



CITIZEN  
PARTICIPATION

in

TRANSPORTATION  
PLANNING

# HIGHWAY RESEARCH BOARD 1973

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# CITIZEN PARTICIPATION IN TRANSPORTATION PLANNING

*A report of a conference held May 29-31, 1973, and a conference session on the Boston Transportation Planning Review held January 24, 1973, during the fifty-second Annual Meeting of the Highway Research Board*

subject areas

- 11 transportation administration
- 81 urban transportation administration
- 82 urban community values

**Special Report 142**

Highway Research Board

Division of Engineering, National Research Council  
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The conference that is the subject of this report was approved by the Governing Board of the National Research Council acting in behalf of the National Academy of Sciences. Such approval reflects the Governing Board's judgment that the conference is of national importance and appropriate with respect to both the purposes and resources of the National Research Council.

The members of the committee selected to organize the conference and to supervise the preparation of this report were chosen for recognized scholarly competence and with due consideration for the balance of disciplines appropriate to the project.

Responsibility for the selection of the participants in the conference and for any summaries or recommendations in this report rests with that committee. The views expressed in individual papers and attributed to the authors of those papers are those of the authors and do not necessarily reflect the view of the committee, the Highway Research Board, the National Academy of Sciences, or the sponsors of the project.

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# INTRODUCTION

The demand for urban transportation is continuing to increase. At the same time the public is demanding a more direct and active voice in transportation planning and decision-making at all levels of government. In response to this, the states and federal government are seeking to develop a better conceptual framework for citizen participation and to reconsider specific planning and policy questions that have been arising in recent attempts to include meaningful citizen participation as a formal element of transportation planning.

During the past 3 years the Highway Research Board has given special attention to the problems of citizen participation in transportation planning. The Board has a special task force on citizen participation. In 1971 the Highway Research Board held a day-long workshop on the subject (Highway Research Record 356). In 1972, further material on citizen participation and community values was presented at its Annual Meeting (Highway Research Record 380). At the January 1973 Annual Meeting, two formal sessions were presented on citizen participation, including a discussion of the Boston Transportation Planning Review.

In response to a request from the Federal Highway Administration, and with cosponsorship of the Federal Aviation Administration, the Urban Mass Transportation Administration, and the Office of the Secretary of Transportation, the Highway Research Board held a conference in May 1973 to examine the relations between transportation planning and citizen participation. The conference (a) attempted to develop a conceptual framework for integrating citizen participation into the continuing transportation planning process and (b) addressed specific planning and policy questions that have been encountered by transportation agencies in their attempts to achieve greater citizen involvement.

The conference lasted 2½ days, and the number of participants was limited to about 90 persons who had special insight or professional expertise in the problems of citizen involvement.

It is important at such a conference that all points of view be considered. The subject of citizen participation in transportation planning generates substantial emotional response and many divergent points of view. One of the problems addressed by the

steering committee was how to obtain an open expression of the differing points of view while keeping the meeting productively oriented.

The viewpoints of at least 4 groups had to be included in the discussions if the conference were to fully consider the issues. First, there were the transportation planners and consultants. Second, there were the citizens that were directly and indirectly affected by a new or improved transportation facility. Third, there were those groups who were concerned with the consequences that transportation system improvements as well as specific projects will have on the regional and national social, economic, and physical environment. Fourth, there were the local elected officials and public administrators who have the legal responsibility for making decisions relating to local transportation systems and comprehensive land use plans.

Each group had its own understanding of the issues and desirable solutions. Each had its own methods for achieving its objectives. There was difficulty in so short a period of time to develop a listening, receptive environment where differing points of view could be expressed and given full consideration.

In designing the format for the conference, the steering committee took such considerations under advisement. In the past, there has been substantial communication among transportation planners about citizen involvement. Similarly, citizen groups have shared their experiences with each other as have the elected officials and public administrators. However, this conference was the first national effort at bringing citizens, planners, elected officials, and other professionals together to mutually discuss the problems of citizen participation in transportation planning.

The conference was therefore expressly designed to generate open discussion and to generate ideas—not to achieve a consensus or a series of recommendations. The conference was a dialog between groups that heretofore met only as antagonists at public hearings or in courtrooms. No attempts were made to gain a consensus, and no votes were taken. References in the text to general agreement within a workshop are based on the personal observations of the workshop chairman and do not necessarily reflect a true consensus or the degree of dissent.

This report of the conference is only the first step in developing a framework for citizen participation in transportation planning. It has been transmitted to the sponsors so that they may use it in developing the federal program for citizen participation. In addition, it should assist state and local transportation planners in evaluating the changing role of citizen involvement in the total transportation planning process and might be used by citizen groups and national environmental groups to define their platforms relating to transportation and to put such platforms before national, state, and local policy-makers and transportation planners. The report might also be useful in helping to articulate the role of local and regional planning bodies and their relation to citizen participation.

In framing the conference, the steering committee felt that the best approach would be to have some formal papers to set the stage. The formal papers were to represent the divergent points of view of the different participants at the conference. In addition, several examples of citizen participation in current transportation planning programs would be used to describe the current practices by state and regional transportation planning agencies. Those papers are included in the second part of this report.

The third part of this report contains a number of papers, presented during the Board's 52nd Annual Meeting, concerning the Boston Transportation Planning Review, a \$3½ million study that was completed in the fall of 1972. They are included in this report because the Boston Review is the most comprehensive attempt at citizen involvement in transportation planning to date. Therefore, the steering committee felt that, although they were not presented during the conference, they were complementary to the conference and would be of great value to the sponsors as well as others.

The formal papers, however, were but the prelude to the main thrust of the conference—the workshops. There were 5 workshops that dealt with different citizen participation issues. Workshops 1 and 2 were assigned questions regarding the overall concept and philosophy of citizen participation in transportation planning without reference to specific planning situations. Questions assigned to Workshops 3, 4, and 5 were addressed to situations within a specified context, as follows: Workshop 3, systems



planning; Workshop 4, subarea planning; and Workshop 5, project planning and design. The workshops met separately in 4 sessions and together in a fifth session, at which the chairmen presented the reports.

Those reports are given in the first part of this report, following a brief review of the conference highlights to provide an overview of participants' suggestions for improving citizen participation in transportation planning.

The Highway Research Board will continue its efforts at improving the state of the art in citizen participation in transportation planning. Annual meeting programs will include sessions devoted to developments in the theory and practice of citizen participation in transportation planning, and a continuing committee on citizen participation will be created.

# CONFERENCE HIGHLIGHTS

## CITIZEN PARTICIPATION: WHAT IS IT? HOW EFFECTIVE IS IT? HOW IS IT ACHIEVED?

### Definition

Citizen participation was defined as an open process in which the rights of the community to be informed, to influence, and to get a response from government are reflected and in which a representative cross section of affected citizens interact with appointed and elected officials on issues of transportation supply at all stages of planning and development. The participants in the process identify and examine all reasonable alternatives and their consequences to assist the appropriate decision-makers in choosing the course that they believe to be needed and that they feel will best serve the needs and objectives of the community.

### Desirability

Some of the desirable consequences of citizen participation are that it

1. Brings members of the community into the public policy and planning decision-making process;
2. Encourages public decisions that reflect the values, needs, and priorities of those who will be affected;
3. Exposes different socioeconomic, environmental, and transportation needs;
4. Surfaces alternative options and increases public understanding of both the options and the constraints of transportation planning;
5. Identifies the benefits and the disbenefits of alternative plans, recognizing that one group's benefits may be another's disbenefits; and
6. Offers a means of resolving the type of public opposition that has blocked transportation programs in many areas.

## Effectiveness

In the evaluation of the effectiveness of citizen participation, quantitative measures, such as the number of people involved, may simply indicate that citizens are participating in participation and not that the participation is impacting goals, objectives, and options. The measure used to evaluate citizen participation should be the degree to which substantive issues are raised either by agencies or by citizens and the degree to which they are considered and resolved in terms of having legitimate constraints recognized and negative impacts avoided, minimized, or compensated for.

Some specific suggestions were that participation is effective when

1. The planning agency seeks out different viewpoints and responds to issues raised by citizens;
2. Compromises are made along the way and are satisfactory to the respective parties;
3. Implementation of transportation programs is facilitated;
4. The learning curve of both the citizens and agency personnel rises from its starting point; and
5. The participating groups are satisfied and feel that they have had the opportunity to participate and were listened to by agency staff.

## Representation

Citizen participation should be from all groups—all income groups, all racial groups, and the old, the young, and the handicapped. Emphasis was given to the importance of ensuring that nonwhite and other minority groups are represented.

At the project level, there should be open participation by all affected citizens whether they be appointed or are self-appointed. The decision reached should be mutually agreeable to citizens and agency and should not be forced by government at higher levels. At the area-wide level, citizen participation should be through an organized structure that is recognized by the agency and that has formalized rights, responsibilities, and procedures.

The use of advisory committees as instruments of citizen participation was regarded most suitable for systems planning and less suitable for project or subarea planning. In any case, several related problems may arise:

1. It is difficult to select people to serve. Each committee member should represent some segment of the community and not be a self-appointed leader, or the member should be an expert in some area of interest.
2. The second problem is associated with the inability of citizens to understand the technical language and process used in planning. That places them at a disadvantage when dealing with the agency's technical staff. Some conferees felt that an advisory committee needs independent technical assistance.
3. Appointed advisory committees may be composed of citizens appointed as political favors or as a means for liaison with the groups from which the appointees are drawn. The committee usually has little impact on the planning decision process, is open to manipulation, and may not broadly represent the views of area and local residents directly affected by planning decisions resulting from the planning process.

## Motivation

Whether citizens participate depends on how strongly they feel about the issues and about whether their participation and contribution will have any influence on the decisions that are made. Experience in many urban areas has followed the traditional pattern: When a citizen sees his immediate personal interest in jeopardy he participates; when he does not, he remains aloof. Some suggestions for eliciting participation were (a) work through existing organizations to make it known that there is an activity going on that will affect people and (b) make the issues newsworthy.

Beyond enlisting citizens in the participatory process, the next need is to keep them enlisted. If citizens feel that they are wanted and that they have some responsibility and can make a contribution, then they will continue to be involved. If they are continually beaten down, there is little incentive to be involved.

Citizen hesitancy toward involvement in the participatory process was attributed in part to mistrust of planning agencies. Part of the attitude was ascribed to citizens' belief that agencies are not listening. Ironically, citizen mistrust is what stirs them to demand a closer look at what the planning agencies are doing. There is little desire by people to participate if they think that what is being done is really being done honestly and has beneficial effects for the community.

## TWO ESSENTIALS: INFORMATION AND FUNDING

### Information

If the citizen's role is to be effective, access to information is a fundamental requirement, the conferees emphasized. Citizens must have accurate and direct knowledge of the planning, decision-making, and budgetary procedures, keyed to significant decision points. This will happen only in a completely open planning process.

Efforts must also be made to educate citizens about the language and tools of transportation planning so that they can interpret and use the information they receive. That would include "demystifying" the planning process and relying less on obscure or technical terms when the same information can be conveyed in lay language. Agencies must be accountable to the public for their decisions, i.e., explain why alternatives are rejected when they are rejected and allow citizens to question whether there were sufficient reasons for the rejection.

Staff whose background and training are in community work should serve as liaison between the planning organization and citizens and should actively promote the full and extensive exchange of information.

At the systems planning level, special communications problems exist because most people do not relate to long-range planning involving general concepts, uncertain time schedules, and broad tentative guidelines. Consequently, improved methods of communication are essential. Well-known techniques can be used and expanded: formal and informal meetings, public hearings, news releases, newsletters, and the like. Suggested for consideration also as a step toward improved communications was the enlistment of communications specialists who are knowledgeable in a broad range of techniques.

### Funding

Increased funding and staffing will be required, many conferees suggested, if transportation planning agencies are to devote the staff time that will be required to involve the community fully. There was some support for financing for the citizen groups to enable them to defray essential costs, including the making of relevant studies. One suggestion was that such funds be usable for hiring of advocates to articulate citizen positions. Estimates ranged from a minimum of 10 percent of the planning costs to sometimes as high as 50 to 60 percent for such technical assistance to citizen groups.

How extensively agency staffs need to be enlarged because of citizen participation will depend on whether the planners are trusted by the public and the elected officials; if they can communicate well and enter into give and take with citizens, one or more staff people per project will probably suffice. But, if there is doubt of the agency's credibility, a completely new planning mechanism that is outside the existing structure and committed to participation may be needed. Conferees also cited the importance of training staffs in the skills of community relations and instilling in them a sensitivity to citizens.

Ideas as to potential sources of additional money for citizen participation were generally nonspecific. One suggestion was that the funding should be part of the regular transportation planning budget, but that people should also get money on their own from independent sources. Federal, state, and local laws should be reviewed to determine existing authority to spend public funds to assist research and investigation projects by or at the request of citizen groups acting in the public interest, and methods for lawful and authorized use of public highway funds for such studies should be publicized.

## CITIZENS AND THE AGENCIES: DECISION POINTS AND DECISION-MAKERS, TRANSPORTATION PLANNING PROCESS, AND RESOLUTION OF CONFLICTS

### Decision Points and Decision-Makers

Key decision points in the planning process are determining goals and objectives, selecting projects, and determining priorities; citizens should be involved at each point.

Conferees also directed attention to the importance of examining the no-build alternative to answer the questions: If the planned facility is not built, what will be the impact on access and mobility in terms of congestion and travel delays? Will socioeconomic values be helped or harmed?

Citizen participation at the systems level helps to identify and evaluate alternatives, broaden areas of consensus, narrow areas of difference, and highlight decision areas. The question was raised, How can citizens more effectively influence elected decision-makers, who often appear to be more responsive to organized industrial and commercial interests and planners than to citizens?

As at the subarea and systems levels, locating the decision-making that is actually being done at the project level can be extremely difficult. The difficulty lies in the fact that projects are often part of a regional or state plan. Although recognizing that regional decisions by planning agencies are not final but are subject to those of the constituent local governments, the groups were mindful that regional decisions can be a determining influence. The position was that identification of decision-makers who produce project plans is essential to citizen participation.

A coordinating agency in each state should be established for planning purposes at the systems level. Where a planning region has no mechanism for effective coordinating planning at the systems level, then it is appropriate for citizen groups to take the initiative in demanding and helping to create such a mechanism.

