

GENERAL DISCUSSION

COMMENT

Paul Wendt

I have just a couple of observations that I suspect some of you may share with me. The first is that it is very difficult to separate what we have identified as land use effects, economic effects, and social effects when we are talking about something that is as key an element as transportation is in economic and social life. For this reason I suspect many of us have had some difficulty in delineating these activities. I think that the very unity of these elements calls for the use of some kind of interaction model that can be used to study the interrelationships among transportation development, housing location decisions, and land value changes. These are very complex, and they are very difficult to isolate and to study individually without considering their interaction. We are doing some work at the Center for Real Estate and Urban Economics that involves application of a large-scale simulation model we developed. One of the projects is the new towns decision model. We are endeavoring to use the forecasting model as a basis for identifying an area in which we may expect development of a new town in the Bay Area. Now obviously this has to be related to the transportation facilities and the people's travel behavior. We are trying to mesh that, so to speak, with a rate of return with a financial decision model by the developers of new towns. Another area of research is one dealing with the impact of BART on land values. Here we are finding, of course, that land value changes reflect anticipation. One observation we have made is that we ought to have been out in the field 2 or 3 years ago looking at the history of land value changes to get a real feel of the impact that BART is likely to have in that area. A third area in which we are presently engaged is a study for Marin County in which we are trying to identify the probable impact of some alternative strategies for transportation development. I felt that the reports have been very helpful, and I thought you might be interested in some of the things we are doing right now.

QUESTION

Do you think the present data on land use are adequate as a base for a before study of the impacts of BART?

ANSWER

Britton Harris

Well, one has to say that, if they are not, it is just too bad. Some difficulties arose from the way the BATSC data were collected, and these have not all been ironed out. Some data are missing. These have to do with the floor area and the volume and conditions of buildings and would be desirable in a long-range study. Land value is something altogether different. There are no data in the BATSC's files, but on the other hand one can do some research on a sample basis by using transactions to try to identify some trends. In any case, it is a very difficult task, and I am not sure that the land value data that you will have in 1975 will be any better than what you have now after 1965. You can always study any particular station but, out of context, land values are not very meaningful. You can interpret or use as a proximity for land value such things as building volume because high-rise buildings only go up on expensive plots. Finally, what happens around stations is only part of what happens in a region. It seems to me that you cannot put any interpretation on the fact that land values rise around the stations. Although this may occur, we do not know how to interpret or evaluate it.

QUESTION

We have been discussing how the results of the BART experience can be of the greatest utility to as many people as possible faced with large decisions in policy and planning in large metropolitan areas in particular. Unlike an expressway, a transit facility does not contain within its geometrics all of the givens of fixed services. Is it beyond prospect that some part of the BART experiment could contain deliberate changes in one or more of these service variables for experimental purposes?

ANSWER

Ward Belding

I think that first of all with respect to variation in fare and differential pricing the flexibility we may have in this area will depend on the financing arrangements that are still being worked out as far as the rolling stock is concerned. Other variables in terms of flexibility of service, coordination of feeder services, and so forth are still under study to some degree. So as far as I know our plans will be continually reevaluated as we start the first year or so of service. I do not know if we can go beyond this at this point. We are concerned with making the services as responsive to changing demand patterns as possible within the operating constraints that we face.

COMMENT

Vincent Roggeveen

One of my interests is transportation folklore, and one of the pieces of folklore that I detected at this conference is that exciting things are going to happen at BART stations and in other cities too if a rapid transit system is built. I would like to suggest an addition to the study: that is, why nothing happens at many rapid transit stations. Some transit systems have been operating for 60 to 70 years, and nothing has happened during all of those years. Maybe it is something in the zoning, something in the access, something in the land ownership, something in the neighborhood, something wrong with parking, something lacking in imagination on the part of private or public sectors that causes lack of development at a location. I submit that in the BART system I can think of some stations that have exciting possibilities. I can think of other stations where I can predict that nothing is going to happen. I would like to suggest that stations attract development, land use changes, employment, social impact. I believe that you could look at existing transit stations all over the world and find that at many nothing has happened and a good research topic might be to ask yourself why this is so. Could changes be made that could create activity at particular stations?

