than an examination of National and private goals and aims. This need was seen by the President’s Commission on National Goals (13, p. 11) whose statement on "Technological Change" included the following comment:

Public and private leadership are required where whole areas are economically distressed. Measures to encourage industries to move to such communities and relocation programs for individuals are justified. Consideration should be given, where necessary, to state and federal government participation in loans and grants to aid community efforts and to underwrite support for programs of retraining.

The true significance of the Area Redevelopment Act of 1961 and of successor measures, including the Manpower Development and Training Act and the Public Works Acceleration Act of 1962, lies in the recognition they give that area redevelopment is a National as well as a community responsibility and one to which the United States must address itself.

In this broad drama, of which only the first act has as yet been seen, highway transportation is certain to play an important and controversial part. There have been, and will be, many calls to provide high-quality highways for areas where the prospects of economic development and redevelopment are small indeed. Some of these requests, accompanied by political pressures and evidence of urgent need, will be difficult to resist.

What is called for, as suggested in the foregoing analysis, is a realistic appraisal of the validity of providing new and improved highways as an economic stimulus. Where there is serious evidence that the request for better highway transportation is based on a real prospect of economic improvement, it may be necessary to relax somewhat the strictures of benefit-cost analysis so that intangible benefits as well as the more obvious costs are weighed. But if the value of highways as an element in economic improvement programs is to be realistically assessed, it should be measured against the need for other types of programs, including programs that take into account the fact that the fundamental concern must be for people, rather than for geographic areas or property values. Within a comprehensive, human resource-oriented framework it may be possible to avoid serious errors of priority allocation or expenditure. A major step in this direction can be made through use of the kind of analysis called for in the Overall Economic Development Program required by the Federal Area Redevelopment Act. Another means for making this kind of analysis is through the use of comprehensive planning for land use and transportation. Studies of this type can be conducted under the Urban Planning Assistance Program of the Housing and Home Finance Agency and the planning programs of the Bureau of Public Roads. The cooperative approach of these agencies is a major advance in placing transportation analysis and planning within a broader context.

Although these, and many other types of research effort that can be undertaken with public or private funds, offer no guarantee of a solution to the varied problems of the distressed areas, they can and should provide a framework within which honest and realistic decisions can be made about the role of highway transportation, in conjunction with other programs, in developing solutions to the problems of each of the distressed areas.

REFERENCES