Summary Remarks—Session I

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In its sessions this year, the Committee on Urban Transportation Research has begun an inquiry into a most difficult problem; namely, community values as affected by transportation. The presentations scheduled in this session, and even in both sessions, are but a bare sampling of the ramifications of this diffuse subject. Thus a simple resume of these papers would not appear to add much to what has been presented. Possibly, however, some comments relating to the general nature of the problem, as a backdrop against which to offer some thoughts generated by a reading of the papers, may serve to give some interim perspective.

One would expect to find a rather broad interpretation of the idea of "community values."

The concept of "values" is taken to include a range of things deemed to be intrinsically desirable by society. Within this range one may well expect to find conflicting values. Some values society will hold in higher esteem or priority than some lesser values.

In the concept of "community" is read the notion of an interacting populace whose size and composition may vary, depending on the common thread of interest under consideration. Thus, at one end of a scale the focus may be on the neighborhood as a community in which the common thread seems to derive from rather local and intimate social interaction, and sense of "belongingness," as Mr. Cline put it. At the other end of a scale, it is conceivable that a whole nation or group of nations may comprise a community; here there may be a common thread of interests and desires related by economic or cultural ties, or perhaps generated by a mutual interest in survival; here there may be community values which, in situations of conflict, may completely overshadow some of the values derived from localized interests.

In between is the community having the dimensions of an urbanized or metropolitan region; this is the community Messrs. Colwell and Zwick were talking about, and they implied that this regional community is at once the product of, and the key functional unit of "society U. S. A." in the present stage of economic development. They seem to take the urban region as the significant unit of organized economic activity.

That a profound change has been taking place in the arrangement and distribution of activities in the urban regional community is, of course, no news. It has been variously regarded with interest, glee, despair, anger, frustration, and amazement. Most observers and analysts have no trouble in agreeing that the changes occurring in the organization of urban regional communities result from a combination of economic forces and the responses thereto by society. Zwick makes the point that at this stage in economic development, the provision of new transportation facilities and services no longer uniquely leads or dominates economic development as a whole, but that the growth and disposition of economic and social activity is in large measure influenced by forces in the economy other than transportation. Colwell seems less than positive about this thesis. The question may be raised as to whether or not this may have important implications for those who would hope to restore the city of a former day by simply supplying again a transportation service in the pattern of that day.

There seems now to have been a move into an era when it is being judged desirable and appropriate to give more forethought to how urban regional complexes are arranged and function. This process of taking forethought is variously called "planning." It appears to be induced by a growing conviction that the values of a random, undirected process of development are inferior to those of a planned process of development of living and working space in urban communities.
Possibly one reason there has been so much argument and altercation about the merits of planning the development of the urban regions is that it is only recently that an attempt has been made to learn how to do it. Maybe the effort to learn has been difficult, in part, because it has not really been understood how the urban complex grows, functions, and changes, in response to longer-term economic forces.

Both Zwick and Colwell make the point that a key aspect of transportation planning in the future will be a problem of meeting the demand for mobility in an economic community being conditioned by a variety of other economic forces. Zwick emphasizes that quality of transport services and a better understanding of consumer preferences (values) will be important to the planning of future transport systems.

In any planning (or design) process, the planner (or designer) strives for a solution which meets some acceptable combination of qualities or requirements. A compromise is nearly always involved; this is where the art aspect of planning or design comes in. The qualities, or requirements, or criteria, or standards of design (or operation) result from values, some measurable and some not, that are placed on the performance of whatever it is that is being planned or designed.

With regard to transportation, society, in the first instance, values certain levels of physical performance and safety in its transportation systems. By trial and error, through the ingenuity of the technical designers, and through the functioning of the market place and the grinding of the political processes, acceptable standards of performance of the transportation systems evolve. It is these requirements of physical performance that the planner-designer must satisfy first, and these were the first with which he historically acquired proficiency.

Society also places value on the non-prodigious use of the scarce resources available to it. Thus, various criteria of economic feasibility are used by the planner-designer. He early learned that if he was oblivious to these values, the job did not get undertaken.

Society places value on various qualities of transport service. There are many aspects of the quality of service; the values involved no doubt have priorities which are influenced by the affluence of the particular community. Among the numerous considerations, for instance, is the avoidance of undue crowding or congestion.

