

PARTICIPATION: ITS INFLUENCE ON PLANNING METHODOLOGY

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I would like to suggest that the old transportation planning process is dead. The promise of the 60s for a systematic transportation-land use methodology based on firm quantitative ground leading to rational policy formation has been a casualty of the so-called "highway revolt."

Where the constituents of such planning are not challenging the planning process in a variety of terms outside its traditional focus, it is collapsing from its own methodological shortcomings.

The challenge has come from the politicization of the planning process where the varied and conflicting values of a variety of groups in society are clamoring for recognition.

The early response to this challenge, the design concept teams, which directed themselves to minimizing impacts while providing a prespecified level of service, has been discredited. A more radical reformulation around a core process of community-technical interaction has been taking place. The need for this approach is reflected in the recent Process Guidelines, which include consideration of a wide range of alternatives, a broad evaluation process, and a continual participation program. The Boston Transportation Planning Review (BTPR) is only the most extensive of new attempts to deal with the problems posed by conflicting user needs, complex external effects on communities and the environment, and trade-offs between time and geographic scales.

Four related shortcomings of the transportation planning process of the 60s created the need for this new approach.

First, "classical" transport planning moved sequentially from regional system planning to project planning. Despite the formal addition of an intermediate scale of corridor planning, the linear sequence idea remained, responding to the obsession with satisfying the demand side of the transportation supply-demand equation at all costs. The decisions made at each step constrained the scope and flexibility of steps that followed. This left planners at the project scale with insufficient latitude to respond to impacts that were suggestive of real supply constraints or to issues that emerged at a scale where concrete implications were visible. Whether the transport service improvements were worth the imposed nontransport impacts was consistently outside the scope of study.

Second, the focus on regional systems and long-range futures permitted use of only the most general objectives to guide the process. Such objectives were useless in making design decisions at the project scale. The abstract long-range focus on the "Magic Land of 1995" also found a disinterested public who was faced with immediate needs and problems and who perceived a long-range focus as irrelevant. Most important, at the project scale, a totally new set of unanticipated issues emerged, requiring a different set of professional skills and planning techniques and rendering irrelevant the previous regional evaluation.

Third, the evaluation process of the old planning focused on aggregate user benefits and capital costs and led to plans that neglected the needs of transportation minorities, allocated costs and benefits without attention to distribution, and left some people worse off than they were in the beginning.

Fourth, the old process presented a very narrow range of alternatives—mostly highways with some line-haul transit. The choice of mode was often rationalized in behavioral preference terms but primarily resulted from resource constraints placed on the entire process by a higher level of government. The problem with highways was how to best allocate a predictable time-staged level of funds—or lose them. In contrast, the problem with transit was the need to prove that any investment whatsoever was justifiable in fare-box terms.

Finally, transportation planning in the United States has been an activity without a government at the corresponding scale. The programs were not developed within the political processes of local government, and, although controversial and subject to debate, they were run by semi-autonomous institutions and professionals less subject to policy control at the local level than, say, education or urban renewal. Professionals were insulated by bureaucracy from the public and elected officials. In addition, guidance from or coordination with other nontransportation objectives and programs was totally lacking.

The closed-shop appearance of transport planning thus stemmed from the professionals' assessment of their traditional prerogatives, from political isolation, and from the seeming irrelevance of transportation studies as perceived by residents of urban areas. The long-range and regional focus of past studies blurred the ability of both the profession and a general public to see the short-range and concrete implications of transportation planning.

History overtook this state of affairs. As the facilities developed by this old process began to be constructed, they moved into a new environment in both time and space. Important shifts in values on the part of key segments of society awaited them. Social welfare and environmental quality questions had replaced economic efficiency as important public and professional concerns. In many urban areas, the urban renewal experience, ecological awareness, advocacy planning, and community organization were new facts of life. In this context, the external impacts and inequities of the products of "classical" planning became dramatically evident.

In Boston, the vanguard of these new values in the form of highly organized interest groups mounted a series of increasingly sophisticated, coordinated, and shifting attacks on the metropolitan transportation plans, the planning process, and institutions. First, as is the case in many other cities, the criticism and the attack were on the basis of facility and urban design issues. The attack then broadened to the lack of real alternatives to the so-called recommended plan and then to issues of modal balance. It also focused increasingly on significant, if unknown, environmental and community impacts. Finally, the attack on the planning process in Boston focused on methodological issues, on the very concept of "travel demand" itself.

