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 Administratior 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,"

someone has said that it is unfortunate that a document of that kind had to be based primarily on the work of one or two states, and that there is a great need for more information. I am sure that the people of Virginia, where economic studies are being made, will benefit a great deal by the work being done there. Such studies certainly will be a better sales ticket than where one has to rely on data from other states, in which there is always the question as to how this applies to the local area.

Although the problem admittedly is two-fold, there is particular interest at this time in research into the field of the general economic impact. This new road program is beyond any expressed conception in its impact upon our entire way of life. It has a chain reaction which extends into every phase of our community way of life in so complex a pattern that we probably could never devise methods whereby its full impact can be truly measured. But anything in that direction would be a great help in selling the highway program.

## Implications of Highway Improvement to Mass Transit J. Douglas Carroll, Chicago Area Transportation Study

The economic effect of this new highway program on mass transportation is going to be extreme, with Los Angeles representing, perhaps, an extreme example of what can occur.

It is not pretended that this is good or bad; but the direction is well marked, and points out a number of major policy questions which will have to be resolved.

In Illinois there is a request before the state legislature to add to the gasoline tax to support the transit facilities of Chicago; a case could be made for such legislation. The availability of mass transit has been decreased because highways and transit are under two different economic systems. It is true that these new highways can be used to some extent by buses, but all would have to agree that as better and better expressways are available it becomes more and more reasonable and convenient for people to drive automobiles, especially as population thins out in the suburban areas.

It probably will be impossible to avoid considering this as a definite economic consequence of this program and one which will require a critical review of policies as to what the optimum mix of facilities in a community should be. To be concerned merely with property study, and not consider these allied effects, might be dangerous.

For example, it can be argued that the unit costs of moving people by mass transit, as opposed to highways, can be easily ascertained. Therefore in a free market, where people have choices and choose a less economical outlet, we do not need to concern ourselves very much about it.

On the other hand, let me describe the difficult problem that we have to face as traffic planners. The people in the central business district of Chicago assert that they want these property values to be preserved and to grow, because they represent a heavy investment in utilities and buildings. But if we improve the highway facilities to that center and then provide the necessary parking, it becomes impossible to maintain those land values in that kind of density. In other words, you cannot have both.