To avoid congestion, the capacities of the parts of a system are adjusted to demand. In recent years, planners of urban transportation systems have been giving considerable attention to this element, and have been becoming more adept at predicting capacities needed to serve traffic generated by various elements of the community.

There is currently a move into a period where the community seems to be indicating that there are further categories of values to which it would like to have some consideration given. One seems to be a set of values held by citizens of the community in the role of travelers, and the other seems to be a set of values held by citizens when occupying a role other than traveler. It is of interest to note that we are concerned with practically the same community of citizens, but the values they highlight depend on their role of the moment.

One set of values, from the viewpoint of the traveler, stems from aesthetic considerations. There has been increased consideration of some aspects of this set of values, over the years. But Appleyard, Lynch and Myer have provided a refreshing essay on how things look from the road, at least to some of the more consciously perceptive and sensitive members of the community. They have suggested one rationale for approaching the study of values of this sort.

Cline has presented a set of considerations pertaining to some "off-the-road" values. There are, of course, a variety of "off-the-road" considerations other than physical topography and the costs of lands or improvements which may influence the planner-designer. For example, in locating routes he usually avoids city halls, cemeteries, and governor's mansions. But as society increases in affluence and humanness (at least at the micro- if not at the macro-scale), other considerations are becoming, or may become, delineated. For example, the presence of historical monuments has influenced planning decisions. Cline has summarized some of the thinking with regard to what might be called sociological or cultural topography. His suggestion that attempt be made to recognize more clearly and to respect the functional neighborhood unit, is a consideration to which some transportation planners have al-
ready given some thought. Through sociological studies, such as those he cites, possibly the values here to be given consideration can be more clearly delineated.

In closing, an earlier observation is iterated that, even as an unprecedented urban form seems to be evolving, so understanding of its functions, and planning with respect to its needs, are also evolving. It is, and will be, a team job to develop both this understanding and the planning competence.

The Committee on Urban Transportation Research is performing a most useful service in laying the groundwork for a considered approach to this problem as discussed by this group of papers and reports.

**Discussion**

Robert Snowber (Parsons, Brinckerhoff, Boston, Mass.). — I think Dr. Cline's point about the barriers created by freeways has interesting implications, one of them being that thought should be given in planning not to create new barriers but to parallel existing barriers. These barriers (such as railroads, items of topography, stream beds) are the barriers that have created the present road. If we could give more thought not to create new barriers but to utilize the existing barriers, we would not be creating any new segmentation.

I wonder if anybody in the audience has any experience or given a thought to a highway created not to create new barriers?

Cline. — There is little I can say about that except to agree. I do not know of any specific instances in which already established rights-of-way have been used to maintain the integrity of the community. What I suggest is that these alternatives ought to be more seriously considered by planners now. This is important because what you are planning may be dangerous and lethal to the surrounding community. Where and how you pick the particular routes is really your problem, to evaluate and recognize the requirements of the community and maintain its integrity.

M. L. Manheim (Department of Civil Engineering, MIT; Joint Center for Urban Study for MIT and Harvard). — Historically there seems to be a continuing trend to quantify as many variables as possible. For instance, economics and finance departments have been concerned with values of time as a particular example, trying to associate dollar values to time. Also, you have mentioned social consequences.

I do not think anyone will argue these are quantifiable. The kind of thing you are talking about is not measurable by numbers of parks, schools, and not even by juvenile delinquency rates. Therefore, as we expand the scope of our problems we are including consequences that are not commensurate to one another but are also not even quantifiable. Perhaps the issues which we have been historically concerned with, such as the value of time, become very much less important. We need to look now to ways to make decisions which we cannot put into single measure, such as dollars.

Graham (Boston Area Transportation Study). — Dr. Cline pointed out we have to be more careful about knowing more about existing conditions of certain areas. However, Mr. Colwell says we have to be conscious of all implications of social change, consumer preferences and so on. It seems that there is a gap here.

I would like to ask Dr. Cline how he feels the sociologists can help us to project social change in these neighborhoods so that transportation people can anticipate the needs in the future rather than what exists today?