There is a need for new and improved work relations among the different levels of planning—systems planners, subarea planners, and project planners. At the subarea level, successful planning and citizen participation require clear establishment of subarea boundaries, including geographic, jurisdictional, and time factors. Local and county elected officials at the systems level often resist citizen participation because they feel this is an intrusion into their own more localized citizen participation efforts.

In the planning agencies, there should be a continuum of planning from the earliest stages through design. The traditional approach should be avoided whereby different groups are involved in different phases of work and there is little transition of information and coordination of concepts. That will require a flexible organization rather than one with fixed divisions along functional lines, such as long-range planning, location, and design.

### Transportation Planning Process

One workshop at the outset concluded that the transportation process is not designed to answer questions that citizens often ask. But citizen participation is the one way to

ensure that changing goals, values, and life-styles are continually accommodated by the transportation planning process. Implementation failures have proved that a community cannot be permanently locked into a transportation plan.

Most of the conferees assumed it to be axiomatic that citizen participation in transportation planning is essential. In fact, in the light of the many transportation proposals throughout the nation that have been stymied by public protest, one comment was that "implementation is possible only with citizen participation."

The workshops considered it basic that citizens should participate throughout the planning process so that they can influence the final product. They considered it basic, also, that the participation should be constructive, making positive contributions to the planning, location, and design of transportation systems. Their position was that

1. Citizens should be involved in determining the goals and objectives of transportation systems, in planning projects that are parts of those systems, and in evaluating the plans;
2. They should also be involved in determining priorities in implementation schedules and have opportunity each year to assist in reviewing these priorities;
3. The process must get citizens out of the reactive role by seeking their ideas, examining their alternatives, and providing them with information; and
4. Citizens have good ideas, too, and they should not be downgraded as amateurish or simply be heard with little attention.

What are the proper roles of those involved in the transportation planning process? The general attitude was that all participants should accept responsibilities. Among the appropriate roles, as seen by the workshops, were

1. The planner creates and maintains, at a highly visible level, the channels for citizen input if these do not exist; evaluates citizen-initiated suggestions conscientiously; and responds to citizen participation with positive actions reflecting citizen desires.
2. The decision-makers make their actions visible to the citizens affected by them; develop communication devices that will be adequate in enabling citizens to understand the array of considerations involved in program decisions; listen to citizens; and allow them free access to information, commitment of resources, impartial technical aid, and an opportunity to influence decisions.
3. The citizen also bears some kind of accountability and devotes time and energy to become acquainted with the issues, to communicate his views to public officials, and to act as a channel of communication between the public official and the community.

Citizens cannot be empowered to make final decisions concerning public courses of action, nor to veto final decisions. These are the prerogatives of the elected official.

The basic products of the planning process are policies and plans designed to provide transportation service through construction of facilities or regulation of travel or both. Decision as to acceptance or rejection of these planning products rests with the appropriate elected officials. But, the systems level workshop favored a reappraisal of originally determined policy after the plan has been developed.

Although citizen involvement in the planning process is needed at all levels of planning, some elements appear in different frameworks at different levels.

At the systems level, planning is concerned with transportation facilities for entire metropolitan or regional areas, sometimes embracing scores of municipalities, several counties, and frequently 2 or more states. The issues are general and are long range in nature. Systems transportation planning must be part of an area-wide comprehensive planning process that involves policy and technical activities. Citizens should actively participate in the policy activities and satisfy themselves that the technical activities are logical and generally acceptable. The product is the implementation of planning elements, and citizens should assist in identifying priorities each year based on the continuing planning process.

The most common impediment to the citizens' involvement at the systems stage is that it deals with problems that will occur too far in the future and citizens do not see how their own current interests are affected.

Subarea planning is a relatively new concept in the overall process. It focuses on one or more metropolitan sectors that are either undergoing rapid growth or have high

priority transportation needs that have generated controversy. It deals with a 5-to-10-year time horizon for project implementation. Ordinarily there are few jurisdictions involved. In fact, the sector may be entirely within the central city.

Products that should result from citizen participation at this level include

1. A reevaluation of systems plans based on more detailed staff knowledge and on input from citizens of the subarea;
2. Some expectation that the agreed-on plan can be accepted by the community and will actually be implemented;
3. Provision for a system for establishing priorities for the subarea;
4. Evaluation and weighing of alternative modes for each link in the system and recommendations of a modal choice and general corridor;
5. Identification of institutional constraints, including structure, capabilities, legal authority, and financial sources of responsible agencies;
6. A determination in depth of existing and projected travel patterns and habits; and
7. A recognition of those issues that can produce impasses between adjacent sub-areas and that must be referred to official decision-makers for resolution.

The group accepted the premise that subarea planning must be action-oriented to meet the specific and real needs of the community; must afford an in-depth view of qualitative and quantitative community values, and must in the end produce a set of recommendations that are feasible to implement.

As the term implies, project planning has to do with individual projects. Quite different from systems planning, the information and data required in the project stage are very specific. Travel demand varies according to prices, tastes, income, growth, technology, values, and life-styles. Citizens must be given an array of choices, fully informed of the consequences of each, and allowed to negotiate acceptable results. Criteria for evaluation should include efficiency, equity, service, environmental protection, policy compatibility, future options, legality, and community goals and values.

### Resolution of Conflicts

In addition to their conflicts with planning agencies, citizens also find themselves at odds with their neighbors. One resident's reaction to a proposed transportation facility may be poles apart from that of the dweller down the block. And, because of the linear character of many of these facilities, an alignment suitable to one neighborhood may be unsuitable to another. Or, neighborhoods may compete for an improvement, such as an urban renewal highway or widening of an arterial. Citizen participation may help to resolve these and other disputes. Among the ways suggested were setting up meetings of diverse groups, bringing the disputants face to face, calling upon them to respond to each other's positions, and having adequate technical information available to the adversaries to prevent the confrontation from deteriorating into an exchange of hostilities.

Some steps suggested to planning agencies for lessening conflicts with citizens were

1. Make information freely available to all parties;
2. Be sure that there is a mechanism for accounting to the public as to what is happening and why decisions are made—not only at the end of the process but as various steps are taken; and
3. Be willing to accept the criticism and the evaluations of citizens who are participating in the process or observing it.

In general, conferees thought that resolution of conflicts is best achieved by a good plan that meets community needs. Conflicts among community groups should be resolved by them and not by the agency; however, political leaders must sometimes make ultimate decisions if conflicts cannot be otherwise resolved. Problems that cannot be resolved by adjacent jurisdictions must be resolved by the government at the next highest level.

## SOME NEW POLICIES

All workshops were asked to develop answers to the question: What federal, state, and local policies are needed to improve the citizen participation process? Some participants favored policies that would make citizen participation mandatory by federal directive, possibly as part of the annual plan certification; give citizens a considerably expanded role in transportation planning; and improve definite requirements on planners in the participatory process.

Other suggestions were

1. Federal policy should require that citizens be involved in the initial goal setting, including levels and kinds of service and desirable urban patterns.
2. There should be mandatory review of plans that involve long-range effects that cannot be fully anticipated in initial studies. Recourse to the courts to stop projects until they can be reconsidered is too costly to remain an acceptable proceeding in settling these matters.
3. At the systems scale, a transportation plan acceptable to state and local officials must be identified annually. The plan reflects currently accepted goals and identifies improvement priorities so that the most acceptable and needed elements can be implemented each year. Citizens should have an opportunity to identify those priority elements each year as part of the area's continuing comprehensive planning process.
4. U.S. Department of Transportation policies should be intermodal in scope.
5. Responsibilities of transportation planners in their dealings with the public should be defined.
6. Responsibilities of planning agencies under the Freedom of Information Act should be legislatively defined so that requirements under the Act may be made definite. Where public rights of access are not now recognized by law, states should enact laws to facilitate access to public agency information files.
7. To ensure that local and regional planning agencies provide properly for citizen involvement, citizens should be given the opportunity to establish their own adversary planning staff with state and federal funds provided to accomplish this.

Viewpoints differed on the question of whether the federal government should or should not specify procedural guidelines for citizen participation.

Policies should ensure that there is a program for information dissemination, that all who are affected by a project can discuss differences and negotiate resolutions to issues, that there is an open decision-making process, and that there is a monitoring procedure to ensure that these conditions are met. Whatever the policy, however, effective, positive, early, and open citizen participation will not take place until there is adequate commitment on the part of political leaders to fund transportation and non-transportation alternatives.



# WORKSHOP REPORTS ON OVERVIEW ISSUES

## DEFINITION

How is citizen participation defined?

### Workshop 1

Have you ever tried to write a definition in an 18-man committee? That is what we were asked to do to respond to the first question, and our group spent several hours at it. Finally, despite our wide diversity, we emerged with a definition, which suffers from only a few semantic problems.

Citizen participation is an open process in which the rights of the community to be informed, to influence, and to get a response from government are reflected and in which a representative cross section of affected citizens interacts with appointed and elected officials on issues of transportation supply at all stages of planning and development. The participants in the process identify and examine all reasonable alternatives and their consequences to assist the appropriate decision-makers in choosing the course that they best feel will serve the needs and objectives of the community.

### Workshop 2

That definition is more refined than anything that we came up with, and I think we would generally concur in it. Operationally, we defined citizen participation as involvement of anybody not directly connected with the transportation planning process, as appointed advisory boards, as a power-sharing arrangement, as the source of community viewpoints, as a means of ensuring the complete implementation of legal and administrative procedures, and as a means whereby the needs and values of the community and the interpretations of the planner can be recycled to produce sound, harmonious plans. Although citizen advisory boards lend a sense of legitimacy to the planning process, they usually have little impact on planning decisions, are open to

potential manipulation, and may not represent views of citizens directly affected by the decisions. Sharing power in certain aspects of the planning process gives citizens the greatest level of influence, but decision-makers must recognize the power given to citizens to be real and not merely tokenism. In summary, citizen participation represents many things, is carried out in a variety of ways, and cannot be defined in a precise manner. The intent, however, is clearly to bring members of the community into the public policy and planning decision-making process.

## DESIRABILITY

Why do we want citizen participation in transportation planning?

How will citizen participation improve our current approach to transportation planning?

### Workshop 1

In response to question 2, our group felt that we should talk not only about the positives but also about some of the negatives. In other words, we should discuss why we do not want citizen participation and what forms of citizen participation would not improve transportation planning.

In the negative category, which is the category that creates so many problems, we decided

1. We do not want citizen participation as a form of window dressing;
2. We do not want that kind of participation that is used as a form of manipulating citizens;
3. We do not want citizen participation to be a mechanism by which citizens are controlled or co-opted or both; and
4. We do not think it would improve transportation planning if citizen participation processes must take place within unrealistic deadlines and unrealistic budget limitations.

In the positive category, we do want citizen participation because of what it produces when carried out effectively.

1. It enables citizens to exercise fundamental rights to be informed and to influence decision-making.
2. It surfaces alternative values.
3. It surfaces alternative options.
4. It exposes different socioeconomic, environmental, and transportation needs.
5. It enhances the possibility of agency responsiveness.
6. It increases public knowledge of both the options and the constraints of transportation planning and implementation.
7. It identifies the benefits and the disbenefits of alternative options, based on the recognition that one group's benefits can be another group's disbenefits.

### Workshop 2

You certainly took a different tack on the negative aspects. The negative aspects of citizen participation that came out in our discussions were that the citizen is often not informed, problems are too complex and limited in scope, and the amount of time and money required to do a planning job may be increased. However, in positive terms, citizens can contribute knowledge, ideas, and alternatives. Citizen concerns may result in the institutionalizing of those concerns. For example, questions citizens raise about social impact may result in the planning agency hiring people to work on social

impact in a different way than has been done before. The process of participation may itself resolve conflicts among citizens so that a political kind of decision becomes unnecessary.

Involved citizens frequently recognize the need for additional or new legislation and are often more effective promoters of legislative ideas and programs than is the administrative planning agency.

Participation can be improved by having citizens involved at an early stage, getting conflicting groups to work together, allowing the planner to be the catalyst or an advocate, and providing sufficient funds and time to do the job.

## EVALUATION

How do we evaluate the effectiveness of citizen participation?

What quantitative and qualitative benefits and disbenefits does citizen participation produce?

To whom?

### Workshop 1

We decided that it is important to examine both participatory processes and participating impacts or, in engineering terms, the inputs and the outputs. Despite the diversity of our group, the various measures proposed focus more on evaluating the agency's performance than on the citizen's performance. Some of the measures are quantitative, but many of them fall in the qualitative category.

One of the important things that we agreed on was that realistic evaluations cannot be conducted from Washington, D. C., behind desks in the Department of Transportation. We recommended that officials go into local communities to look at what is really happening, use tools like interviews and observation at meetings of both staff and citizens, and judge the quality of interaction between them. The various measures that we propose are as follows:

1. The degree to which the agency seeks out affected citizens;
2. The degree to which the agency seeks out different viewpoints;
3. The degree to which the agency interacts with citizens;
4. The degree to which the agency responds to issues raised by citizens;
5. The degree to which the transportation goals, objectives, and options were changed as a result of the interaction between the planners and the citizens;
6. The degree to which learning curves of both the citizens and the agencies went up from where they were when the interaction process started;
7. The degree to which citizens feel they had the opportunity to participate; and
8. The degree to which citizens feel they have been listened to by agency staff.

In short, we propose that the measure should be the degree to which substantive issues are raised either by agencies or by citizens and the degree to which they are considered and resolved in terms of having legitimate constraints recognized and negative impacts avoided, minimized, or, when possible, compensated for.

Obviously this will require a great deal of time and money. Someone mentioned that in the Boston Review approximately 50 percent of the time of the top agency staff went to interacting with citizens. Although we felt that the percentage of staff time would vary from situation to situation, from community to community, and maybe from issue to issue, we did agree that serious levels of interaction require serious levels of technical staff time. A citizen member of our group suggested that both the amount of staff time and the dollar costs involved in producing this level of interaction could be perceived in terms of savings, if one compares the costs of citizen participa-

tion with alternative costs of lengthy court suits and delays in implementing transportation plans.

The group was quite in agreement that the major focus on evaluating citizen participation in the past has been on quantitative measures, like the number of people involved or the number of meetings held or the number of news releases issued. Evaluation must recognize that we do not want citizens to be engaged in the process of participating in participation. What we do want to achieve is a process of interaction that will result in impacting goals, objectives, and options. And thus that impact is what we need to measure.

## Workshop 2

When the various groups involved agree on the facts of the case, regardless of how they feel about the implications of those facts, then that is one of the tests of successful citizen participation. If compromises are made and emerge along lines that are satisfactory to the respective parties, that too is an important measure of effectiveness.

