Studying the Connecticut Turnpike—A Before-and-After Analysis

Walter C. McKain, Head, Department of Rural Sociology, University of Connecticut

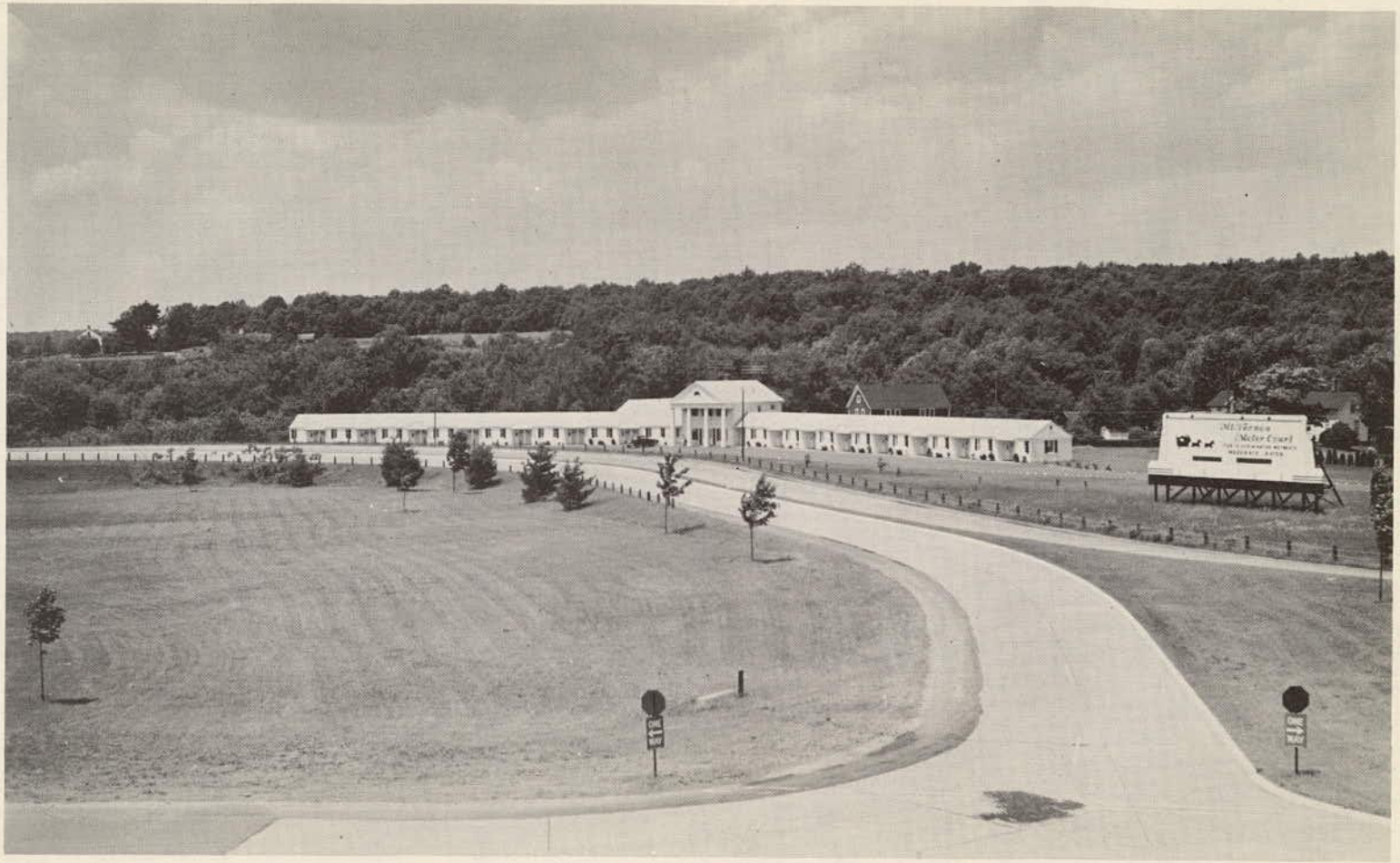
The Storrs Agricultural Experiment Station at The University of Connecticut has long been interested in suburbanization and has produced a number of monographs on this topic. Notably absent from research in suburbanization has been any attempt to analyze the suburbanization process under experimental conditions. Social scientists seldom can conduct research in the laboratory and must depend upon "social" experiments that are planned and carried out for reasons unrelated to research design. The construction of the Connecticut Turnpike is fortunately a social experiment that permits the analysis of an area before suburbanization takes place and enables one to isolate various elements in the suburbanization process. Controlled comparisons can be made in this instance with both time and area dimensions.

Before-and-after comparisons become more meaningful when the individual elements in the situation can be traced longitudinally and related to other elements both before and after the introduction of the independent event (in this case before and after the opening of the Connecticut Turnpike). For example, cross-sectional analyses of population composition could be made preceding and subsequent to the opening of the turnpike. This rather static approach would have limited value, however, in an attempt to assess the effects of the turnpike. An analysis of population change with reference to the factors that attracted population to the area and to the changes that resulted from in-migration is more likely to uncover the effects of the turnpike. In other words, dynamic situations require dynamic techniques.

Controlled comparisons also may be designed on an area basis. If the effects of the turnpike are more pronounced in the area immediately adjacent to it and become less noticeable as the distance from the turnpike increases, an analysis of changes that occur in areas with varying degrees of intensity will provide useful comparisons. The influence of the turnpike may not follow this pattern and the relation between distance and effect may vary from one kind of influence to another. (For example, population growth may be greatest at a point somewhat removed from the turnpike.) These zonal gradients will then be useful in demonstrating the relation that does apply, provided the step-by-step development of the effects can be determined.