Cline. — I am not sure I have either the formula or the answer. Maybe I can answer the question by restating a point in my paper: that methods for analyzing social structure are available. For those who are engineers, this is not a research problem, this is an engineering problem. I do not think we have to spend any time or money on how to study social structures. I am certain the materials and techniques are available. The statistics change; all forms of factors and variables in the social science literature (such as in economics and social psychology) are available as well.
I am not sure it is appropriate to say more than that it could be done. Maybe to get
down to what Mr. Manheim said, we are really dealing with apples and bananas and we
can translate geographic and demographic into one unit but not social and psychological
into a comparable unit.

Economic and demographic variables in a sense can be evaluated as money. A
transport route, a freeway, can be appraised on cost. The social and psychological
values are not appreciated in this way. Maybe what we ought to consider is establish­
ment of a different set of ultimate units to compare these apples and bananas into some­
thing that is comparable.

I think Professor Davis suggested the value systems of the community. If we decide
to use as the unit of analysis of planning to be the value unit of the community and de­
cide the contribution of the economic and demographic and the social and psychological
into these terms, the value systems, then they become comparable. We have to decide
before we start to build what values we want to build into our community, what values
are there that we want to maintain, what values we want to destroy.

Joseph D. George (Metropolitan Toronto Roads Department, Chief Design Engineer).—
I do not like to appear ungrateful but I grouped the papers into two parts, three into one
group and Mr. Colwell’s. It seems to me that we have a tendency to be impractical.
Are we getting soft in a very hard world? When you consider the basic factors that
affect design and layout of expressways, roads, and so on, you are always up against
cost.

All these factors are certainly worth consideration but we should not have a tendency
to make molehills into mountains because we will end up gilt-edging all these roads.
We are losing the concept of value. How much are we going to spend on these roads
and where are we going to stop? A road after all has certain basic functions, as Mr.
Davis pointed out. We have to be frank, otherwise we would be wasting our efforts
and some of these points brought up are fine as long as they are viewed in proper per­
spective.

Bernard A. Lefeve (New York State Department of Public Works, Deputy Chief Engi­
neer).—These considerations may very well spell destruction of highways in cities.
Let me give an example in New York. You have a situation where people will not allow
an incinerator to be built within a short distance of homes. On the other hand, when
an incinerator or sewage plant is built, you find homes creep up against them. How
serious is this nuisance value? I think we should consider that highways should be
built in cities. They should look impressive. They should not look like railroad rights­
of-way, things like that have had a deteriorating effect on land use and property values.

I might add we had a recent experience in New York City where a very important
crosstown expressway was stopped by these considerations and it will have a serious
effect on the future of that area. It will remain a rundown area. If the highway had
been built it would have been a revitalization of the area.

I think we should consider the social effects and we should plan for the other effects
as well, to make not just a highway plan but a whole redevelopment plan. This will be
a better scheme for highway planning.

Cline.—The visual aspect of our environment is not superfluous gilt-edging of our lives.
This is of fundamental psychological importance to us.

I do not think a city like Washington was designed and built entirely with cost in
mind. I do not think we can build any environment in terms of only money value, there
are social and psychological values.

Herbert Mohring (University of Minnesota).—There is one point that perplexes me. If
I understand correctly, the material presented by both Mr. Lynch and Mr. Cline has a
certain static quality. Nevertheless, we all know these neighborhoods change. Even
the visual points in the community change in time. What we build today is likely to re­
main built for another generation, at least.

Is there any way of relating the dynamic qualities and the visual and esthetic quali­
ties to the years ahead rather than just traffic conditions today?
The gentleman from Boston indicated he thought there was a gap between these papers. I think more than a gap; I think a disagreement, very specifically.

With regard to how we are going to get ahead on these values I would take the position the primary way we do it in our society is in the marketplace. We adjust that through government action. I would like to have this on a more objective form. Some of these things cannot be stated in quantitative terms.

I do think there is this basic situation of the current situation versus the future: how much do you want to perpetuate the current pattern.

I am really not an economist but an unemployed whip maker. It turns out that Zwick is the German word which if you turned it back it does mean whip maker. I suppose if we had prevented all this social change I might still be in Germany rather than sitting in California and driving to Santa Monica every day.

I personally would like to place a lot more emphasis on letting the marketplace decide these things, modified by a number of other considerations.

