## ALTERNATIVE STYLES FOR CITIZEN PARTICIPATION IN TRANSPORT PLANNING

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•QUESTIONS surrounding citizen participation have come to preoccupy professionals in a wide array of fields in recent years. It is no surprise that the designers of the HRB 50th Anniversary Meeting should have arranged an opening session around that topic. Conference managers serving social workers, educators, housers, public health officials, and others have been doing quite the same thing in recent years. It has almost become the fashion of the well-ordered modern meeting.

In all these fields the professionals have been under attack by their public. (By comparison to some others, in urban renewal or education, for example, transportation people have been relatively immune to citizen wrath, however loud the recent outcry against freeway extensions may have sounded.) It is important that we try to understand why our clients have become restive, for something does appear to have gone wrong. We need to understand where the public-service professions seem to have been remiss, so that we might then try to modify our activities to alleviate the apparent hurts and to improve our capacities for accomplishing positive good.

Some 50 years ago George Bernard Shaw observed that "every profession is a conspiracy against the laity." That was at about the time of HRB's first meeting, well before the professionalization movement had gained momentum in America, well before the professions had gained such tight control over their governmental agencies and the agency programs, well before the legitimacy rendered by professional status had been able to weaken the staunchest congressman or city councilman into submission to the professions' criteria for goodness. During the past decade the civil-rights and the student movements, the OEO-sanctioned community-action programs, and the rise of a new brand of participatory populism have suggested that the laity has come to share Shaw's conclusion.

Dissatisfied with the established tests of goodness, many citizen groups have been trying to wrest control away from the professionals and then to shape public decisions to their own criteria. Eager to be responsive and responsible, professionals have been exploring ways of engaging the laity in mutually satisfactory alliances, such that technical expertise might be merged with citizen's purposes in more effective alloys. I should like here to offer one diagnostic hypothesis concerning a cause of the unrest and then one preliminary prescription for ameliorating that cause.

Early in the development of transportation engineering and transportation planning, 3 ideas were implanted that have remained dominant and have contributed to the present malaise.

1. Transportation investments were seen as primarily capital investments, i.e., as investments in physical plant, in physical facilities, rather than in transport services.

2. The function of transportation facilities was seen as connecting geographic places, rather than as connecting people.

3. The primary test of goodness of one geographic network of facilities over another was least cost, i.e., least input of resources, rather than the largest output of benefits.

In combination these 3 ideas have been very powerful, for they have supplied us with both a purpose and a criterion for decision. In sum, they say that the business of trans-

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portation planning is to install a network of facilities to connect geographies and to do so efficiently. It is small wonder that there has been a popular outcry.

The focus on building physical facilities has led us to operate as though social value resides in the facilities themselves. We all know that is not so, of course. When questioned, we are quick to explain that the utility of an interurban highway, for example, derives from the connections made possible between buyers and sellers in the linked cities, between friends and kin who can now visit more easily, between recreation resources and vacationers. Of course, we know that the value of a highway system derives from the contributions that improved accessibility makes to the nation's economic and social life. Of course, we all know that value is generated by the external effects of the highway systems.

Yet, when we seek to appraise transportation systems, we habitually apply criteria that are internal to the transport system itself. We turn to such measures as miles of highway installed, numbers of airports built, and the extent of the networks' geographic coverage—typically measurements of facility characteristics rather than measurements of the social services accomplished.

Although we have by now all learned the formal rules of systems analysis, professionals in most public-service fields have been finding them extremely difficult to apply, transportation planners included. The first rule of systems analysis insists that the value of public enterprises can be found only on the output side of the activity, never on the input side. In the transport field, facilities are inputs whose value can be only instrumental to the accomplishment of various service-induced outputs. Thus, for example, a radial freeway link within a metropolitan area pays off in higher incomes to the suburbanite whose accessibility to central-city jobs is improved, in greater longevity to sick persons and to accident victims who can reach the hospitals quicker, in lower inventory costs to retailers who are more accessible to their suppliers, and so on. In turn, as individual households and firms adjust their locations to accord with the new accessibility conditions, the freeway generates a secondary wave of outputs—a secondary set of consequences-this time for the metropolitan area's spatial structure. In further turn, modifications in the spatial arrangements of the metropolitan settlement may so change the distribution of opportunities and the incidences of costs among the region's publics as to provoke concerted political protest. (I shall want to come back to this proposition in a moment, for I suspect that the secondary and tertiary effects of recent highway developments have been far more provocative of citizen protest than either the protestors or the highway builders have realized.) My present point is, rather, that our evaluations of the relative goodness of potential or existing highways must derive from appraisals of the consequences of the highways—of the outcomes that are external to the transportation system.