A decision to implement a plan demonstrates effective citizen participation, for in the transportation planning environment today an affirmative decision on implementation is possible only with citizen participation. The test of effectiveness may also be whether the public is satisfied. Information and understanding gained in the planning process can result in public acceptance of the plan, permit its implementation, and even sometimes reduce costs.

Generally, time delays and the costs of such delays and of additional studies are viewed as disbenefits of the process. Those delays and added costs are caused by public opposition to plans that were made without having citizens participate in the planning process. Although Corps of Engineers studies offer some evidence that citizen participation has not raised the cost of plan implementation, there is no question that many highway projects have been stopped and that both short- and long-range planning is being delayed because of citizen objection.

## ATTITUDE

How can communication, rapport, candor, trust, and understanding be developed among all participants?

## Workshop 1

I would like to preface our group's response to this question by an excerpt from one of the few documents ever prepared by a black community group. This was a case study prepared by the Areawide Council of North Philadelphia with the assistance of an advocate writer and published in *Public Administration Review*. The writer was committed to writing only what the community wanted to say about its experiences in the Model Cities Program during a 3-year period. One of the important "lessons" articulated by the predominantly black group came up in our workshop, and I think it serves as a useful preface.

You can't trust City Hall or HUD. That is what the Nixon administration ignores when it pronounces from on high that the goal of citizen participation is to build trust between City Hall and the community. It might be beautiful if City Hall and HUD were trustworthy. But our history testifies to the fact that we would be fools to trust the politicians. We were cheated each time we let our legal guard down. We only succeeded when we insisted that the politicians live up to their promises and when we demonstrated that we had some power. All four Model Cities directors used us to achieve their own ends. Each was willing to negotiate with us when he assumed the job and had some important HUD deadline to meet. Right after that goal had been achieved, each tried to renege on the partnership agreement by creating an outrageous crisis around the re-

newal of our contract. Though some of the staff of the city and federal agencies were clearly honest and helpful, most of them lied, equivocated, cheated, and distorted.

The reason I quote this excerpt is that none of the 3 citizens in our workshop was black and none would claim to be from low-income communities. Yet they raised the very same issue in our workshop sessions in response to this question. One person later said that this question probably created the most profound learning that took place in our sessions. We were sharply divided: the citizens on one side and the professionals on the other. The following paragraph summarizes what the citizens stated in forceful tones.

You must understand the fundamental point that we don't trust you. It is unrealistic of you to expect us to trust you. Your past performance has taught us to distrust you. And trust is not an essential prerequisite for interaction. You must behave differently from the way you have behaved in the past. If you will change your behavior, then we can talk about candor, then we can talk about understanding, then we can talk about building rapport. But the monkey is on your back to change your behavior.

I think the important message to the departments of transportation is that distrust is a far more prevalent dynamic than agencies have been willing to recognize in the past. In other words, because conflict is a reality, we need to think in terms of conflict management tools like mediation, trade-offs, bargaining, and negotiation if we want more serious and productive levels of interaction.

## Workshop 2

If attitudes were changed on the part of transportation planners, most citizens would probably be encouraged to believe that the planning process could work. However, very few in our group believed that attitudes will change fast enough to bring that about any time soon. Therefore, the rules and constraints should be revised to force or encourage behavioral change.

There are several reasons why citizens distrust transportation agencies. One is the belief that the agencies have only one solution to transportation problems: highways. Transportation planners must genuinely consider all transportation modes and seek real interagency cooperation. The influence the Highway Trust Fund has on closing minds to other alternatives was noted. Other reasons why transportation agencies are distrusted is the belief that they are more concerned with concrete than with people and that they do not listen to citizens.

In terms of specific procedural changes, the suggestion that was made over and over again was to open up with information, to make information available to all parties, to make it available freely. The most repeated suggestion was to be accountable to the public in terms of why decisions are made, what is happening, what is really going on. The group felt that agencies should be required to explain why alternatives are rejected at the time they are rejected and that citizens should be allowed to express whether they think there were sufficient reasons for the rejections. In that way agencies are accountable to the public for what they decide not only at the end of the project but at various steps along the way. As decisions are made, the factual base should be made available and communicated to public bodies.

The phrase, "Try it, you'll like it," summarizes much of what we said about ways to achieve citizen participation. It is an enjoyable kind of process, and the only way it can be improved is by practice, by doing the kinds of things that we say ought to be done, by the practitioner practicing what he preaches.

## REPRESENTATION

How do you identify the citizens who should be involved in the planning and decision-making process?

Should citizen involvement be by election, appointment, or self-involvement?

How do you obtain a fair representation of values, attitudes, and desires of the community?

### Workshop 1

I would like to take one step backward and add another note to the subject of trust. At the end of our session, the most outspoken citizen on the issue of trust-distrust turned to the 3 state agency people and said, "I trust you, I think."

Although the other 3 workshops deal with methods and techniques, our group felt we really could not discuss the issue of representativeness without discussing to some degree both techniques used in citizen participation and levels of citizen participation.

The context of this discussion could be largely summarized by a state agency representative's statement: "Let's face it, no method will work if the agency doesn't want it to work." There are at least 40 methods and mechanisms that have been listed and described by various consultant firms, universities, and federal agencies. In reality, any of those mechanisms and methods can be easily subverted to mock citizens or to restrict and control serious levels of citizen-agency interaction.

The group finally agreed that, under the circumstances, the safest mandate for a transportation department is a combination of approaches. First, at the project level, there should be open participation. That is to say, all affected citizens should have the opportunity to participate—and that means self-appointed citizens (no election, no appointment) based on the criteria of who is affected and who wants to participate. In short, all citizens who are affected and want to participate should be perceived as legitimate participants, and people should be screened in rather than screened out of such a process.

Furthermore, at the project level, once an agency has sought out affected citizens and citizens on their own have sought out an agency, the citizen groups—some of which will have competing and conflicting interests—and the agency representatives should discuss the best mechanisms and the best methods that are relevant to their community and to the issues to be considered. The decision should be left to local option, as it were, but with the understanding that the decision on methods and mechanisms should be mutually agreeable (as opposed to something forced from Washington on a top-down basis).

For the area-wide level, the group took a different approach. It decided that, on that level, it is important to have an organized structure recognized by the agency and to have rights, responsibilities, and procedures more formally spelled out. The reason is that an area-wide process is a continuing and lengthy process and requires a far longer sustained period of interest and interaction.

There was much reservation within the group about how to establish an organized structure that was, in fact, a representative cross sampling of affected interests that would not function as a means of precluding citizen participation or as a means of co-opting citizens or as a means of only hearing from certain sectors of the community. I wish I could say that the group came up with a nice solution on how to devise such a representative, open, and accountable citizen group; we did not.

In addition, there was much discussion about the pros and cons of public hearings. Almost everyone agreed that the public hearing is inflexible, is not a good way of achieving 2-way communication, and is held too late to consider alternative choices. Nevertheless, public hearings, if nothing else, offer citizens a negative checkpoint procedure; thus, the citizens are not eager to see the requirement for public hearings dropped.

## Workshop 2

Our group made a completely different interpretation of the term. Workshop 1 talked about representativeness; and we talked about representation; and there is a difference. Although we did address the issues of representativeness, it was largely in the context of advisory or review committees, and we had quite diverse views within our group about both the merits of such committees and the functions they should perform and how they should be appointed. Some held very strong views that it was the prerogative of elected officials to appoint such committees, that they were valuable, that they did represent their constituencies and, moreover, that they had constituencies, and that they should play quite an important advisory role.

Going on from that, we agreed that public officials must not only accept public participation but must actively seek it, that is, go out and find affected and interested groups and encourage them—not compel them—to be involved. Any and all affected or interested groups need to be identified in order to involve them in some manner, whether that manner be in a formal advisory capacity or in some more informal participation mode. Legislation in California that requires the participation of particular groups (the young, the old, the handicapped, and the disadvantaged) is being considered by the other states now.

Another question that is difficult to answer is, What is the community? Is the preservation of the French Quarter only the concern of the citizens of New Orleans? Are the California Redwoods only the concern of the Californians? We did not arrive at an answer, but we did think that confining the community to rigid boundaries defined by a planning agency and limiting participation to people who live therein have some serious disadvantages, which carry over into referenda. If there is to be a referendum, what is the relevant community?

## ADAPTABILITY

How can changing goals, values, and life-styles be continually accommodated by the planning process?

Does acceptance of a plan by the community lock its successors into the plan 20 years from now?

If so, is that desirable?

## Workshop 1

On the matter of community, we defined community in terms of the individual's perception. Thus, there are geographic communities and there are interest communities, and these should be determined by the citizen and responded to by the agency. Our group moved directly from that issue into a general discussion of the last issue on legal and policy recommendations. We did not answer the intervening questions.

## Workshop 2

We had some real disagreement as to whether values are changing. The distinction was made between individual values and social values. Individual values are perhaps not changing rapidly, but their expression in social communities does change rapidly and during a fairly short period of time.

Involvement of citizens in the transportation planning process needs to be continual. There dare not be major time gaps in which there is a loss of contact between the planning agency and the public. That may happen if participation is limited to particular projects. Therefore, participation should be considered in terms of groups of projects

and programs instead of individual projects.

The new philosophy, which has grown out of implementation failures such as highways on which construction was started but never completed, is that you are never locked into a plan. Airport planning can be made more flexible as well even after construction is completed by changing the operation. The consensus was that planners and citizens should not be locked into a plan but should build in flexibility by establishing a continual review and revaluation process.

## MOTIVATION

How can citizens be motivated to participate in transportation planning when proposed actions may be many years away?

What are the needed incentives for transportation planners to become involved with citizens?

### Workshop 2

If citizens feel that they are wanted, that they can make a contribution, and that they have some responsibility, the motivation will be there. Lack of motivation is related to the lack of rewards. If you are continually beaten down, there is little incentive and motivation to be involved. Citizen input to the process must be actually used and responded to in a responsible manner.

The idea, "Let's all work together; it's fun," was expressed, especially by those who had been involved in public participation activities. It was an enjoyable kind of process; it was not threatening; it was not onerous. Other ideas suggested for developing and using citizen participation were rewarding planners who successfully do so and dramatizing issues in a variety of forms.

## RESOLUTION

In view of the linear character of many transportation facilities, an alignment suitable to one neighborhood may be unsuitable to another. How can conflicts of neighborhood or community self-interest be resolved?

### Workshop 2

A summary of the points discussed is as follows: (a) Resolution is achieved by having a good plan that meets community needs; (b) conflicts among community groups should be resolved by them and not by the agency; (c) political leaders must sometimes make ultimate decisions in conflicts that cannot be resolved at a lower level; and (d) problems that cannot be resolved by adjacent jurisdictions have to be resolved at the next highest level, whether it be a regional government, a state government or, in the case of several states, the federal government itself.

In addition to, or as a substitute for, the public hearing, there was a great deal of enthusiasm for the idea of what in England is called the public inquiry by the Queen's counsel. In that inquiry, the agency must defend itself and must submit to cross-examination by somebody who knows how to cross-examine on the issues. Citizens, themselves, should be subject to some degree of this, although there was at least a minority view that if a citizen wanted to make a statement he should not be subject to as much of this cross-examination as the agency.



## LEGAL

What are the existing legal requirements for citizen participation in transportation planning?

How have these legal requirements influenced existing transportation planning approaches?

Are new or changed legal mandates necessary or desirable?

## Workshop 2

Formal requirements for public participation in transportation planning and procedures for carrying out those requirements are provided by a growing body of statute law and administrative regulations. Currently, direct contact between highway departments and the public is required in public hearings prior to approval of highway projects and relocation advisory assistance where residents and businesses are displaced by highway construction. These requirements constitute legally enforceable rights of the public and must be respected in the transportation planning process in order for a project to receive federal assistance.

Delegated responsibilities of the Secretary of Transportation and Federal Highway Administrator to promulgate standards also have provided bases for soliciting public participation in governmental decisions. One of the most recent examples of this process is the requirement that

The Secretary after consultation with appropriate federal and state officials, shall submit to Congress . . . and promulgate guidelines designed to assure that possible adverse economic, social, and environmental effects relating to any proposed project on any federal-aid system have been fully considered in developing such project, and that the final decisions on the project are made in the best overall public interest. . . .

The guidelines referred to are intended to ensure a consideration of needs for safe, efficient, and economical transportation and the minimization of adverse effects of noise, air, and water pollution; destruction and disruption of natural and man-made resources, aesthetic values, community integrity, public services, employment, and property values; displacement of people and businesses; and disruption of community growth. As implemented by administrative regulations, the process of formulating these standards provides opportunities for public participation at the state level.

In addition to requirements for public participation in the federal-aid highway laws, related federal legislation dealing with environmental protection and other community values contains requirements that either necessitate or facilitate public participation. Reports and statements that discuss probable impacts of federally aided projects and that are required by law for review and consultation by other federal agencies under the National Environmental Policy Act of 1969, the Historic Preservation Act of 1966, the Department of Transportation Act of 1966, and others, all provide information that is available to the public and may be used in volunteering comments to federal agencies on citizen interests and concerns. Procedures for review and consultation among affected governmental agencies under those laws provide additional opportunities for indirect participation of citizens in the official decision-making process.

Paralleling federal legislative requirements for wider public participation in transportation planning and decision-making, there is a growing body of state law on this subject. For example, a recent California statute requires that the Department of Public Works ensure that contact is made with groups representing the young, the aged, the handicapped, and the disadvantaged in developing design specifications for highway projects.

A final element in the institutional framework for public participation involves the public's right to resort to the courts for settlement of disputes over the location, design,

and operation of transportation facilities. In recent years, procedural rules for allowing parties to represent public interests in those projects have become more liberal, thus making the courts available as forums for consideration of various questions that heretofore have been handled entirely within the administrative and legislative branches.

The quality of public participation in the transportation planning process and the ultimate effectiveness of the institutional framework that has been created to facilitate it depend on many variable elements. Those are touched in other parts of this report on overview issues and include attitudes, representation, motivation, policy orientation, and the like.

One key factor in the success of public participation is the availability of information concerning factual matters involved in public issues and governmental procedures for handling such matters. In this respect, citizens often feel helpless when faced with the responsibility of contributing constructive comment on highly technical subjects on which governmental agencies have amassed data during long periods of time. Expenses in duplicating this information and analyzing it are prohibitive for private resources. Thus, the Freedom of Information Act must be regarded as an essential part of the citizen's opportunity to participate, and its spirit as well as its letter should be respected by governmental agencies.