C. D. Foster

When I was over here a few years ago, everybody was getting worked up over public transport and its place in urban transportation and arguing that public transit was necessary and that the day of the highway in cities was coming to an end. Others said that highways were here to stay and that subways were a very expensive indulgence. Again, I find a lot of people repeating the public transport case pointing to a number of facts, some of them relevant, some of them irrelevant. Clearly the cost of building highways has gone up enormously, and a lot of opposition has developed and adds to the cost of urban highway construction. One suspects that a lot of people who are clanging for transit do not know what they are clanging for. There are always other alternatives to highway construction such as decentralization of the cities. In my own country, I am very enthusiastic about public transport and I believe in its future. This is no reason, however, for believing in its future anywhere else. If Warren Higgins will permit me, I will say that after spending some time in Boston I think that there may be a justification for future expansion of public transportation in Boston. Whether or not BART is justified in the San Francisco Bay Area is quite a different order of affairs. Rail transit is tremendously contingent on particular population densities and particular types of development in different urban areas. The case for rail transit should be

evaluated on the basis of an analysis of expenditure decisions with some idea of a rate of return, cost-benefit analysis, and the impact on the net wealth of the area as a result of this change. I think that it is very important to get some feeling for the total effect—the total costs and benefits—whether it is positive or negative.

Edgar Horwood

The Danish railway system compares in scale to the BART system. It is a combination of a line-haul system that connects separate cities and urban stations with close spacing. It does not have the same speed that the BART system will have, but nevertheless it was one of the best European systems that I have ridden in terms of dependability. The important fact to note is that the ridership has been decreasing steadily since the postwar years in spite of the fact that Denmark has the highest automobile taxation of any western country, in spite of the fact that freeways are not being built at a rapid pace, and in spite of the fact that the Danes have developed housing near the rail stations. In spite of these developments, ridership has continued to decline. I asked my friends why this is, and they state that Denmark is going through a stage where still some segment of the population is buying automobiles for the first time. The number of females in the labor force is rather high, and this brings up the problem of single households supporting jobs at 2 different locations, which makes it hard to optimize location with respect to jobs. Also the trend of job development in the outlying centers is continuing. I think we have something to gain in studying these other transit systems.

Henry Bruck

Our review here has been very helpful in clarifying issues and in reminding us of the variety of things that need to be looked at. There are, however, some other messages that we ought to keep in mind, such as a reminder of how incredibly bad the state of comprehensive planning is. We are advocating ex post impact analysis in this conference, but it should have really been planned for, at least in a large measure, beforehand. We need to know not only the impact of these systems but what the consequences would have been if alternatives had been chosen. I do think that we ought to keep the future transportation planner in mind as we do these studies. I hope that in the future some serious thought will be given to allocating a much larger amount of money to planning. If you look at the costs of planning for the BART system and its relationship to the total cost of the system, you can see that less than 1 percent of the total cost of the system was related to planning. If you compare this to similar types of business decisions, the planning investment tends to be on the order of 7 or 8 percent. The second point that I think we ought to give some thought to is the great number of studies that have been proposed. We have defined 4 areas in which these impact studies might be made. I think that we will also have to have studies of what happens to the system itself when it is in actual operation. These will involve collection of data on operating costs based on actual experience and the collection of data on ridership. Aside from these studies, we should give some thought in the future to allocating research efforts among the various areas of transit impact.

David Boyce

Identifying impact is going to be very difficult. The impacts that will occur will be either zero or very subtle. In South Jersey, where a line has been in operation for a year, not very much has happened around stations. Between 15,000 and 30,000 people are getting to and from work in a new way, but beyond that little other impact is apparent. I think it is going to take some careful long-term studies to determine the effects of new transit systems.

John Gibson

I think everyone probably came to the conference with certain preconceived ideas of what they would get out of it, and no doubt they will go away with their own conclu-

sions as to what they actually gained from it. I think, from my standpoint, the conference certainly developed a prospectus of research areas that could be of use not only to the Bay Area but to many other cities and certainly to the national programs that would be involved. Although this prospectus needs further work in identifying specific projects and what useful results can come from them, certainly this prospectus should be enough to allow us to get started on some useful research. I would suggest that based on this we get started, because time is getting short. As for funding for the research, clearly there are a number of topics that will be of interest to various groups and governmental agencies. I think that some of the foundations and industry may have interests, and it might be more appropriate for them to fund rather than for the federal or state governments to do so. Earlier in the conference, I mentioned that we were considering the need for an overall study—one that would look at what was being done in several cities to see whether the data being collected could be comparable and also to do an overview look at what the national implications were. I would be interested in hearing from any one of you regarding any of the subjects discussed at this conference.