An effective approach to that mode of systems appraisal is to reconceptualize the nature of the transport system by viewing it as a service rather than as a facility. I commend that simple trick to you, for it can work wonders in reshaping ways of thinking and styles of analysis and in reformulating the purposes of the transportation enterprise. Right off, that simple switch forces us to describe transport systems in the syntax of verbs rather than that of nouns. We must ask, What does the system do? rather than, What is it made of? How does it work? rather than, What is its geometry? Having asked that critical question, we cannot then avoid the more demanding, goal-directed question, What should the system do? We are then inexorably led to the most crucial question, What should it do for whom?

If transportation suppliers are to provide services rather than equipments and if they are to be directed toward accomplishing nontransport ends, the designer is then called on to specify the types and qualities of services to serve each of the many diverse groups of customers. In that conceptual frame-of-reference, the geography-serving basis of the transportation enterprise is likely to get supplanted by a client-serving one.

We may be in the process of this very shift in perceptions of the transportation mission—in part because the customers have been lining up at the complaint desk, in part because the thoughtways of systems analysis have led us to ask verb types of questions about transport services and goal types of questions about the payoffs from those services. The process has been slow, however; for we have not yet learned how to deal with populations as collections of culturally distinct subgroups, and we have not yet learned how to formulate the goals that should guide transportation developments.

One of the more persistent mind sets hindering clarity of client analysis is the notion that there is a "metropolitan community" that shares a "public interest." So much has been written about that mythical community that we have come to suppose it to be real. It has been a most convenient myth, for, if all residents of the metropolitan area really were to share values in common, if everyone did want much the same things, then it would be relatively easy to discover the standards for transportation and other services that would satisfy all. Or, alternatively, if there were a common public welfare that might ethically override the welfares of divergent subgroups, the same sorts of standards might be justified. Again, we could supply a standardized product or service, comfortable in the confidence that what pleased one pleased all, or that what pleased the majority was sufficient.

Unfortunately for our work-a-day comfort, the myth of the metropolitan community is exploding. Rather than being a single community, it is becoming clear that the metropolitan population comprises literally thousands of communities, each with its peculiar value sets, its peculiar modes of behavior, speech, dress, customs, spending habits, and transport preferences. Modern urban communities are becoming increasingly pluralistic and differentiated, and that differentiation may no longer be detectable by their locational patterns. A single neighborhood may be the habitat of dozens of community groups, some of them with widely different preferences. A single sector of a city may house hundreds of separate communities, each of them a cluster of people with like values, life styles, and behavior norms—but different from each other's. Or, even more likely today, the closely knit members of individual communities may themselves be scattered over the whole of the metropolitan terrain, although their loyalties, associations, and activities are closely joined. Social distance and geographic distance need no longer coincide. Conversely, proximity no longer signals community of interests.

Those patterns are probably going to become even more exaggerated in the coming years, as geographic mobility and footlooseness increase and as the cultural differentiation of the American population progresses. It is now clear to many observers that the long-anticipated amalgamation of the American population has not happened and that it is not about to. Rather than a mass society smelted down in some national melting pot, we have been emerging as a nation comprised of literally thousands of different minority groups, each of them with the capacity to spawn subgroups that differ from the parent. In this day, of course, most of them occupy the metropolitan regions where they become the neighborhood subgroups, the dispersed interest groups that seem poised and ready to confront the first freeway or airport that threatens their turfs.

The transportation planner faces a rather special kind of dilemma in that setting. Transport routes are by nature lines that cross geographies. Some communities do comprise persons who occupy a single place. Highway lines cross those sorts of places in getting from here to there, and the outcries from those types of communities are a familiar sound to most of you. More difficult still are the culturally heterogeneous mixtures of communities that occupy a common place. They pose a rather different problem to the transport planner, for each of these citizen groups has a somewhat different set of transportation preferences from the others. Because transport routes are inherently geographic, it is difficult indeed to please all inhabitants of a single geographic place when their wants differ widely. Thus, it must seem to the transport planner. who hears objections to every proposal that he makes, that the "local community" does not know what "it" wants. He is understandably perplexed when the would-be spokesmen for the local community say one thing and their "followers" say something different. The joker is that there seldom is a local community. People who live next to each other are not necessarily like each other, nor are they necessarily a communal group with common likes and dislikes. Persons who present themselves as representatives of the local community are frequently self-elected. At best, they can represent themselves and perhaps a subgroup from the larger collection of local groups. In the face of that sort of ambiguity, what is the responsible public official to do? How is he to know what is right?