Another key factor in the success of public participation is the ability of citizens to interpret the significance of impacts on their interests. That need is not fully recognized or met in current formal requirements for participation in planning, and possibly it should be accommodated by mandatory review of plans that involve long-range effects that cannot be fully appreciated in initial studies. Recourse to the courts to stop projects until they can be reconsidered is too costly to remain an acceptable procedure in settling these matters.

A final key factor in the success of public participation is the assurance of continuity of such participation. Historically, governmental bodies have used citizen advisory groups to assist them in these matters. Yet there is a danger that these semi-official groups may proliferate to the point where they become unwieldy. The recent Federal Advisory Committee Act of 1972 reflects this concern that there may be too many such bodies to effectively assist government, but also raises the question of how this advisory function can be defined and preserved at a level where its full potential effectiveness can be realized.

The duties of governmental agencies to provide meaningful opportunities for public participation in the transportation planning process and ensuring consideration of citizen group interests in making transportation program decisions are adequately set forth and guaranteed in the law at the present time. However, successful utilization of those opportunities requires that federal, state, and local agencies promulgate reasonable and realistic procedures for citizen participation. These standards and related regulations should be periodically reviewed with citizen input in the light of experience and revised where necessary to realize the full potential of citizen participation.

Full citizen participation in transportation planning often is curtailed because citizen groups lack financial means to make needed studies, investigations, and research reports. Federal, state, and local laws should be reviewed to determine existing authority to spend public funds to assist research and investigation projects by or at the request of citizen groups acting in the public interest. Further, methods for lawful and authorized use of public highway funds for such studies should be publicized.

Although there is universal acceptance of the concept of freedom of information, experience with the federal statute guaranteeing access to public records and documents has shown there still is uncertainty regarding the rights of citizens and governmental agencies. Existing questions regarding implementation of the Freedom of Information Act should be clarified by the legislature before it is necessary to have them clarified by the courts. States should enact and enforce laws facilitating access to public agency records and information files where such public rights of access are not now legally recognized.

Finally, it should be universally recognized that meaningful citizen participation cannot be achieved merely by passing laws or issuing regulations; meaning can be introduced into the concept of citizen participation only by citizens and public officials

acting in good faith, cooperation, and diligence. Therefore, the formal framework of opportunity—which is really all that the legislature can provide—can be successful only when it is properly and fully utilized by the people involved.

## POLICIES

What federal, state, or local policies are needed to improve citizen participation practices?

### Workshop 1

In general, most of the recommendations from our group fall more in the category of policy and resource changes as opposed to formal legislative changes.

First, the group agreed that, if we are going to have serious levels of citizen participation, the U.S. Department of Transportation must be far more responsive to the need for funds to support citizen participation. In particular, the department should provide funds to enable citizens to obtain much needed technical assistance so that citizens can both respond to plans suggested by agency personnel and consider alternative options.

The group also discussed a particular method of technical assistance that has become known as advocacy planning. We were unable to agree on whether federal-state funds should be used to provide advocate planners or whether agency staff should be available to citizens.

Second, we decided that policies of the Department of Transportation on citizen participation need to be better supported with in-house resources. The department needs to do a better job of training its officials and to make funds available for training agency officials and citizens who want such training. Training, plus technical assistance to support training efforts, ought to include both substance and process so that it deals with planning philosophy, planning techniques, transportation alternatives, human behavior, and interactive behavior.

Third, we recommend that the Department of Transportation hold planning agencies accountable by evaluating their performance and by exercising negative sanctions against those agencies that fail to comply with policies on citizen participation.

Fourth, the group felt rather strongly that the department needs to adopt uniform policies and consequent procedures that cross its modal units. The group suggested that something similar to PPM 90-4, which is popularly referred to as the Action Program or the Process Guidelines, be adapted so that it is relevant to both the Federal Aviation Administration and the Urban Mass Transportation Administration.

Fifth, the group recommended that the recently instituted Annual Certification Program include a new requirement: that citizens have the opportunity to review and comment on the substance of the work program and the proposals contained within that program package.

There was consensus on the urgent need for intermodal transportation planning. In this connection, the Department of Transportation should recognize that there are competing and conflicting procedures among the various modes and that the procedures need to be reviewed thoroughly and rationalized in terms of citizen participation, in terms of intermodal consequences, in terms of various stages of planning, and in terms of reducing red tape. Citizen members of the group felt it was important to keep the sanctions that are built in but to reduce the number of checkpoint procedures. They pointed out that, if you reduce red tape for transportation planners, you are also in fact reducing red tape for citizens. In this context, some members suggested that our systems planning approach is rather useless because it is required to focus on details for a 20- to 25-year period and that it would be more useful if the required level of detail were greatly reduced.

## Workshop 2

Citizen participation practices could be improved by emphasizing policies that make such participation flexible, meaningful, feasible, equitable, consistent, comprehensive, and open. Most of these policies, summarized briefly below, can be put into effect by local, state, or federal governments.

Flexible citizen participation policies should offer citizens a chance to take part in transportation planning at vital times such as system, corridor, and design stages and at annual or other periodic reviews. However, the form or number of those opportunities should not be specified explicitly.

Meaningful citizen participation depends primarily on public agencies listening and paying attention to citizen suggestions. This should include technical analysis of feasible alternatives suggested by citizens. Furthermore, agencies should let citizens know that their suggestions were considered.

Feasible participation policies by agencies depend on adequate resources. Those resources may result in agency funding for qualified citizen groups, in agency provisions for information or attitude sampling activities, in telephone and face-to-face and mail responses to all inquiries, and in agency support to help employees learn of relevant experience elsewhere.

Equitable citizen participation policies stress the need to involve all groups, particularly those often left out. Groups deserving special attention in transportation planning and citizen participation efforts include the young, the old, the handicapped, and the disadvantaged.

The need for consistent policies is dramatized by present inconsistencies among the Urban Mass Transportation Administration, the Federal Aviation Administration, and the Federal Highway Administration. Those inconsistencies impair participation by citizens and complicate activities for state and local agencies.

Comprehensive citizen participation techniques can extend even beyond the full scope of transportation planning to include land use decisions. By illuminating and eventually improving decisions affecting land use and development, citizen participation offers the hope of attaining transportation systems and land uses that are compatible and economical with one another over time.

Open policies concerning citizen participation techniques refers to freedom of information—files open to the public, in most cases, in all agencies.

## Workshop 1 Minority Report

*E. Wilson Campbell*

The U.S. Department of Transportation should establish minimum acceptable criteria for citizen participation for systems, subarea, and project planning and for rural and urban planning.

In urban areas, a formal committee could be established or informational meetings could be held at which the citizen is invited to review and comment on the material submitted by the states when they request annual certification. The comments should be made to the state but transmitted as part of the certification material. Time should be allowed for citizen input, and the automatic certification should be extended until the material is submitted and reviewed by the Federal Highway Administration.

Above all, the process should be open to interested citizens and the press. Mechanisms should be set up so that citizens are notified of their rights and of meeting dates and other pertinent information.

Public meetings and hearings should be held on a periodic basis (at least biannually) to keep all citizens informed and to get feedback on whether a plan is valid or goals have changed.

The U.S. Department of Transportation should not specify the procedure by which the citizen participation is to be accomplished. However, the department should require that key points be addressed and officially presented to it by each state agency to

show how it will accomplish this mandate. This could be done by extending the process guidelines for the current Action Plan to include all modes.

It is recommended that

1. A task force be established by the U.S. Department of Transportation (all modal administrations) to (a) set up minimum guidelines for formalizing effective citizen participation in the planning process, (b) provide to the states summaries of experiences of others in implementing procedures and effective techniques that have been applied and that appear most appropriate for each stage in the process, and (c) define for the states how the U.S. Department of Transportation will measure the effectiveness and extent of citizen participation and the basis for its approval of the process set up by the state;

2. The U.S. Department of Transportation require the Action Plan to address citizen participation for all modes (this could be done by state departments of transportation, or, in states without such departments, by agencies other than highway departments that have the modal responsibility);

3. Uniform procedures be developed by the U.S. Department of Transportation for reviewing and certifying the planning process; and

4. Categorical programs be abolished for highway programs.

# WORKSHOP REPORTS ON SITUATIONAL ISSUES

## GENERAL

### Workshop 3 (Systems)

Underlying some of our thinking was a consensus that the state of the art in transportation planning itself leaves much to be desired in the sense that citizens often ask questions of the process that the process is not designed to answer.

### Workshop 4 (Subareas)

Our first problem was to identify the nature of subarea planning. The concept is new and has only nominally been implemented in the United States. It corresponds to corridor planning, but that concept is probably equally as vague.

We finally accepted the definition developed by the Pennsylvania Department of Transportation: Subarea planning is comprehensive planning that involves all modes but focuses on one or more sectors where there is either rapid growth or high priority transportation needs that have generated controversy and concentrates on a 5- to 15-year time horizon for project implementation. Subarea planning may be used to refine or reevaluate already adopted (comprehensive) regional plans. In other words in subarea planning, a preexisting comprehensive regional plan is accepted as a given.

Because subarea planning is a new concept, we felt that directly responding to the 10 questions posed constituted a "what if" situation and the only real situation we had to measure by was the I-95 study in Maryland, although that does not really correspond to our definition.

The subarea planning concept offers the citizen an opportunity to input into the process while there are still choices; it offers the opportunity to test the regional plan in the real world.

We believe that the subarea planning concept itself may be a means of increasing the effectiveness of citizen participation, and we support the concept.

In arriving at answers to the questions, we had to surmise how the subject matter related to subarea planning, for none of us had experience in or knowledge of real situations in which these issues had been addressed at the subarea level.

### Workshop 5 (Projects)

These opening remarks address the entire spectrum of the problem of citizen participation in planning and question whether we really understand the difference between citizen participation and citizen protest. Another kind of conference could have been held by citizens where they invited perhaps one or two highway specialists and had workshops on the concept of citizen protest. I think that has been done in several cases. Within our group, there was only one full-time, nonpaid citizen; the rest of us citizens were full-time, paid somewhere. However, I think in general there was some understanding of what the problem is, and we did have some good discussion and reached some agreement.

Our view is that effective, positive, early, open, public citizen participation is not going to take place until there is an adequate commitment on the part of political leaders at all levels to put dollars into urban alternatives. That can be interpreted ideologically any way one wants to. I think it goes to the heart of the Highway Trust Fund problem, which we got into as our report will indicate.

### PLANNING PRODUCT

Because planning processes are at least partially product-oriented, the citizen participation program should assist the completion of specific planning activities.

What are the desired outputs or products of the planning process?

### Workshop 3 (Systems)

At the systems scale, transportation planning must be conducted as an integral part of an area-wide comprehensive planning process. Comprehensive planning is an iterative process that can be briefly outlined as follows:

Step 1. Develop input policies that reflect community goals and desires regarding planning elements such as water and sewer, housing, open space, transportation, and environmental preservation;

Step 2. Forecast and allocate future population and employment based on input policies;

Step 3. Forecast and allocate travel demand based on population and employment forecasts; and

Step 4. Evaluate implications, i.e., cost and impact of physical facilities, required to support demands generated by input policies.

A second cycle follows in which input policies are modified to reduce adverse impacts identified in step 4, and the steps are repeated. Steps 1 and 4 are generally policy activities, and steps 2 and 3 are technical activities.

Citizens should have the opportunity to participate actively in steps 1 and 4. Citizens should also have the opportunity to satisfy themselves that the technical processes associated with steps 2 and 3 are logical and generally accepted procedures. That can be done through review and discussion of the technical work program or, in some cases,

the citizens may retain a recognized professional to work with the comprehensive planning team.

Effective comprehensive planning should lead to implementation of elements of functional plans on a continuing priority basis.

In transportation planning at the systems scale, a transportation plan acceptable to state and local government officials for planning purposes must be identified annually. The transportation plan reflects the transportation needs associated with the currently accepted goals and policies of the comprehensive planning process.

The transportation plan identifies improvement priorities so that the most acceptable and needed elements of the plan can be implemented each year. Citizens should also have the opportunity to assist in identifying the priority elements of the transportation plan each year as part of the continuing cyclical comprehensive planning process for the area.

### Workshop 4 (Subareas)

Although the subarea planning process is a relatively new concept, Workshop 4 identified these several desired products of the planning process:

1. Identification of the general subarea boundary based on jurisdictional, geographic, and temporal factors;
2. Reevaluation of the systems (i.e., comprehensive) plan within the subarea based on more detailed staff knowledge and input of subarea citizens (this assumes that the subarea has established goals, objectives, and issues);
3. Identification of institutional constraints;
4. Evaluation and weighing of alternative modes for each link in the system and recommendations regarding transportation modes and general corridors for facility location;
5. Expectation that the subarea planning product will be acceptable to the subarea community and will be implemented;
6. Establishment of priorities for the subarea plan;
7. In-depth determination of the existing and projected travel patterns and habits; and
8. Recognition of those issues that can produce an impasse between adjacent subareas and that must be referred to the region for resolution.

In summary, the subarea planning process must be action-oriented to meet the specific and "real" needs of communities. It must afford an in-depth consideration of both quantitative and qualitative community consequences and values. It must in the end produce a set of recommendations that are feasible to implement as a program.

### Workshop 5 (Projects)

If we can agree to adopt a planning process that is acceptable to and binding on all parties involved and that will resolve problems caused by conflicting needs and concerns of diverse publics, then we can expect a variety of products or outputs of this process.

There are 3 distinct categories of products with respect to the adopted planning process:

1. Results of the planning process itself, e.g., defined roles, broad understanding and definition of citizen participation, and evaluation mechanisms;
2. Specific forms that the results of the planning process take, e.g., reports, drafting of legislation, and policy and procedure statements; and
3. Outcomes relating directly to transportation systems or to transportation services or modes, e.g., assumptions, local issues, impacts and alternatives, and land use.