In response, the planners tended to solidify in defense of the "comprehensive plan" with its prior approvals and retreated under the cover of a methodology and jargon, and that tended to further alienate them from their political constituencies. The issues were increasingly articulated to the point where a variety of groups that could agree on little else found a consensus that a new approach was called for.

Thus, the moratorium on highway construction in Boston called by the governor 2 years ago was the political recognition of a de facto situation that existed in Boston and now exists in most other large cities as well. The moratorium also spawned the BTPR,

permitting an interdisciplinary team of professionals, battle-scarred from experience in other cities—Philadelphia, Baltimore, Chicago—the first opportunity to undertake a comprehensive new approach to a new set of problems.

Basically, the innovation of the BTPR is that it has been uniquely broad: It has given equal attention to highway and transit and to the internal and external effects of transportation while de-emphasizing investment in sophisticated quantitative transportation-land use techniques in favor of a balance among a broad range of competing issues. As a technico-political enterprise, BTPR was structured to combine a broadly open participation process—in terms of option generating and evaluation activities—with a simultaneous sharpening of the decision-making power, now clearly centered on the state chief executive.

In this context the participation process has played several key technical roles:

1. Broad exposure of alternatives right from initial concepts proved to be the way to ensure that the complete range of potential issues was generated as soon as possible so that plans could respond to those issues. The concept that all plans and technical memos were drafts dampened impulsive rejection of tentative solutions and ideas and made it possible to generate a broad range of alternatives for later detailed evaluation.

2. As participants became accustomed to playing a role in the shaping of plans, they often took the initiative rather than simply establishing a series of defensive postures to initiatives coming out of the technical process. The continued exposure of the technical staff to a variety of value positions assisted to extend the conventional wisdom of the profession about what constitutes a "nonabsurd" alternative or what "feasibility" really means. A number of solutions resisted by the technical staff at the outset appeared more promising as discussion forced the staff to reevaluate the basis of its intuitive rejection.

3. The participatory process also revealed that a broad variety of groups in urban areas placed a surprisingly low priority on time savings of a few minutes in comparison with a whole host of conflicting and changing nontransportation objectives. Time saved per se is a highly abstract quantity, particularly in small amounts.

4. The evaluation criteria in Boston were a joint product of community-technical consensus. The choice of criteria was a joint product of interaction and discussion around the issues associated with each subarea and problem. The participatory focus of evaluation required a simultaneous accounting of short- and long-range effects, a context of sensitivity to alternative futures, and an ability to handle systems or project issues at any given time for any given highway or transit facility regardless of the level to which it had been developed.

5. The participatory process ensured that decision-makers were continually informed as to the reactions of various interest groups to a proposed public action. The participants recognized that transportation planning issues are political questions relating to resource distribution requiring trade-off decisions. Community-technical interaction ensures that those interests affected by such decisions are aware of their true consequences. Achieving agreement on the facts relating to impacts of all the alternatives under investigation, whether positive or negative, is a major contribution of this process. Public dialogue can then concentrate on the real issues—questions of values, trade-offs among impacts, and benefits to different areas and groups in society.

6. The need for technical staff to be available for communication among each other and with the participants required that everybody be located in one space. It is essential to both the technical process and to the political process that there be continual on-line interaction—not milestone inputs at selected intervals.

The pressure of intensive community involvement on the technical planning process requires some important changes in that process.

First, although a special community liaison staff can facilitate community-technical interaction, the top technical staff must carry out the technical end of this interaction. Technical questions require answers by technicians. It is time consuming; the top 5 or 6 professionals from a staff that peaked at 80 spent 40 to 50 percent of their time in communicating through a variety of media ranging from regular meetings of policy groups to hundreds of meetings, large and small, formal and informal, with community

groups, interest groups, elected officials, other agency staffs, the media, and so on. The ability to communicate is critical to the community-technical interaction process. Senior coordinating staff must be able to think on their feet and be synthesizers. The techniques for this community-technical interaction have been discussed elsewhere, but, like the technical process itself, they require flexibility to adjust the intensity and type of interaction to the technical issues, the interest group, and the information at hand (1).

Second, the traditional system-to-project linear planning approach does not work. The elegant simplicity of systems analysis with its sequence of objectives identification, alternatives generation, simulation, and evaluation is not easily adaptable to urban systems. In Boston, as in other contexts, the objectives were multiple and conflicting, and the alternatives were many. The paradigm of the planning process must shift from an optimizing process with an objective function to the search for consensus—a search that is interactive, iterative, and adaptive and that can consider conflicting objectives and a wide range of qualitative concerns in a dynamic context.