In the recent past when the criteria of efficiency were the acceptable ones, the responsible public official, who was also technically expert, was in a position to say which decision was the right one. Drawn from the images of a single metropolitan or local community or of some "overriding public welfare" for which a simplistic majority will is determining, he could indeed say what mix of transport modes was right and which routes should be installed to which specifications. Today those criteria are no longer the ruling ones. There can no longer be one right way, one technically correct solution.

One of the dramatic changes that occurred in America during the 1960's was the elevation of equity tests to at least equal station with efficiency tests in appraising public policies. The PPBS efforts directed attention to program effectiveness rather than to efficiency and, thus, promoted the instrumentalist view that sees programs as means to the accomplishment of human or societal goals. The various citizen movements gave voices to previously silent minorities. Rising income levels gave consumers more opportunities to buy the goods and services they preferred; but when governments were sole suppliers and service levels were low, they showed up in city hall and politically demanded improvements. Because those populations were becoming increasingly pluralistic, they were demanding ever more diverse mixtures of services—whether in educational programs, health care, police protection, or recreation.

In that setting of rising wants and rising pluralism, the dominant question then became one of equity: Who is to pay, and who is to benefit? That central equity issue is the one that has been provoking the citizen protests against transport developments. It is the central consideration that will be shaping overall transportation policy in the current decade.

Transport planners, like other professionals in government, have been trying hard to respond in responsible ways to laymen's demands for larger shares and, thus, for active roles in decision-making. The public-hearing procedure has been the traditional testing forum, and many agencies are experimenting with more effective formats for the public hearing. However, the hearing has some inherent weaknesses. Some groups just do not know how to use these sorts of formal proceedings; others know how all too well and can effectively dominate them. Some kinds of technical analysis just cannot be treated in a popular open forum, and important evidence is sometimes neglected because it does not suit the medium. However valuable the public hearing is, it is not enough.

Some agencies have been enlisting lay citizens into study groups to assist the technical staffs, in effect to sensitize the technician to some of the softer, cultural variables that he might not have been alert to. There can be little doubt that this sort of collaboration is helpful, and the practice is likely to spread. Public-opinion polling offers advantages over the public hearing as a means of tapping preferences of the publics, for, by controlling samples properly, the agency researcher is far more likely to get representative responses than if he relies on volunteered opinions. I want to suggest a rather different style from these more fashionable modes of participatory engagement, however; for I suspect that even the most effective styles of direct citizen action will fail to represent the groups who are least well served with transportation services.

However important it is equitably to adjudicate the conflicts over a freeway alignment or over any other specific facility location, these matters are trivial as compared with the uncontested issues surrounding large-system transportation policy. It is the debates that are not engaged in that should concern us—the topics on which citizens do not tend to participate—for the larger equity questions are embedded here and are being neglected.

At this time in the nation's history when we are nearing the end of a century-long period of transportation building, we need to take the time to ask how our next transportation priorities should array themselves. I have argued elsewhere that we have nearly completed the huge transport-building job of connecting all parts of the nation's geography to all other parts. We have successfully leveled out the contours on the nation's accessibility map, such that time distances between any two places in the nation are by now nearly equal. That was a tremendous accomplishment. Yet, transport services are still far from being equally, or equitably, distributed among the nation's many population subgroups.

When we adopted the automobile-highway system as our dominant urban mode, we also set loose a chain reaction that has by now reshaped the metropolitan settlement pattern. The causal chain is familiar to all of us who have been watching the processes of suburbanization with the attendant spatial redistribution of employment opportunities and the persistent decline of public transit services. If we knew how to appraise the costs and benefits that have accrued to the prototypical middle-class suburban family, I am betting that family would show a strong positive score. Those who have known the amenities that accompany suburban living have enthusiastically welcomed the new living patterns.

The rub comes for those who have not shared in these. For them, the rise of the automobile-transport system and of the suburban-settlement pattern has meant an actual reduction in life qualities. Degraded transit service and, for central city residents, the removal of employment opportunities to distant suburbs have meant lessened economic opportunity and lower life chances. Although no one ever intended it to be so, because some population groups have benefited from the automobile-highway system, others have been directly hurt.