The specific products discussed by workshop 5 are as follows:

1. Report in which assumptions for systems planning are updated for project planning and in which a description is given of the extent of citizen participation and of the mechanisms and methods of evaluating the quality of that participation;
2. Recommendations and concerns regarding local transportation issues, including citizen participation, facilities, and services, and their relation to national legislative needs, broad funding mechanisms, and land use policies;
3. A deeper concept of appropriate public transportation services, a clear-cut agenda of improvements, projects listed on a priority basis, implementation timetables, concepts of projects, and sufficient support and funding for their operation;
4. Definition of systems and modes and the processes that allow different alternatives to be tested for effect and that include funding recommendations;
5. Project planning process that generates service needs, assesses impacts of alternatives, states whose interest is being served and at whose expense, and sets forth impacts or consequences of the system plan;
6. List of agreed-to facilities and services and identification of probable consequences of providing them;
7. Documentation of process and periodic documentation of evaluation of process, assumptions, participants, and state of the art—all consistently and systematically disseminated;
8. Format for each plan including long- and short-range plans, goals defined to satisfy needs, alternative solutions and approaches to determining them, impacts on segments of the population and the environment, time sequence in which impacts will be experienced, and detailed and summary forms;
9. Alternatives related to land use, including plans to protect future food supplies and open spaces, and transmission of views to congress to change funding so that those alternatives can be realistically considered and implemented;
10. Alternatives that (a) put planning process and products within framework of land use, people, environment, sociological considerations, and energy conservation and (b) that reduce movement of goods and people;
11. Planning that is not a product but a process in which assumptions are clearly stated, roles for citizen involvement in implementing the decision-making process are defined, and the planning period is used to prepare for whatever alternatives are selected; and
12. Methods for getting public officials to be more responsive to citizen views, to consider the alternative of more effective services by efficient use of existing facilities, and to consider less growth as an alternative.

## DECISION-MAKING

What are the key decision points in the planning process?

How does citizen involvement relate to the decision-making process?

What roles do local elected officials, citizen groups, planners, and other citizens have in decision-making?

### Workshop 3 (Systems)

The key decision points in the planning process are determining the goals and objectives of a transportation system, selecting projects that are to be a part of that system, and determining priorities in implementation or construction schedules.

Citizens should be involved at each of those points. Their participation will help identify alternatives, broaden or narrow areas of consensus, and highlight decision areas.

In the planning process now, elected officials bear final and legal authority for decision-making. There is a growing demand for allowing citizens to have a greater input, for making citizen input really effective in influencing the elected decision-maker, and for having planners be more responsive to citizens. Professional planners in government agencies are now more responsive to elected officials, and both in turn are heavily influenced by organized industrial and commercial interests. The problem is how can citizens play an effective role and communications be facilitated among citizens, agencies, and the "establishment." Part of the problem has been how to sustain citizen interest and input, and one way is to give them some support and provide them with planning expertise. Organized citizen groups with professional staffs can make a valuable contribution to planning transportation facilities and services.

#### Workshop 4 (Subareas)

The key decision point is often in the formation of the issues to be decided, and there should be as much citizen assistance in the initial formulation of the questions as possible. The workshop concluded that a major recommendation should be the obvious but often violated injunction to involve the public before rather than after the decision is made. The public should be informed when and by whom the decision is to be made so that the citizenry can participate.

There is an important distinction between citizen involvement and citizen decision-making. An increasingly difficult problem is identifying the decision-maker. This of necessity will be intensified at the subarea planning level. Diffusion of decision-making responsibility or unclear definition of who is deciding what can only lead to increased public frustration and disillusionment with the governmental processes. For there to be ongoing citizen involvement in transportation planning at the subarea level, citizens have to know that they are not wasting their time talking to and trying to influence the wrong person. Planning for the sake of planning has considerably less appeal to citizens than it does to planners.

When consideration is given to a product or set of planning products or desired outputs for a subarea planning process, there arises the immediate question, What is a subarea? and the corollary question, What then constitutes a subarea planning process? The designation of a subarea implies that some group or agency has a specific interest in making such an identification and that it is being done to achieve a specific purpose, i.e., a perceived set of goals or objectives.

The problems associated with identifying a subarea appear to be, in many cases, related to those of identifying suitable jurisdictional, geographic, or temporal boundaries. That such boundaries must be clearly established, however, is a recognized necessity if subarea planning is to be successful. Correspondingly the "outlooks" of both planners and decision-makers must shift to accommodate the shift in scale from regional considerations to neighborhood concerns.

#### Workshop 5 (Projects)

Citizens must not only be given an opportunity for input in the planning process but must also be shown that their views have been considered in decision-making. However, the final decision must be made by the public official charged (by law) with the responsibility. This official must be identified, visible, readily accessible, and subject to receiving periodic performance evaluations by the electorate.

Roles in decision-making are as follows: Elected officials make decisions, establish policy, and provide funding; citizen groups elect elected officials, influence planners, influence elected officials, and stop processes by legal action; planners listen to citizens, recommend to elected officials, and furnish facts; and other citizens elect elected officials, influence planners, and influence elected officials.

In the decision process, citizens inject their views into the formulation of goals; furnish input to planning professionals, who recommend decisions to elected officials;

directly influence elected officials; evaluate environmental, social, economic, and overall community impact; and apply pressure to bureaucrats.

## ROLES AND RESPONSIBILITIES

What are the proper roles and responsibilities of the planner, elected and appointed officials, citizen groups, nonaffiliated citizens, and others in the planning process?

Who identifies problems? Goals? Alternatives? Consequences?

Who evaluates alternative proposals?

### Workshop 3 (Systems)

Planners, technical experts, appointed officials, citizen groups, and nonaffiliated citizens should all share leading roles in the planning process. They should be formed into one group that identifies problems and alternatives, establishes goals, and explores consequences. This group should evaluate alternatives and retain special experts where needed to accomplish this.

The issues that remain to be decided after this process will be political. The workshop did not agree on who should have how much authority and responsibility for final decision. The workshop agreed that the participating citizen had to be given some authority, but balked at having him make the final decisions. The important thing was that the citizen view have important impact at a level equal to that of the planner or professional. Thus, the important thing is the process—a process that demonstrates fair play and encourages mutual trust and responsibility. The process must get the citizen out of the reactive planning role by seeking his ideas, developing his alternatives, and providing him information.

The planner and the professional should have the responsibility, but not the exclusive right, to lead planning and to identify need.

### Workshop 4 (Subarea)

Defining roles and responsibilities requires that a distinction be made between those individuals who are in advisory and decision-making positions and those who represent a constituency, whatever size.

In general, it is the responsibility of the decision-maker or planner in an elected or appointed position to make their actions visible to the citizens affected by those actions. This entails identifying the choice variable as well as the context variables relevant to the generation, evaluation, and selection of alternatives. These same individuals have the responsibility of developing the communication devices requisite to the adequate understanding of those variables by concerned citizens.

Planners in particular possess technical expertise with which they should conscientiously evaluate citizen-initiated suggestions. This implies a responsibility on the part of planners to create and maintain at a highly visible level the channels for citizen input if these do not exist.

### Workshop 5 (Projects)

In all urban areas, all participants that are or should be involved in project planning should be identified, and their respective roles and responsibilities should be spelled out in detail. In general, it is observed that, when citizens find planning efforts to re-

sult in transport solutions that they observe to be ineffective, citizen participation peaks and often results in litigation. When planners show that solutions are sensitive to citizen involvement, citizen participation ebbs. The result is that citizen participation must be encouraged so that it may occur when citizens feel so motivated; but, more important, it is the supreme role of planners to respond to citizen participation with positive actions reflecting citizen desires. The priority at this point should be development of better agency attitudes toward citizens as well as mechanisms for citizen participation.

Participants in project planning should be the following: the general public, including organized citizens, individual citizens, businesses, professional groups, and trade groups; elected and appointed officials, including state and national legislators, local government legislators, mayors, commissions, and boards; agency representatives, including state highway or transportation departments, transit operators, and local planning departments and other staffs; and all media.

Workshop 5 proposes the following roles and responsibilities as being in the best interest of promoting equitable, efficient transport services and decisions.

It is important to emphasize that citizen roles are optional, depending on circumstances. But, under any circumstance, the roles must be exercised at the options of the general public. Testimony before congress and state legislatures should be encouraged. The roles and responsibility of the general public are to identify problems and consequences; to inquire; to recommend alternative solutions, priorities, and policies; to serve on task forces; to litigate irresolvables; and to testify before legislative bodies.

Major decisions on policies, programs, and projects must be entrusted to elected or appointed officials and wrested from planning technicians when necessary. Those officials should adopt policy; approve plans and priorities; invite appearances of citizen groups, particularly broad-based citizen coalitions, before hearings or other forums; and request evaluations of alternative policies and plans from agency staffs.

The role of agency staffs is to evaluate alternative policies, plans, and programs from standpoints of costs, social and environmental impacts, consumption, and other identified consequences; to advise decision-makers; to solicit citizen inputs; to respond to citizen inputs; to encourage coalitions of citizen groups; to recommend relaxation of funding restraints when unbalanced funding inhibits desired programs; to develop procedures such as new appeal processes for the benefit of concerned citizens and to circumvent costly litigation; and to conduct all processes in an open manner, to provide timely information, and to invite public attendance at meetings.

The role of the media is to continually amplify the planning process.

## INFORMATION FLOW

What information must flow between planners and citizens for community participation to be effective and responsive?

How can this information be stimulated?

What communication techniques are valuable?

## Workshop 3 (Systems)

Systems planning has special communication problems owing to the long-range, non-specific characteristics of this activity. Although private citizens are stimulated to action and inquiry when specific lines on a map are publicized, most people do not relate well to long-range planning involving general concepts, uncertain time schedules, and tentative, broad guidelines. Yet, once long-range plans are formulated and approved by public hearings, there is sometimes a complaint at a later date by citizens who question the validity of the systems planning.

Consequently, improved methods of communication are essential. Well-known communication techniques can be used and expanded: formal and informal meetings, public hearings, radio and television, newsletters, movies, contests, 3-D models, press releases, and the like. Simply taking advantage of existing public relations techniques will require much larger expenditures than previously. Emphasizing the need for such funds is therefore of primary concern.

In addition, efforts should be directed toward making use of innovative approaches; two suggested were use of electronic devices for expressing opinions at large gatherings and use of skilled personnel for cross-examining at public hearings.

A critical element of this communication is that it must be a two-way interaction.

#### Workshop 4 (Subarea)

Information flow is likely to become a problem in those agencies that fail to recognize a basic premise of our governmental system: Planning and technical staffs work for the citizens as well as for the decision-makers. We agreed that the information that must flow between planners and citizens for community participation to be effective and responsive includes identification of the decision-makers and the decision-making process; detailed explanation of limitations; and the pros and cons of each argument.

We decided that the kind of communication technique depends on the situation. There was general agreement that a communications specialist would be the best person to handle the details of imparting information. Certainly, the sole responsibility for determining the techniques to be used should not have to be left up to the citizen.

#### Workshop 5 (Projects)

Access to information is the foundation of effective citizen participation. Citizens must have accurate and direct knowledge of the planning, decision-making, and budgetary procedures, keyed to significant decision points. That will only happen in a completely open planning process. Efforts must also be made to educate citizens about the language and tools of transportation planning so that they are able to interpret and use the information they receive. This would include demystifying the planning process and relying less on obscure or technical terms when the same information can be conveyed in lay language. Staff, whose background and training are in community work, should serve as liaison between the planning organization and citizens and should actively promote the full and extensive exchange of information. The emphasis, however, must be on information and not public relations. Finally, the flow of information and ideas should be directed two ways: from the planning agency to citizens and from citizens to planners and decision-makers.

### WORK RELATIONS

What do you do in the absence of a single local governmental agency to effectively handle planning and citizen participation for all the jurisdictions and all the administrative agencies involved in transportation planning?

Does increased citizen participation require new or improved work relations among long-range planners, location planners, and project planners and designers?

If so, how can this be accomplished?

Are improved intra-agency work relations required?

### Workshop 3 (Systems)

Where there are multiple governmental jurisdictions, it is essential that a coordinating agency be established for planning purposes. The structure will depend on the jurisdictional problems such as whether more than one state is involved or what the political realities are.

If a planning region or subarea has no mechanism of effective coordinated planning around legitimate system issues, then it is both important and legitimate for citizens and citizen groups to take the initiative in demanding and helping to create such mechanisms. At one level, a policy committee might be established on the basis of a memorandum of understanding among jurisdictions. At another level, a central planning agency might be established through the legislative process. The agency might be responsible to an official commission whose members could be appointed by the governor or elected.

The workshop recognized the inherent difficulties facing such intergovernmental bodies, but, short of metropolitan government, believed that such bodies should be created and helped to succeed in every way possible. In particular, it is important in forming such structures that citizens be included as members of the official body or that some other way be devised by which the citizen point of view can be a major consideration.

If, for example, there is a citizens' advisory committee that relates to the intergovernmental organization, it should work closely with that organization on the level of a partnership relation. The result of this should be, as far as it is feasible, that recommendations or actions or both that are taken would have the approval of the citizen representatives as well.

The workshop cautioned against taking the power to implement programs away from specific agencies with a single operating purpose in particular jurisdictions. If their power to implement is kept intact and their programs do impinge on other jurisdictions, they are more likely to coordinate their efforts with other jurisdictions.

With respect to encouraging closer working relations between planners and designers at different levels, it is incumbent on the official agencies to create such intradepartmental and agency coordination. If they do not, and very often that is the case, then citizens must demand that they do so in order that there is the utmost clarity in the factual information, policy directions, and proposed plans.

### Workshop 4 (Subarea)

If there is no single local governmental agency to effectively handle planning and citizen participation for all the jurisdictions involved, the critical component is to establish the identity of the decision-maker. For subarea studies, the decision-maker should be the entity that established the subarea study and, therefore, may not be a local governmental agency at all.

Our group felt that it was obvious that increased citizen participation required new or improved work relations among long-range planners, location planners, and project planners and designers. Work relations have to be closer because citizen participation creates the necessity to recycle ideas. Moreover, subarea planning tests regional plans.

System planners tend to deal in abstracts and in numbers; designers deal with problems on the ground and with people. In other words, designers sniff the grass while planners color maps green. Although there is some merit, conceptually, in requiring systems planners to build what they plan (or sniff what they color green), that is probably impractical; but some system of interface should be institutionalized.

A technique that attempts this, and is perhaps more suitable to a project than to a subarea plan, is the intensive design exercises carried out in England. Here key individuals involved in the planning, implementation, and funding of a project participate in a 2-day exploration of the projects' various aspects so that each may become aware of the unique views and concepts of other participants.