Paul Oppermann (Northeastern Illinois Metropolitan Area Planning Commission, Chicago). —I do not know whether I am more encouraged or discouraged. It seems to me we have been moving in one direction this morning and I for one welcome it and commend it highly. It is extremely useful and suggestive.

I was thinking a moment ago about Professor Davis’ summary where he spoke of the fact that we have a very wide spectrum to work. In this spectrum the new additions are extraordinarily useful. It is just beginning. But in the team sense we are talking about operations, again in interdisciplinary or multi-approach, the relationship of plan to operations. Nowhere have we become operational with very many skills, or have some of the people you have named already become useful to us for practical purposes? But the practical thing in a plural society which we have is to employ these various skills in proper combinations in the teams.

I suggest, and I believe it is quite demonstrable, we have not begun to be operational in the team sense. Our teams are heavily weighted by people concerned with your market, the functional scientific approach, with its qualifiable matter and not with the values judgment, some of which are wholly unfamiliar and are not agreeable to the masters of these teams.

I would hope that we could begin to talk in what I think are very practical terms of how we are going to have these members, disciplines, or the values that are not present, how we are going to have them present in the competition among these skills to have their say and have it effectively.

We go again to the role of the citizen. Unless the citizen understands these concepts—which are very sophisticated concepts—unless they are made available to leaders, they cannot be effective.

I suggest that we devote some of our time at these sessions to setting up concrete concepts of how to develop these teams in balance and how through our operational agencies we can begin to test these judgments and values which are not yet in the team picture.

Mohring. —I think Mr. Cline has given up much too easily on the possibility of translating social psychological data into dollars. I was wondering if he had given any thought on how one might set up tests necessary to achieve such a thing?

Zwick. —In my paper I argued one of the things we should be doing is sponsoring experiments. If you like, let people choose, see what preferences really are. It seems to me that is one way to get at it. The other way is to discuss it.

Colwell. —Also, there are some tools now borrowed from economics that attempt to express data that cannot be expressed in terms of numerical theories yes or no.

Cline. —I think there is a great variety available now for translating social psychological data to economic data. At the same time I want to suggest that significant changes in the social structure can be translated into generation of might, and might, I am sure, is something you can identify in terms of economic terms. I do not think it is difficult to say what society loses or gains from economic changes within a particular community. This is not a major problem now to crank into the kind of decision processes available to us now.
I want to suggest still further that if we define the marketplace as defined by Mr. Zwick for us, we define it as the final process by which the decision is to be made. What we are doing if we let the normal give and take of economics occur is to allow for elimination of large sources of significant data.

Clifford D. Rassweiler (Johns-Manville Corporation).—Just one quick point about the marketplace and the decisions of the marketplace. The decisions are not made on the basis of cost alone, that in the decisions of the marketplace these intangibles are terribly important as to what is to be done and not done.

Robert B. Mitchell (University of Pennsylvania, Philadelphia).—There has not been a paper here or analysis I have seen anywhere of the values that are created by major transportation facilities in other locations from which they remove traffic. I was on a street called Germantown Avenue, one of the most ancient streets in this country. It is so old that George Washington marched down it to battle once. If you tore down Germantown Avenue you would have to knock down 75 percent of the old houses in that city. The preservation of this street ought to be considered. To get rid of heavy traffic without destroying that can be considered and included in our work.

Cline. —Just one point about the functions of special interests. One of the functions is to clarify their particular interests, so that these can be discussed openly and then proposals evaluated in common discussion. This is what we are trying to do. One can certainly evaluate whether a highway is coherently structured or fragmented. You can certainly evaluate whether a highway is meaningful or meaningless. It can be fairly clearly identified.

I should think you would be in general agreement with the points we are trying to get over and therefore are discussable. One means is to clarify the objective and the other one is to develop a language in which we can communicate these problems.

Carroll. —After a week of sessions I concur in the language problem. If somehow we could just get words on a common basis.

Lefeve. —I think we have this language problem. I think in listening to all these words that they are strange to engineers.

I think we have a problem of finding a yardstick to measure these things. I do not think there is disagreement as to value, it is how to measure them. You have got to be within the economic range of the facility you are building.

These things you talk about are going to have to be done soon and translated from these very nice words. Put names on these values you talk about so we can measure them and evaluate them. Use terms we can understand—tons, feet, etc.