

Mr. Bone mentioned that on Route 128 it has been necessary to build an additional interchange to serve some industrial plants. It is presumed that considerations leading to establishing the interchange at that location included, at least, consideration of the possibility of building a service road between the two existing interchanges serving that area. This would also reopen the subject as to the economic benefits of adding a service road.

## **Relating Highway Improvement to People Gordon Sharpe, Bureau of Public Roads**

Our main concern or interest is the method of relating the influence of traffic to people, in all of their activities.

When bypasses are built or when any highway improvement is undertaken, planners ought to know what effect to expect, not only in terms of the economic impact, but in all activities related to the improvement. In these improvements, traffic is being diverted and generated. In addition, the movement of industries, people, and goods is being stimulated and the whole complexion of urban areas and rural areas is being changed.

Bertram Tallamy, Federal Highway Administrator, pointed out in one of his articles that the New York Thruway at each of its interchanges will have a new urban or industrial complex. This type of information is important. These changes will certainly have a measurable quantity in dollars and also in their effect on traffic.

These are some of the basic things that we are interested in: relating highway improvement to people; to where they live, where they work, and where they shop; and to their business.

Some pilot studies were inaugurated by the Bureau in the Washington area to find out the effect of highway improvement on the number of trips to the central business district and to suburban centers. As cities grow in size, does the central business district retain its same degree of attraction as distance from downtown increases? We have studied employment centers and residential land uses to determine the relationships between land uses and traffic. Mr. Carroll has done somewhat the same thing, although in more detail, as to the effect of distance and time on travel patterns.

Highway improvement does have a very serious economic impact on the whole nation. How can some of these things be measured? The effect on traffic and on improvement of land might be very small in the case of an expressway located in an already highly developed area as compared with one built in a completely undeveloped area close to the central business district. The rapidity of the rate of growth in the latter instance probably would be extremely high in comparison to the first instance.

Such information is needed for forecasting traffic, which has been, outside of Mr. Michael's case, almost uniformly underestimated. It would aid study of the impact of a highway improvement in the general trend of city growth versus one built to an area that is more or less blighted or dead.

There was case in Puerto Rico back in 1948, where the planning board wanted to give priority to the building of a highway from the proposed airport to the central business district through a congested blighted area. From a traffic standpoint, a reliable forecast based on current traffic

figures was questionable because there was no airport in existence. But it was indicated that there would be an increase in traffic, and that the highway should have first priority not only from a traffic viewpoint but also as an aid in the redevelopment and upgrading of land use.

It was estimated by the planning board that the upgrading of the land into apartments and hotels, along the ocean front, would more than pay for the highway improvement. Such a development definitely would constitute economic impact and be a valid reason for building the highway, in addition to its serving the present and future traffic.

It is urged specifically that all planning commissions produce land use maps, both for current land use and for projected land use. This is not accomplished in a week. It is very necessary to have land use in both economic studies and in traffic studies. The success of the whole highway program hinges to a large degree on developing data and factors as to the relation of traffic and highways to land use.

### **The Highway and the Businessman** **J. Edward Johnston, U. S. Chamber of Commerce**

The discussions so far recalls a statement made by the Federal Highway Administrator suggesting the interests that the National Chamber of Commerce has in the economic impact of the highway program. He related an experience in connection with the New York Thruway, in which a trucking concern wrote him that during the year they had spent \$48,000 in tolls on the New York Thruway, but during that same period, because of greater safety in operation, among other things, they had made a saving in insurance costs of around \$50,000.

This is the kind of testimony that is needed in trying to sell businessmen on the highway program. Those working on the job of trying to sell the public on the road program agree that the businessman certainly needs to be sold on the importance of good roads so he will get behind the program in a positive way and not simply oppose ill-advised route locations and access control.

Mr. Michael commented earlier that the problem is two-fold. One aspect is the specific problem of trying to justify a certain route location on its economic benefits; the other, is to find the economic benefits of the road program as a whole. One phase is specific; the other, general.

Data coming to hand recently demonstrate the kind of information needed in dealing with the general economic impact. This information was developed by the Council for Economic and Industry Research, Inc., of Virginia. It had to do with the impact of the road construction program as it was estimated by an electronic computing system. It shows the impact of the road program on some 194 different types of businesses. If that kind of information had been available earlier, to help sell this road program, the support of many businessmen probably would have been obtained much sooner.

Strange as it may seem, the business community as a whole has been very slow to see the value of the road program. In the years to come businessmen as a group may be one of the major obstacles in getting the job done.

In a comment in regard to our booklet, "How Bypasses Affect Business,"