## Workshop 5 (Projects)

The best situation is one in which all agencies involved can agree on a cooperative, jointly sponsored study designed to address the transportation issues of local importance. In areas where impacts are minimal, one of the agencies might be given lead responsibility and provide the staff for the study with open participation invited from other agencies and citizens. In areas where major impacts are anticipated, a cooperative study staff might be assembled from various agencies or hired by using pooled funding. In either case, active citizen participation should be encouraged and facilitated, and the planning staff should be composed of the appropriate disciplines to deal with the issues. The staff might gradually shift during the course of the study as the project progresses from initial alternative development through project definition and design.

There should be a continuum of planning from the earliest stages through design. The traditional approach should be avoided whereby different groups are involved in different phases of work and there is little transition of information and working relations. If some people stay with the project for its duration and other talents are added as needed, communication and participation channels will be established and maintained and information developed in an effective manner. That will require restructuring intra-agency work relations in most instances, for a flexible organization will be necessary rather than one with fixed divisions along functional lines (such as long-range planning, location, and design).

### STAFFING AND FUNDING

Will the implementation of increased community participation require increased staffing and funding for transportation planning?

If so, how much funding will be required?

Who will provide the necessary citizen participation funding?

What staff training and development needs can be identified?

## Workshop 3 (Systems)

Assuming that the planning activity is to be restructured to ensure continuing community (citizen) participation in the comprehensive planning process, then it is essential that major increases be made in the funds available at the federal, state, and local levels for that activity. In fiscal year 1973, highway planning and research funds of the U.S. Department of Transportation total a mere \$154.6 million including \$33.4 million for research and \$121.2 million for planning. Of this, only \$36.6 million is for urban planning. It is estimated that less than 2 percent of the expenditure for any capital improvement is used for planning that improvement. As the planning process has expanded to include an extensive analysis of socioeconomic and environmental impacts, this level of funding is proving to be inadequate. It is recommended that a ten-fold increase be made in urban planning funds for all comprehensive planning activities including activities of not only the Department of Transportation but of the Department of Housing and Urban Development, Environmental Protection Agency, and Department of Health, Education and Welfare as well.

As a part of this funding process, some mechanism should be developed to ensure satisfactory citizen involvement at all government levels. We propose that federal agencies measure the responsiveness of planning agencies to citizen participation; where it is found inadequate (where citizens are excluded and thereby dissatisfied with existing planning agencies), then some mechanism should be provided whereby citizens are provided the opportunity to establish their own adversary planning staff answering to and addressing citizens' needs. Some balance of state and federal funds must be

provided to accomplish this and should be taken from the total available local planning funds.

The current citizen uproar over transportation and, more specifically, highway planning reflects, among other things, a serious credibility gap between citizens and public officials and their planning staffs. Citizens feel that they have been excluded from the decision-making process, and recent history certainly supports such claims. Planners, on the other hand, do not yet feel the need to enlist citizen participation from the inception of a planning effort, especially on the systems level. They appear to feel, instead, that the 2-hearing process gives adequate opportunity for citizen participation. Current citizen concern over transportation priorities is sufficient evidence to the contrary, however. Interestingly, it is these very citizens who are in fact "the clients" whom the planners are supposed to be serving and should be serving. There is obviously much confusion on a national as well as a regional scale as some agencies begin to bring citizens into the planning process while others continue to exclude them intentionally. Given the seriousness of the problem (inability to complete large sections of the urban portion of the Interstate Highway System) and the lack of communications and understanding in certain areas, it cannot be expected that agreement will be achieved within the next few years in many planning areas. We can, therefore, anticipate and should plan for an adversary relation between citizens and planners in such areas for perhaps as long as the next 10 years at least. Acceptance and attention to such a relation may be the most effective way of redressing existing conflicts.

It is the consensus of our group that every action should be taken to ensure that existing planning agencies do the jobs that they were created to do; that is, respond to public demand and structure and implement actions that reflect the goals, objectives, and priorities that have been articulated by the public. At the same time, we recognize that not all planning agencies have been responsive to citizens' demands, and some have been openly hostile. Such action is obviously counterproductive and must be altered if meaningful citizen participation is to endure. Therefore, agencies that do not respond in an acceptable manner regarding citizen participation must be altered to ensure that they begin to do so. If necessary, action as drastic as removing unresponsive agency staff members should be taken. If that does not work or proves unacceptable, then it may be necessary to establish an adversary planning staff responsible directly to citizens. To avoid conflict of interest (and possibly co-option), funds for such activities should come from independent sources. As a last resort, "no-strings-attached" government funds may be required to ensure meaningful citizen representation. The systems planning group does not encourage such action, however.

Some members of the group expressed concern about how to "control" any funds provided to citizens for establishing adversary planning activities. New York City's air pollution control effort may prove a useful example in this regard. Early in 1973 some 20 environmental and public interest groups formed the Coalition for Clean Air by 1975 in order to coordinate and consolidate support for the transportation controls section of the air quality implementation plan for the metropolitan area. That plan calls for the establishment of a full-time paid technical staff directed by and responsive to citizens to provide technical assistance in analyzing the plan and in fostering its implementation to ensure compliance with federal air quality standards. It has been suggested that, in order to most effectively reflect the leadership of a large part of the metropolitan area, this technical staff report to the coalition. The coalition would in turn have responsibility for setting policy for the technical staff and for hiring staff. This model may serve as an example should it prove necessary to repeat such action regarding citizen participation in transportation planning.

Staff expansion will be essential to ensure adequate manpower to interact and coordinate with the public. In many cases this may require a doubling of staff from present levels. Such staff additions should focus on the social sciences and on communications. At the same time, all existing staff not so inspired should be trained in the skills of community relations in an effort to instill a greater sensitivity to citizens. Such actions must be adopted officially in the federally mandated planning process, and funds must be made available for such training activities as part of this process.

In summary, our recommendations are as follows:



1. Increase federal planning funds tenfold to accommodate increased levels of planning activity and intensive citizen participation in the planning process;
2. Intensify efforts to ensure proper agency response to citizen involvement, and, if that proves inadequate, take all necessary action to ensure positive response;
3. Provide a mechanism (e.g., a paid adversary planning staff responsible to a representative body of citizens) to ensure that citizens have technical assistance should agency response prove impossible;
4. Increase planning staff levels to adequately reflect the needs of effective community participation programs; and
5. Initiate programs to train existing personnel in the skills of community relations.

#### Workshop 4 (Subarea)

The implementation of increased and effective community participation will require increased staffing and funding because of requirements for greater specialty in staff positions and an increased commitment in time to fully involve the community.

We made no estimate as to the amount of increased funds required and reached no consensus as to the source of the funding.

Suggested possible expenditures ranged from the payment of transportation of citizens' transportation to meetings and hearings, hiring of advocates to articulate citizen positions and issues, and payment of expenses of citizen groups to the writing of a blank check for community involvement activities.

#### Workshop 5 (Projects)

The implementation of increased community participation may in some cases require increased staffing and funding for transportation planning and may not in some cases. If the technicians and planners in the planning agency are (a) trusted by the public generally, i.e., community groups, interest groups, "no-ax-to-grind" citizens, and others including elected officials, (b) are talented enough to communicate well, and (c) are inspired and patient enough to enter into give-and-take encounters with the public then there would be a need only for someone to handle liaison and information as a sole responsibility.

However, if an agency's credibility has disappeared, if it has no technicians and planners able to communicate, and if it does not want its plans questioned, then a completely new planning mechanism will have to be set up outside the existing structure, one that is committed to a participatory process. That may be a \$1 to \$3 million restudy operation, or it may be something more modest but adequate to serve the public who should know and are interested in the issues.

The amount of funding required varies with the conditions. As a general rule, we suggest that the planning process set aside a minimum of 10 percent of the budget and a maximum of perhaps 50 to 60 percent to handle participatory aspects of a planning process (i.e., all items that are not strictly technical). The higher percentage would obtain when there is a high technical assistance budget.

The funding should be part of regular transportation planning budget, but citizen groups should also be helped and encouraged to raise money from independent sources.

Staff should be recruited from within the community. They should be able to relate to the technical staff and to communicate with people of all types and with different views and positions. They should not try to sell a point of view, but should understand all points of view and make sure they get into the planning process in an appropriate way.

### NEGOTIATION STRUCTURE

What kind of structure do you create to negotiate and arbitrate differences in values, goals, costs, benefits, and desired life-styles among the different segments of the community and between the community and the transportation planning agency?

### Workshop 3 (Systems)

We recognized that it is impossible to devise a systems plan that will be completely acceptable to every individual or group in the area. However, if the planning process has built-in citizen involvement in the plan development, the citizen input will have been taken into account. Unresolved differences must be decided by the elected officials who are the ultimate decision-makers.

### Workshop 5 (Projects)

We reviewed the forms that citizen participation must take. Several of those forms are already in use and constitute the formal public hearings called for in various federal and regional codes and regulations.

We recommend setting in motion frequent informal meetings with a variety of groups such as citizens, environmentalists, and the business community so that they can consult with transportation planners and information can flow in both directions. This inherently assumes the opening up of the entire planning process from the strategic-system stage through the subarea planning stage to the project level.

These points of formal and informal meetings between professional planners and citizen groups must be used as sources of findings to generate interaction at all stages.

## EVALUATION CRITERIA

As citizen participation in the transportation planning process becomes greater and represents more widely diverse values and goals, what criteria should be used to develop and evaluate new transportation expenditures?

How should the social, economic, and environmental consequences of transportation actions be related to public demands for access and mobility?

How does citizen involvement reflect the needs of transportation users and the needs of those affected by transportation actions?

### Workshop 3 (Systems)

We restated the question as follows:

As citizen participation in the transportation planning process becomes greater and represents more widely diverse values and goals (of transportation system users and nonusers), how should the physical, social, and environmental consequences of transportation actions be used to evaluate new transportation expenditures based on public demands for access and mobility?

The priorities on transportation improvements must be examined on a nationwide basis to better balance needs against available resources. Related to this is the need to reestablish transportation priorities based on needs and broadly based environmental impact. A way to establish nationwide transportation priorities could be through a national land use plan based on a comprehensive analysis of needs and resources. Those involved in making transportation decisions must ask themselves whether investing in highway improvements instead of transportation improvements might be doing more harm than good from the point of view of needs and the increasing external costs of making single-minded transportation decisions.

Therefore, the real costs of making transportation decisions must be examined closely. Citizens need information to understand these external costs. However, even after external costs are thoroughly examined, highway improvements may continue to be, in certain areas of the country and under certain circumstances (combined highway and transit improvements), reasonable and prudent. Evaluating transportation expenditures is a wide-ranging task engrossing the expression of individual values. Approximate methods are available today that allow citizens to make rational choices among alternative transportation options, but more research is needed in this area.

Relating this question to the earlier one regarding roles and responsibilities, we discussed a new hearing process to evaluate transportation system plans. The majority view was that an annual review and update of the official system plan was appropriate to find out from citizens whether the system plan in all its aspects combined was acceptable. Citizens would be thoroughly informed of the system plan through preliminary informational meetings and would then be in a position to raise questions on the system plan and request reasonable changes at the hearing and at follow-up sessions. The official metropolitan planning body should hold such hearings and would be required to do so by clearly stated requirements of the U.S. Department of Transportation. The majority view was that a comprehensive presentation of alternatives to the system plan and a full-dress impact study of alternatives would take enormous amounts of staff time and that there is a danger in presenting an adopted plan for review because decision on the plan would always be in a state of flux. The minority view was that, for citizens to really express what is acceptable, a full-dress review of the system plan and alternatives and an analysis of their impacts are necessary. Further, the new hearing process should culminate in a referendum on the system plan that, at the end of the hearing process, most meets the needs of all concerned.

### Workshop 5 (Projects)

Social, economic, and environmental effects are variable with respect to the project being proposed, and the kind of project and the characteristics of the service provided in turn affect demand. It should be made clear that demand is not fixed but that it bears a functional relationship to a number of variables, which include prices, consumer tastes, household incomes, land use, regional and national growth, technology utilization, and values and life-styles.

It should be made clear that other variables, the most important one being land use, are simultaneously system-determined. Citizens must also clearly understand the limitations of the transportation planning process.

Citizens must be presented with an array of choices that can be considered based on an understanding of the consequences of those choices. They must be able to enter the planning process to modify the plan so that more satisfying results can be obtained. Citizens must have the ability to negotiate acceptable results.

The bases for evaluation of transportation expenditures should be related to quantifiable and qualitative comparison of alternatives. Prespecified criteria and standards should be used, and the role of error in assessing impacts should be recognized. The evaluation should be placed within the context of an iterative planning process, and an evaluation report should be prepared that is carried to the level of detail appropriate to the stage of planning being carried out. The major criteria for evaluation should include the following:

1. Efficiency (Have aggregate benefit-cost examinations been made? Can the same service be provided at less cost, or can more service be provided at the same cost? Has modal bias been eliminated in determining the array of investments made? Have all costs and benefits been internalized?);
2. Equity (Have benefit-cost incidence examinations been made? That is, have individuals and groups been identified by interest category—income, race, geographic location—and benefits and costs assigned to them?);
3. Service characteristics;

4. Environmental effects;
5. Compensatory programs (compensatory programs need not be in existence, but the need for compensatory programs must be established so that the equity criteria can be met);
6. Relation to national, state, and local policies;
7. Relation to future alternatives (Does project foreclose or allow for a wide range of alternative urban land use patterns?);
8. Legal constraints (Are new legislative mandates required in order to carry out a desired project?); and
9. Relation to community goals and values.

## TECHNIQUES

What techniques can be most effectively used to foster desired levels of citizen participation in various planning situations?

What are the advantages and disadvantages of various techniques?

Which groups will be involved through use of the technique?

### Workshop 3 (Systems)

Our group discussed 9 techniques for fostering desired levels of citizen participation:

1. Citizen advisory committees with functional task forces provide social, geographic, and economic representation and the opportunity for structured dialogue over a period of time. A valid cross section of the community is involved.
2. Hearings elicit testimony from only a few people, and there is little feedback; however, they potentially involve all interested citizens.
3. Dialogue with interest groups offers the opportunity for clearly explaining issues to those likely to be in opposition.
4. Formal debate before the decision-making body provides an open forum for which there is likely to be good media coverage, but there is usually no continuing dialogue.
5. Face-to-face dialogue from door to door allows great penetration in the community but is impractical in terms of time and personnel requirements.
6. A combination of the preceding techniques is perhaps the best technique, for it can be tailored to any area.
7. The media with some feedback mechanism provide good coverage for a large area, but dialogue is limited.
8. Professional citizen representative or lobbyist provides a better avenue for dissent.
9. Contracting planning elements to citizen groups provides for the most direct participation, but technical and fiscal control is impossible.