In this process the planner becomes a catalyst between various interests in the community and the decision-making process. The values and perceptions of the affected interest groups are used to guide the formulation and revision of alternatives. The evolving plans are tested in a variety of ways, and the results are exposed for a subsequent round of reaction and revision. A communication framework is thus developed and ensures that full information is available to affected interest groups and policy-makers as a basis for consensus (at best) or a fully informed decision (at least).

Third, major public concerns become visible at the scale where solutions are planned—the project. Only at that scale are the impacts of interest to participants visible. Thus, all serious corridor alternatives must be engineered to at least a 200-ft scale for evaluation before an informed decision can be made. Although participation has considerably broadened transportation planning, it has thus also placed a new importance on the ability to develop engineering solutions rapidly on a number of alternatives and to work with other disciplines as they are being developed. Full environmental-impact-statement treatment was given to all serious alternatives before decisions were made.

Fourth, single future land use distributions are inconsistent with the explicit recognition that project-scale feasibility is a real constraint in the supply-demand relation. In addition, a constituency that includes the Sierra Club, chambers of commerce, Model Cities, and highway contractors will not agree on a single 25-year vision of development policies. Until such time that we have a capability to reliably and quickly model both transportation and nontransportation policy inputs to future activity distributions, the approach of sensitivity testing of alternative facility combinations in the context of alternative futures must suffice. Evaluation, sensitivity testing, and systems planning in this new process become the common technical thread at the metropolitan scale in what is otherwise a loosely organized group of project-related interdisciplinary studies, each organized on a subregional basis around highway or transit corridor controversies.

Fifth, we desperately need a better way to describe the benefits of transportation improvements. Time savings, particularly marginal savings, have little intrinsic value to participants other than that they can be shown to further specific economic or social objectives of those groups. At the present time, the state of the art can be very concrete about negative transportation impacts but is uselessly vague about expressing transportation benefits in other than performance (time and cost saving) terms. The depth of our ignorance on this subject should be of great common concern to our profession. Until we can identify the value of mobility in nontransportation terms, trade-off decisions may place a low value on transportation improvements.

Sixth, the public is rightfully suspicious of a process that focuses on 1995 when it is surrounded by today's problems such as congestion and pollution. This disinterest in the long range may also reflect an accurate discounting of our ability to make accurate projections given potential policy changes and uncertain activity forecasts. A planning approach that takes as a point of departure today's problems, which are visible to participants, rather than those of 25 years hence, which are known only to technicians, combined with an explicit concern for the distribution of service impacts will tend to

discourage alternatives that favor certain groups to the exclusion of others and will generate a broader palate of solutions such as special mobility services and non-capital-intensive approaches to managing our existing transportation resources.

Seventh, the evaluation process is totally changed. It becomes an interactive cooperative venture between a specialist staff who represent a variety of disciplines and a coordinating synthesis staff of project managers who develop and present total evaluations and modify the scope of relative emphasis as public discussion reveals major interests. Evaluation criteria are very broad and embrace localized impacts like noise or disruption as well as long-range economic issues. In Boston, the classical benefit-cost analysis was only one of 40 or 50 criteria and received no more attention than any of the others. The information produced for many criteria will necessarily be a mix of judgment and measurement. No weighting or rating schemes, which would obscure the facts as agreed on by all parties, seem to be useful given the multiple and overlapping issues and objectives. The distribution of impacts among various groups and geographic areas is of more concern than total effect.

Finally, in a participation process, planners cannot make recommendations because, short of imposing their own values, there is no way planners can choose a "best" solution. The BTPR process was never directed toward a single optimum decision but rather toward the description and evaluation of a wide range of potential multimodal transportation improvement programs each with attendant nontransportation components. Such a process must permit participants with a wide range of values to judge the desirability of the various alternatives according to their own values. In this process, as appropriate in a democratic society, the planner must accept the role of communicator and issue finder as well as option creator and evaluator and relinquish the role of judge. This may go a long way toward eliminating the artificial distinctions that have long separated the planner from his constituents and from the decision-makers to which he is responsible.

REFERENCE

1. Lockwood, S. C. The Boston Transportation Planning Review: A Case Study in Community/Technical Interaction. Planners Notebook (AIP), Vol. 2, No. 4, Aug. 1972.