I suspect this set of relationships is too subtle and too removed from work-a-day realities to provoke any sort of citizen protest or citizen debate. Even if a local group might read the clues so, it would be rather absurd for a neighborhood to organize in opposition to the modern forces of urbanization. They might force the highway department to adjust a route alignment plan, but they are not likely to do much to affect the momentous technological and institutional forces that are so emphatically influencing their lives.

We are addressing questions of citizen roles in transportation decisions because, I presume, we suspect that those decisions would be better decisions if consumers were to help shape them to accord with consumers' wants. I have no doubt that this is so, and especially so if the large numbers of competing communities can help shape them. Direct political participation in analysis and discussion is only one medium, however. Moreover, it may not be the most effective one, if only because some groups cannot, or do not, work in the deliberative or the confrontational styles that mark these participatory modes. In the larger system view, however, I mean to suggest that community-action modes may be wholly incompatible.

There is a rather different style that has worked very well as the means by which consumers have traditionally told suppliers what they want. That is the market style, and I shall want to urge that we exploit market processes where they are working and that we need to invent market-like arrangements where such information feedback systems are insufficiently sensitive.

It is clear that the metropolitan marketplace has been working to select the automobile mode over others. If, as one alternative, we were to accept the decision rules derived from the concepts of efficiency and of a single consensus metropolitan community, we should then follow the gross market indicators and expend our energies on improving automobile facilities for the population majorities. The marketplace, however, is signaling inferences for the many minority populations as well.

Some population groups cannot use present-day automobiles, either because they do not have the necessary driver skills or because they are too poor to own them. Children, aged persons, and infirm persons have been absolutely deprived because of the rising dominance of the automobile system; and so too have poor families—well over half of whom do not own cars. Alternatively, then, if we accept the decision rules that derive from concepts of equity and that reflect the growing pluralism of the nation's people, we are then led to find means by which these minority groups—children, old folks, poor folks, carless wives, and teen-agers—can enjoy the transport benefits that now come with the discretionary use of an automobile.

The market indicators have been dramatically signaling widespread consumers' pleasure with the mobility and accessibility that the motor car has made possible. They have also been telling us that those benefits are very unevenly distributed—that large segments of the population have yet to enjoy the personal freedom, the access to job

opportunities, the recreational possibilities that automobile users have come to know. I mean to be saying that citizens have been telegraphing their wants to transport planners. Perhaps what we need now are some sensitive listening devices to capture the signals from those otherwise inarticulate groups whose wants have tended to go undetected.

In turn, alerted to latent market demands, we might then direct the apparatus of the various governmental agencies to developing the new transport systems that might satisfy those minority-group wants. A major research and development effort at this time in history might trigger a wave of effects as powerful as those that followed the introduction of the railroad, the automobile, or the airplane. A directed exploration might generate conditions under which virtually everyone could enjoy transportation advantages comparable to those who are now well-served by the automobile system. A parallel effort might simultaneously induce amiable urban settings that conform to whatever the new transport mode turns out to be.

Citizens can and will have key roles in making these determinations—that is actually the only way these determinations can be made. We need to install a wide array of experimental settings, comprising diverse experimental transport systems, housing types, social services, population mixes, and so on. The initial transport explorations would undoubtedly test out current developments in dual-mode systems, dial-a-bus operations, and high-speed intermetropolitan trains. An all-out research and development effort, however, would likely generate new systems as well.

The way, then, to find out which is the right mix of systems—the only way to find out, I will argue—is to see which sets are elected by which lay subgroups. There is no technically right solution apart from this test. There is no one right system—only a mix of systems to be found through the political market. Consumers can participate best by having the chance to choose freely from a diverse set of options. The choices they make in the marketplace and the wants they identify there are likely to be the most accurate indicators of their preferences and, hence, of goodness. If professionals could learn to read those indicators, and if government agencies were to take their lead from private industry and to supply differentiated product lines, the many minorities would be better served and much of the conflict that attends citizens' protestations would never arise.

In the transport field, this means that we need to encourage imaginative experimentation with new modal systems and new kinds of services, and then to put them out to consumer test. It was the failure of our predecessors to ask the customers what they want that led George Bernard Shaw to voice his indictment. The very fact of this meeting suggests that we are now at least asking those questions. If we fail to listen for their mutely telegraphed answers, though, it is clear that the customers will engage their newfound voices to shout them at us instead. Then, if the professionals fail to respond, we can expect them to engage their newfound political competencies to command the desired sorts of transport services. In a democratic society the odds are on their side. So, it would be far better that the transport professions enter a conspiracy as allies of the laities. That appears to be the only sure way of guaranteeing that the right mix of transport services will be supplied.