### Workshop 5 (Projects)

Broad citizen participation can be fostered by inviting representative groups to "study-and-discuss" conferences. A local citizen should act as chairman, and names of local citizens should appear in advance publicity about the meeting. At the conference, the chairman should briefly explain the project under consideration and then turn to officials for in-depth answers to questions from the audience. The audience should learn at its own pace and volition and should not feel pressured, brain-washed, or condescended to.

After the local or regional meeting, news releases should report the questions asked and answers given, names of people attending, and names of officials present.

After a sufficient number of area informational meetings have been held, a 1- or 2-day regional or statewide conference should be planned. The state would pay for lodging and meals. Citizens should be assisted to organize for action, if that is indicated.

If input from local people has been encouraged and if the project is reasonable, this method will gain acceptance. If the project is wrong or if citizens are pushed and condescended to, they will oppose the project.

## POLICIES

What federal, state, and local policies are needed to improve citizen participation practices?

### Workshop 3 (Systems)

First, there is a need for much increased citizen participation in systems transportation planning, and there must be stronger legal requirements, especially federal, to ensure an administrative commitment. Responsive government should be our goal. Increased funding for citizen participation efforts is a must. Interested citizens and those who are impacted by decisions should be involved in the initial goal-setting or priority-setting as to level and kind of service and desirable urban patterns. This should be required by federal policy. There should be grass-roots information gathering as well as meetings and public debate. Moreover, interested citizens and those directly affected should be officially involved (by federal requirement) in an annual review of any systems plan. Perhaps a hearing process could be used at which alternative systems of service are presented. Details should be given as to impact, internal and external costs, land use, social and environmental impacts, economic factors, and access. The alternative systems should include various modal choices and policy strategies (e.g., for parking or car-pooling). Service to all social groups in an equitable manner should be included. Based on these reviews and discussions, the planners could develop one system and submit it for citizen review after a month or so. If it met the test of consensus (either by referendum or by some other method), then it could be submitted for federal approval. If it did not meet the consensus test, then a contract (with funds) should be given to a citizen group to develop a system, and the review and approval process would be repeated.

Second, there should be no Highway Trust Fund as an allocating measure! Such a fund is unresponsive to the political process and builds bias and unresponsiveness into bureaucracies. It is also an inefficient way to allocate resources.

Third, citizen groups should be able (with tax laws changed) to receive charitable contributions and to lobby as do chambers of commerce, the road machinery and construction industry, the automobile and related industries, and other groups opposing citizen participation in transportation planning. The latter groups have enjoyed a favored position in this regard, which has created a tremendous imbalance not only in lobbying efforts but also in campaign contributions and other activities that can subvert the electoral process. It is not surprising that citizens do have severe grievances.

Fourth, most procedures should have the force of being federal regulations if they are to have any impact at the state level.

### Workshop 4 (Subareas)

The Federal-Aid Highway Act of 1973 will mandate guidelines for maximum feasible citizen participation. We feel that the federal government should not develop specific procedural guidelines for citizen participation. Timing and techniques of citizen participation must be widely varied project by project and town by town. The federal government should require local political institutions to develop citizen participation processes and evaluate the product of those processes to determine whether a close-working relation between representative (i.e., open and representing all points of view)

citizens and planners is reasonably provided and whether the process is understandable, open, responsive, and, above all, decisive. Citizen participation should be included throughout the process.

### Workshop 5 (Projects)

Fundamental to the notion of equity in our society is a concern with the means as well as the ends. That is, we need to be concerned with the decision-making process as well as the decision itself.

Therefore, as a matter of policy, there should exist

1. A program for dissemination of information,
2. Opportunities and capacity for all who are affected by a project to discuss differences and negotiate resolutions to issues,
3. An open decision-making process, and
4. True partners in the planning process.

Also, there should exist a monitoring procedure to ensure that these conditions are met.

Effective, positive, early, and open citizen participation will not take place until there is adequate commitment on the part of political leaders to fund urban transportation alternatives.

# Conference Papers

# ON THE TECHNICS AND THE POLITICS OF TRANSPORT PLANNING

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Being positioned at the opening minutes of this conference, my comments occupy the place equivalent to the opening pages of a technical report. It is proper at the front of such printed expositions to present a summary of what is to follow. To do so in a conference setting would typically seem to be the height of arrogance. Nevertheless, I can easily and humbly summarize our findings, for the most telling conclusion of this conference has already been clearly enunciated by others.

It is the fact that this meeting was convened around these topics and under these auspices. This medium is the message we came to find. So revolutionary is that message that I suspect there will be no other conclusion from our deliberations that will be more dramatic, more profound, or more consequential.

As I understand the meaning of the conference, it translates about as follows: After having been through an extensive and rich learning experience during several decades and having finally accumulated a high level of technical sophistication in transportation planning, responsible governmental officials are now saying there can be no technically correct solutions to transport problems. More than that, they are saying that the acceptable answers are only those that have been derived politically, only those that result from open bargaining among contesting publics. That must be one of the more notable commentaries of our time.

One cannot know how far they would be willing to extend that line of thinking, of course. I recognize that a few might be saying only that tacit involvement of citizen groups is a means of legitimizing what technicians know best and have been doing all along—that citizen participation is a way of laundering engineers' plans that might otherwise appear to be soiled. Others may be saying that even nonprofessionals may have useful ideas; and so, by opening the design process to open discussion, something useful might be contributed. Some may be saying that only by opening the design processes to politics can the right answers be found. Still others may be saying that there are no right answers; there are only the outcomes of political contest.

I am enthusiastic about summarizing the conference because I think I have been hearing this latter message. The only hesitation I have is that I might have been listening with too biased an ear, that I might have been wishing too hard to hear what I wanted to hear. These comments are, therefore, a draft of the summary and await clarification.



For those of you who find that latter position to be an exaggerated point of view, I shall want to argue its defense—to contend that, in an open and pluralistic society, there can be no right answers, no correct solutions to problems. For those who find it a truism, I shall want to defend the technical expertise that no lay group of vocal advocates can command. My thesis will hold that the conclusions that brought us together are basically sound. Our task is then to find the right modulation among the technics and the politics that underlie transport-improvement decisions.

### THREE APPROACHES TO BETTERMENT

During the past decade or so, America has been home to three actively competing and fashionable lines of thought, each with its own approach to social betterment. One, systems analysis and systems engineering, relies on technical expertise. The second, market type of arrangements, relies on the autonomous social processes through which individuals and groups make choices among alternative goods and bads. The third, citizen protest and citizen participation, relies on the voiced expression of collective choices under conditions where other means are unavailable.

#### Systems Analysis and Engineering

Advertized under names such as systems analysis, systems design, and systems engineering, the systems approach reached its heyday at the peak of the space program where it had achieved rather dramatic success. Very complicated machines and related gear had to be invented, designed, and built on a short time schedule and under central direction and control. The success of Apollo leaves no doubt about the utility of the systems approach in space technology and similar fields.

In the next stage of its development, the systems approach was to apply its methods to social problems. Anticipating the maturation of social science, systems analysts hoped to marry social science with natural science and engineering, and then expected the imminent birth of something akin to social engineering. During the 60s when the nation was being plagued by social problems of many sorts, it was thought that we needed only to reassign systems engineers from their space missions to missions focused on problems of crime, poverty, broken families, drug use, underachievement, and so on. If knowledgeable systems engineers could but bring their effective apparatus to bear, we could solve social problems that had seemed insoluble to less sophisticated folk. Many practitioners of the faith expressed full confidence that virtually all social problems could eventually be made to yield before the application of systemic diagnosis, simulation modeling, and reasoned redesign. The methods of science, when merged with those of engineering and then turned on the problems of societies, would prove as effective as they had been when directed to the intricacies of atoms and nuclear power or the complexities of chromosomes and rice. The technological capabilities, which could trigger a green revolution and put a man on the moon, would, if only we willed it so, get us to the airport, too. You have all heard the litany.

#### Market Type of Arrangements

The second style that has been gaining popularity in recent years stems from 2 origins, both of which view social systems as self-organizing, self-regulating, and self-correcting. In direct contrast with the systems engineers, who see themselves as the potential designers of these systems, people of this persuasion seek to minimize the roles of central decision-makers. They aim to disperse decision-making among the millions of individuals who constitute the society and thereby to retain the autonomous processes that initially created social organization.

Much of the theoretic basis for this strategy derives from classical economic and political thought, which understands markets and political forums to be the media

through which individuals and groups make known their preferences, through which suppliers respond to shifting demands, and through which societal development is autonomously regulated and directed. In such a setting, the customer is always right, and the suppliers' task is to respond to the customers' wishes by furnishing goods and services in the mixes and volumes the consumers demand. According to the classical theory, only individuals can know what is right for them. Although professionals of various sorts have been trying to improve on the individual's private calculus of good and bad, and although each of the professions proclaims its own brand of service as just the thing to cure the customers' ills, in fact none of them has yet found a tenable substitute for each person's individual assessment of his own betterment.

The other source of this second strategy derives from general systems theory, which has emerged in recent years as an explanation of the ways in which open systems organize and maintain themselves. Social systems are of this sort. They evolved over time without the help of systems engineers, and yet they are probably the most complex and intricately organized systems that exist. They have emerged complete with feedback circuits that transmit information on outputs back into the input regulators; they have error-detecting and error-correcting processes built in; and they seem capable of dealing with many problems far more effectively "on their own" than would-be social engineers are able to. This ecologic perspective would seem to reinforce the more traditional economic perspective and, thus, foster a search for ways of making the social systems more nearly autonomous.

The governing strategies that follow turn to indirect efforts to induce suppliers to serve their potential customers. The early Soviet economists tried to design the economy in detail—to compute amounts of every product required and then to assign production quotas to each plant. American practice in contrast has relied on markets to transmit messages from consumers to producers and has then let that interaction determine quotas. American governments have been less inclined to go into the supply businesses directly than have, say, the governments of northern Europe. For example, recall that, when all those nations faced post-War housing shortages, the other governments created huge government house-construction agencies while the Americans installed a mortgage-insurance scheme that induced huge amounts of bank credit and thus generated a huge building industry. Post-Keynesian economic stabilization policies have turned most governments to such indirect interventions—to monetary and fiscal means of subtly regulating the economy, leaving microdecisions on production quotas for specific commodities to decentralized, typically nongovernmental, agencies and to individual persons.

Not all our public interventions have been so indirect, of course. Unlike their tactic in housing, American governments have become the major suppliers—usually the sole suppliers—of goods and services such as education, water, highways, libraries, and fire-fighting and police services. In recent years, consumers of those commodities have been complaining bitterly about them, charging that they are not of the kinds or qualities they prefer. But, under conditions of public monopoly, the consumers have had nowhere to turn for competitors' products. Being unable to abandon the governmentally supplied services, they have turned instead to public protest (1, 2). As Hirschmann would put it, with no means of "exit" and with eroded loyalty, they have had to voice their dissatisfactions.

Because standardized government services are sure to displease some consumers, the promoters of the second style of thought I refer to would treat services like education and highways in a manner rather like that accorded housing and investment credit. Rather than permitting professionals or systems engineers in government to decide how much of what should be produced, they would seek to permit individual consumers to make those decisions. And so we have been hearing of schemes like those for education vouchers that would diversify education by privatizing it. Instead of supplying standardized education services, governments would instead supply tuition fees to be used wherever individuals themselves choose. Similar schemes would remove the sole vestige of government-produced housing by supplying low-income renters with rent money, thus permitting them to choose private houses and locations that match their personal preferences rather than those of public-housing architects. And further, the several income-maintenance schemes would have similar effects. Whether via the negative-

income-tax route suggested by Milton Friedman or via President Nixon's Family Assistance Plan, the aim is to remove the income-redistributional role of governmentally supplied services. There would follow then the prospect of reprivitytization and pricing of some public services and the differentiation of the types and qualities of services thus provided. In these ways, the self-managing capabilities of economic markets and political forums would be exploited, permitting individual rationality to be reasserted over the collective rationality of governmental service agencies. In these ways too, citizens would be able to participate directly in their efforts at betterment; and they would do so in their roles as individual consumers in the economy and as individual citizens in the polity (3).

### Citizen Protest and Participation

The third style that became popular during the 60s is the mode of social protest. One of its underlying images sees societies as the arenas where competitive groups wrestle with each other for advantage. Groups defined by race, age, ethnicity, social class, location, income, or some substantive interests are seen as inevitably in competition with other groups. Gains accrued by one mean losses to another. Because conflicts among intergroup values may be irreconcilable, what is a good for one may be an ill for others. In such a setting, systems engineering and analogies with rocket ships sound nonsensical. The laws of the jungle seem more appropriate than the laws of mechanics. Indeed, many did turn away from notions of rational planning to something rather like jungle warfare, and rival tribes fought it out on university campuses, city streets, and other urban environments.

It is well to remember that prior to the 60s, the dominant image in America was of Progress fulfilled. Postwar prosperity was combined with massive construction of new roads, new schools, suburban houses, and the rest, carrying the promise that soon every American would have the chicken, the pot, and the 2 cars he had previously been promised. Sociologists and journalists of the 50s were decrying the imminence of a mass society—the homogenization that the suburbs were going to impose on us. The major problem of the nation, it was said, was the hazard of becoming a smug, happy, affluent, undifferentiated mass. When the 60s arrived, the rosy images and the simple problems were quickly displaced. We suddenly woke up to find we are an extremely heterogeneous nation, comprising a multitude of special interest groups and culturally defined minority groups—just the opposite of the mass society.

First, we discovered poverty. That was about 1962. To our surprise, we learned that nearly a fifth of the nation was living under conditions generally judged to be "sub-standard." Then the peak of the Negro revolt, the Civil Rights Movement, the student revolt, the antiwar demonstrations, and a wave of public protest against environmental pollution and against major public works all broke on the continent in epidemic proportions. Long-suppressed dissatisfactions were suddenly given voice, and literally millions of once-silent Americans—lower class and middle class alike—cried out in public protest against one or another condition they disliked.

The protests proved remarkably effective. Governments responded with all manner of programs aimed at alleviating the disfavored conditions. Major congressional acts and major court decisions clarified disputed legalities and proclaimed previously disputed or denied rights. Reforms of many sorts were inaugurated at universities, lunch counters, and employment and personnel offices. New agencies of government were formed, placed under the control of professional reformers, and charged with correcting the social and environmental circumstances that had provoked the initial uprisings.