Topics Covered. Six topics included in this project may be pertinent to research on the economic impact of highway improvement. Broadly stated, these are: 1. Population shifts and composition. 2. Decentralization of manufacturing plants. 3. Changes in retail trade and professional services. 4. Development of the recreation industry. 5. Changes in local government services and costs. 6. Shifts in land use and property values.

Period Covered. The Connecticut Turnpike is scheduled for completion in 1957. In general, 1954 and 1955 have been used as the base period of comparison for all secondary sources of information. Field investigations did not begin until 1956, therefore most of the primary data begin with 1956 or 1957. After completion of the turnpike comparisons probably will be made on an annual basis for an indefinite period.



A view of a motor court development adjacent to the Wilbur Cross Highway at Rockville, Connecticut. An extensive economic impact study of the Connecticut Turnpike is now under way, sponsored by the Connecticut State Highway Department, at the University of Connecticut.

Areas Included. The project will be concerned with that portion of the Connecticut Turnpike that lies in New London and Windham Counties. Seven areas have been identified with reference to the turnpike and, insofar as possible, each phase of the investigation will cover all of these areas. In order of intensity they are as follows:

1. A 1-mile area surrounding each interchange or pair of interchanges.
2. A 5-mile strip on each side of the turnpike.
3. Towns (townships) traversed by the turnpike and lying wholly within the 10-mile strip.
4. Towns traversed by the turnpike and lying partly within the 10-mile strip.
5. Towns not traversed by the highway but lying wholly within the 10-mile strip.
6. Towns not traversed by the highway but lying partly within the 10-mile strip.
7. Towns in Windham and New London Counties lying wholly outside the 10-mile strip.

Research Procedure. Population estimates are available from the State Department of Health for each of the towns in the two counties for 1954 and 1955 and estimates are being prepared for the 10-mile strip. The latter estimates are based on the construction of new dwelling units as reported by local assessors, the annual school census and other school records, utility installations, and periodic field reports. After the turnpike is opened for traffic in-migrant households will be interviewed and their relation to the turnpike determined.

Manufacturing plants have been classified and mapped for the entire area and a schedule of information has been obtained for all plants with ten or more employees for 1956. The commuting patterns of the workers have been plotted. Information concerning payrolls and monthly fluctuation in employment has been obtained from the State Department of Labor for 1954 and 1955. Comparisons are available for all the areas of intensity and annual changes following the completion of the turnpike will be recorded.

All commercial establishments and home enterprises have been plotted for each area for 1956. The State Tax Department has made available the gross sales and the taxable sales on a quarterly basis for each establishment in 1954 and 1955. Professional services have been charted from lists available in state or county headquarters. Changes in all of these items will be reported for the years following the opening of the turnpike.

The recreational use of land is being obtained for each area of intensity from assessors' records for 1954. This has been limited to summer home and shore properties, summer boarding houses, summer camps and winter sports facilities. Retirement homes are being listed from the same source. Certain recreational facilities have been covered under retail services. A listing of other recreational uses of land will be made from field investigation. Motels and other tourist accommodations will be canvassed to determine present capacity. All of these items will be checked on an annual basis when the turnpike is completed and any change in recreational facilities will be related to the turnpike by field investigation.

A list of local government services, including some quasi-governmental services, has been prepared and data for each town will be secured by field investigators for 1956. The form of local government, tax rates, and

zoning or planning activities will also be listed. Changes in type or amount of service and changes in the costs will be noted after the turnpike is completed.

All property sales in each area have been recorded for 1954 and 1955, together with a description of the property involved. This will permit comparisons with sales following the opening of the turnpike. Land use changes will also be noted, with special attention being given to the disposition of farm land. Housing developments, manufacturing sites, and commercial developments (such as shopping centers) will be subject to separate field investigation.

Photographs of land adjacent to main highways at interchange points will be taken in 1957 and a pictorial story of the present highway usage will be made. Aerial views of interchange areas are also planned. Similar views after the turnpike is opened will be obtained.

The State Highway Department has made traffic counts on many roads and will expand its coverage to include the Connecticut Turnpike.

Integrating Land Use and Highway Planning in Detroit
Glenn Richards, Department of Public Works, Detroit

It seems that the people of the United States have decided to have a big highway system, and they want it built in a hurry; that is, in from 10 to 12 years. Whether or not the things that have happened in the past should be looked into, and whether what is going to be done should be based on what has happened to the highways in the past, the important thing is what is going to happen in the future.

There is a great value in studies like this. In these highway hearings, we have to be able to point out to the people why a certain highway should be built and why it should be located as planned. But as far as the impact on the economy is concerned, it would seem that the decision has been personal. Almost every state has increased its taxes and the federal taxes have been increased. But as one who is going to spend a great deal of money in the urban area of Detroit, I am anxious to know how and where to spend that money.

In the past land use change has followed highway improvement. Industry has been developed along highways, an effect still being evidenced as fast as new highways are built. In fact, many times we have ruined highways by developing industry and business along them.

If we are smart, in the future we shall look ahead and avoid some of our past mistakes. To this end we have been giving some thought to the future in the Detroit metropolitan area. Primarily there are the metropolitan origin-and-destination studies made by Carroll, from which we know about how much traffic to expect in the future. We have a city land use plan, a regional land use plan, and some industrial studies. How can we pull all those together and make something out of them?

The city planning commission completed a master plan in 1950, after about ten years of work, and now we have our new origin-destination study. The problem is whether or not to use this origin-destination study as the basis for remaking of the land use plan, or whether to take the land use plan and add to it the expressways and secondary roads. I have come to