

to have reached a saturation point, and where such saturation exists it is a mistake to build freeways into the heart of the central city, thereby adding not only more people but also more automobiles.

The problem is static as far as the business district is concerned, but is dynamic as far as the private automobile is concerned. Underlying these opposites is the basic demand to move people, and transit more nearly fits the needs. There must be greater emphasis on the development of transit in keeping with greater use of the automobile.

The matter of paying for transit is a terrific problem. Thought must be given to how transit facilities can be financed without public subsidy. It certainly is most important that the transit problem be taken into consideration during the design of these expressways and freeways.

There is no need to fear losing mass transit completely; it will survive and must survive. Some radical adjustments may be needed to keep it, but it certainly is an integral part of maintaining the health of the central business district.

## GENERAL ECONOMIC ORIENTATION

### The Broad Approach to Highway Impact—National and Regional Edward A. Ackerman, Resources for the Future, Inc.

The comments addressed in the direction of a broader highway impact picture than a locality, or a very small region are most interesting. However, it seems that one profitably could start at the other end. This is a Federal highway program and perhaps such planning is the responsibility of an agency of the Federal establishment. Whatever the agency, outlining a framework within which planning can be undertaken at the national or regional level should be helpful.

Of course there are decided imperfections in looking at so large an area as the United States over the period during which one would want to plan, say, 25 or 30 years hence. Even recognizing the imperfections that exist in techniques, in data, in outlook, it still seems that an effort in that direction is desirable. In its absence we have, at best, impressions. And all of us, even when we seek to be accurate, make certain assumptions which may be based on impressions.

There are other forces influencing growth in this nation than the direction that highway construction takes, although that is very influential and one of the ways in which the other forces are channeled.

I think, for example, of resource development. What has been done in the development of water resources over, say, more than one-half of the geographical area of the country, is extremely important as far as the future is concerned. What is done about reforestation, although possibly not as important as water resources, still can influence the direction that development takes.

The balance of the energy resources indicates certain trends. Let's take the matter of rising prices of petroleum products as against new forms of energy that are coming in, or of coal compared with petroleum products, and so on. Those who specialize in these subjects consider them to be significant factors in the future economic development and settlement in most parts of the country.

Another example may be cited in agricultural trends, such as the coming of irrigation in eastern agriculture, particularly as far as the development of the Lower Mississippi Valley is concerned. Certain social considerations furnish one more example of forces that we have to think about. For instance, the shorter work week, the longer life span of most of the population, and the increasing demand for recreation will have effects on the needs for transportation. The role of highways in meeting recreational needs will be vastly greater in the future than it is at the present time.

Somewhere along the line I hope that we can have a study which looks at the nation with the objective of determining what the forces are that favor certain types of general traffic patterns for the country or for regions within it. One can forecast trends for some of these forces; for example, trends in the nature of resource exploitation (such as water, minerals, and others) and some of the basic social changes which are inherent within our society at the present time may be at least generally seen. To that might be added, of course, the fact that we are in a growth economy, and that through measures such as gross national product, it is possible to arrive at some idea of what that growth amounts to.

The highway system is now concerned with freight traffic as well as with passenger traffic. Up to this point no distinction has been made between the passenger and freight highway traffic in planning, although the two do not necessarily always go together.

This is mentioned because freight traffic is still largely handled by other parts of the national transportation system—the waterways, insofar as they have been developed, and, of course, the railroads. It is important, in planning for the highway system and in understanding the economic impact of that planning, to understand what is happening in other parts of the transportation system of the country.

An obvious example is the development of the St. Lawrence Seaway. Chicago has been trying to discover what the impact of that will be. But it goes much beyond Chicago and the lake cities. Another is the proposed development of a navigation channel on the Arkansas River as far as Oklahoma. This will have an impact, not only an impact on the rail system, but also a general effect on the economy of the area.

In these economic studies of the future, it will be necessary to start with a larger view and a consciousness that there is a national and regional traffic pattern that must be considered, as well as these numerous more local patterns that have been discussed so much in this meeting.

### **Three Decades of Experience Along Westchester County Expressway Frank L. Dieter, Office of Planning, Arlington County, Va. \***

The Westchester County Planning Department made a study on the effect of expressways and parkways on surrounding land uses under a grant of \$14,000 from David Rockefeller, a member of the Westchester County Planning Commission. The investigation began with a study of the impact of land uses on one another; for instance, commercial on residential. Then the effect of the various types of highways on surrounding land uses, particularly residential land uses, was investigated.

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