The effect of governmental acquiescence was first to quell the civic disorders and to divert energies into what was hoped to be constructive and creative activities. I have no doubt that OEO, Model Cities, EPA, and the rest have accomplished significant works. But I have no doubt either that, if the grand accounting were to be done, the score of successes would not nearly approximate and, thus, cancel the hurts that triggered the initial protests. The most dramatic effects, I believe, were first to damp the furies and then to institutionalize citizen protest as a legitimate mode of behavior.

Groups that had previously been wholly unskilled in the ways of politics were given governmentally sponsored training courses in the uses of political processes. But it was not only the poor and underskilled that learned to voice their dissatisfactions. Middle-class groups too—persons with well-developed verbal, social, and political skills—got caught up in the fashion that swept the nation and the world. Styles of behavior that had once been exclusive to trade unions and dissident minorities were picked up in PTAs and conservation societies across the country. Somehow during the 60s, citizen protest and then "citizen participation" became proper, if not fashionable.

It appears that the roots of such citizen protest and participation lie deep within the historical origins of democratic social institutions. Populations in open societies are accustomed to behaving in these ways when the normal operations of the social system seem not to be working properly and when they have no way of turning to alternative systems. It takes a lot of frustration to generate a Boston Tea Party, a Watts Riot, or a freeway revolt. But when there seems to be no quiet way of shopping around and choosing an alternative to the disliked condition, the available means is loud objection. But after the shouting has died down, after the protesting citizens have become participating citizens, how then can they improve on the processes of design and governance? What then are their roles in such intricately technical affairs as transportation planning?

## TOWARD AN AMALGAMATED STYLE

I suspect that the major cause of protest in transportation matters is the imminence of a threat of some kind, typically the fear that a freeway or an airport is about to be built in the protester's neighborhood. Such protestations are obviously narrowly self-serving and do little to improve overall transport system design. Nearly all citizens want improved transport facilities but not near their houses. If the newly institutionalized participatory procedures are merely to permit clearer expression of objections to these sorts of neighborhood effects, little will be gained. The aim of increased participation should be to promote positive contribution to transport-system design. The negative protest phase should now be followed by positively creative participation. At this stage, we need a major political institutional invention that will engage a wide spectrum of publics in a concerted consideration of national and regional development policies.

It would seem comparatively easy to eliminate those objections reflecting fear of reduced property values, fear of noise nuisance, or similar direct costs stemming from adjacency to a new transport facility. If these external social costs were compensated at their full "market" value, the objections should be effectively eliminated. The experience with the exercise of eminent domain suggests that proper reimbursement is usually sufficient to resolve such conflicts. Although we have been ready to pay the full costs of real estate, we have not had the habit of paying for expropriation of other kinds of property. It is time we now also pay people for the losses to intangible properties they are forced to bear.

The residual popular unease would then be those objections directed to the larger system effects. In considerable part, one suspects, they would reflect differences in the social values held by government technicians and engineers and the values held by lay publics.

A persisting difficulty derives from the way we organize to produce and distribute public services and from the ways we do our bookkeeping. Highway engineers, charged with installing a road between 2 points and with doing so efficiently, are thereby compelled to find a short route. If parkland should happen to lie along the way, so much the better; it is probably cheaper to build there than along a path occupied by houses and other buildings. If the "best" path should happen to require removal of a venerated building of some sort, well it is probably cheaper to remove the building than suffer the greater land-acquisition costs of a longer route. On the account sheets of the highway department, the least cost solution defines the correct alignment.

A different bookkeeping system would produce a different route plan. Within the confines of the highway accounts, returns from parks or from architectural monuments

have no value; the responsible highway official would be remiss to divert his new freeway around at greater direct cost. Within some larger accounting system, however, the longer route with its greater construction cost, might be the more profitable investment. Social benefits received from park users might clearly warrant the higher expenditure. But we can detect that only if we keep joint accounts for these several systems. That is a great deal easier to think about than to accomplish, however.

We know that each of the urban systems, including each of the service systems governments supply, interacts with each of the others. Everything is connected to everything else nowadays, however uncomfortable that makes us. When we touch the land use pattern with taxes or zoning, we thereby affect demographic mix, travel patterns, family life, school enrollments, child development processes, and so on. When we install a new transport facility, we have thereby effected a long chain of consequences for family relocation, housing construction, retail sales, labor-force composition, municipal tax revenues, recreational opportunity, job opportunity, cost of doing business, and so on in a virtually endless sequence of repercussions. Whatever one government agency does, the outcomes inevitably fall on the systems that other agencies are responsible for.

What does that mean for the boundaries of each agency's responsibilities? Is the highway department thereby responsible for managing all those other systems too? Obviously not. It would cease to be a highway department and become the whole of government, at the least. Structural amalgamation of specialized agencies into more comprehensive ones is not likely to work, for a range of reasons that we need not worry about here. As specialization becomes more compelling and division of labor more fine-grained, governmental agencies must necessarily focus specifically on specialized tasks.

I am dubious too about the prospect that a superordinate planning and managing body might "coordinate" the activities of the several specialized agencies, thus ensuring that the repercussions of a given agency's activities support those of others. We have very little evidence suggesting that this sort of coordination is possible in public affairs, even in autocratic governments like that of the Soviet Union. We are thus likely to continue to have multiplicities of agencies, each pursuing its own specialized task, each inevitably generating important consequences upon subsystems that are the provinces of other agencies, and no prospect of either a grand accounting, a comprehensive and coordinated management, or a technically effective overarching design.

In a society as pluralistic as this one, it is virtually impossible to find any design, any plan, that would suit all groups and individuals. Because Mr. A hates what Mr. B loves and because there is no way to say who is right, there can be only persisting difference and latent conflict.

That may be the most important observation we can make in this setting, and yet most systems analysts and systems engineers seem not to know about it. Probably because they were trained to think in the contexts of bounded and tamed problems in such fields as mathematics, physics, and operations research, where there are findable solutions, systems engineers have come to believe that there are findable solutions to social problems, too. More, they believe that there is one best answer that, once found, is indisputable. But with problems that touch on society, and thus on pluralities of publics holding to pluralities of value systems, there can be only a plurality of answers, sometimes one for each participant in the affair. There is no one best answer to socially related problems. There are no set solutions. There is no way to find what is right. Indeed, there is no one right to be found (4).

In the absence of generally accepted criteria for design or for decision, we have accepted the criterion of efficiency. The principle of least means, which has been so powerful a concept in civil engineering, has been carried over into transportation planning, but its utility there is now coming into doubt. With rising popular concern over questions of equity and over the distribution of benefits and costs, efficiency measures are being given far less comparative weight than they used to be. That is because people are asking, nowadays, what possible social consequences might follow from the installation of a major public work, and who will feel those consequences. Questions of that sort were seldom asked even a decade ago, for the variables that entered the technicians' calculus usually excluded such incommensurables. The events of the 60s have

now compelled us to ask questions about intergroup redistribution; and if we should forget to do so, we can now be sure that some citizen group will be there to remind us.

But though we may ask the questions, we cannot supply ready answers. We can, however, attempt to trace out the likely future effects of a proposed action, following the repercussions through as many of the connected subsystems and as many publics as our intelligence and our theory permits. We can make our forecasts of probable effects known. We can help the various partisan interest groups better understand what a proposed action would mean for them. We can, that is to say, exploit our considerable technical capabilities to fuel an informed public policy debate.

Because there are no technically valid answers to systems designs that affect social systems—no science that can define human welfare—there can be only politically derived answers. The task of the systems designer is therefore to contribute better information, better forecasts, and better analyses to public review, such that more enlightened and better informed bargaining can be engaged among the several competing publics. The technicians themselves are interested participants in those arguments and political negotiations, of course. They may be seeking to promote their own technocratic or idealistic conclusions about the right course of action. But if the contest be properly conducted, they should enjoy no greater power advantage than do other interested groups.

That sort of equitable distribution of influence would be very difficult to achieve, of course. Highway engineers in state government have traditionally occupied positions of very considerable power, and they are not likely to yield them voluntarily. They may be compelled to backtrack some, however, by the growing political competencies of lay publics and by the growing realization in official circles that laymen may in the final analysis know best. Because there are no technical routes to values and no science that can tell us what is the right thing to do, the involvement of the consumers is probably the only way.

Markets provide an alternative medium to debating forums. Without having to organize the publics into politics, suppliers of automobiles, for example, have been able to find out what kinds of cars to produce in what volumes. In the automobile market citizens participate directly and very effectively. Not quite so in the apparatus that supplies roads for their cars, however. It is true enough that transportation planners have sought to respond to expressed and latent market demand. As consumers acquired more cars and then drove them more, highway engineers raced to provide more space for them. Seldom did they ask whether people should have more cars or whether they should use them as they do. Rather, in the style of a self-adjusting market system, highway agencies sought to serve their customers' manifest preferences. They did so by effectively merging the first and second styles I mentioned at the outset, operating as systems analysts and designers at the fine grain of highway location and geometric design and as market-sensitive producers at the gross grain of total highway supply.

One effect of their work was to create the world's most extensive and highest grade road network, which has sufficient capacity to serve the nation's huge inventory of cars and drivers. In turn, it has made for unprecedented freedom of movement for those who have access to the system. I suspect there have been few public works programs that have so dramatically expanded the personal freedom of Americans and fewer still that have been so universally loved.

But another chain of effects has been even more pervasive and consequential. The development of the highway-automobile system in America has been among the powerful contributing factors reshaping the culture, reorganizing urban settlements, revolutionizing living patterns, restructuring the economy, influencing the course of national politics, indeed, reformulating social values. So major a force in the nation's development would seem to warrant the most intensive policy analysis and the most careful projections. And yet, virtually nothing of the kind has ever been done. We devote a great deal of attention to the layout of regional road networks and corridor alignments, done nowadays with great technical sophistication. We conduct bitter fights in each neighborhood destined for a new freeway link. But we ignore the large-system effects. It is well that we now ask how we might generate equivalent debate on the land-based transport systems.

I am suggesting that the neighborhood disputes, which have been so preoccupying and so much the focus of citizen participation, are comparatively trivial. Besides, if the government would only reimburse the neighbors for the social costs that the transport improvements impose upon them, most of the difficulties would probably disappear anyway. And so too will that motivation for citizen participation.

It will continue to be far more difficult to engage meaningful civic debate on the larger transportation policies that really matter, and herein lies the challenge to this conference. How should the larger national and regional networks be laid out and scheduled? What pricing policies should be applied to transport services? What sorts of governmental organizations should regulate which activities? What modal mixes are appropriate? What new systems should be installed? How can those who are now underserved by transport services be better served? What long-range developments would be most likely to serve all the diverse publics' separate interests?

Questions of that scope can be dealt with neither by systems engineers alone, by citizen groups alone, nor by the unseen hands of autonomous markets. And yet, they cannot be dealt with adequately unless all three of these approaches are pursued in concert. Because all these questions involve large and unresolvable valuations concerned with the welfare of individuals, groups, and society, no technical answers can be found. Systems analysts, as forecasters of probable outcomes from alternatively hypothesized action courses and as inventors of hypothetical policy choices, will surely continue to play essential roles in these deliberations; but there is nothing in their technical armament that equips them to make better choices or judgments than laymen.

The questions I list are essentially political in character. They can be equitably resolved only through bargaining—through debate and negotiation. But, of course, debates based in ignorance and negotiation without estimations of outcomes are not likely to serve any of the participants' own interests. It is here that analysis and systemic forecasting find their critical roles—as informers and sources of intelligence. Technics and politics are thus mutually interdependent in a true symbiotic relation, making the systems analyst and the participating citizen joint partners in the pursuit of social betterment.

And then the market processes can supply just the medium they will both need for effecting the outcomes they choose, by making it possible to supply a diversity of transport systems and to distribute a diversity of transport services. If we were smart enough or wise enough or technically skilled enough to invent transportation arrangements that would provide each of the many publics with something approximating the transport system each prefers, many of our transportation problems would dissolve. I suspect that means a private vehicle for everyone. Paradoxically, though, our major transport problem in recent years stems from our reliance on the automobile-highway system. Its dominance has made for so drastic a transformation of the metropolitan settlement pattern and so rapid a deterioration of other transport modes that carless persons have been positively hurt because persons with cars have been positively helped. Clearly we now need a set of institutional and hardware inventions that will more nearly equalize the tremendous advantages the automobile has brought to those fortunate enough to own one.

The major transport problem of our time, I believe, is not congestion or pollution or energy shortages. It is that those without discretionary use of motor cars are positively disadvantaged. The major policy direction we should be worrying about is toward ways of increasing mobility for those who are comparatively nonmobile. It is here where a market strategy could serve us well.

We shall be experimenting with an array of new hardware systems in the near future: PRT, dual modes, people movers, improved omnibuses, minibuses, electric propulsion, linear induction, ground-effects, magnetic levitation, demand-actuated transit, and more. After the research and development work has been advanced and after the simulations have been run, the test of workability and acceptability must be actual market tests in populated settings. Similarly, some important institutional experiments are impending: road pricing, joint-transit fares, new organizations for public-transit supply, free entry into taxi and jitney service, and so on. In all these, only the consumers can give us the final answers. Only by field tests under work-a-day conditions can we

be confident that any of these proposals is acceptable, and thus right.

In this sense, the market strategy becomes an effective medium for concrete citizen participation, for here the citizen participates where it matters and in ways that do not rely on forensic, social, political, or cognitive skills. In such marketlike settings, the work of the systems engineers merge with that of the individual citizen to provide the only concrete answers we can expect to find in these fields. But the answers will be provided, it should be clear, only if a differentiated array of services is offered at a range of prices such that citizen consumers have a spectrum of choice. Anything less would bring us back to where we have been, with the technical expert producing his own preferred "solution," leaving citizens the option, not of participation, but of protest.

## REFERENCES

1. Hirschman, A. O., *Exit, Voice, and Loyalty: Response to Decline in Firms, Organizations and States*. Harvard Univ. Press. Cambridge, Mass., 1970.
2. Levine, R. A. *Public Planning: Failure and Redirection*. Basic Books, New York, 1972.
3. Webber, M. M. *Alternative Styles for Citizen Participation in Transport Planning*. Highway Research Record 356, 1971.
4. Rittel, H. W. J., and Webber, M. M. *Dilemmas in a General Theory of Planning*. Policy Sciences, Amsterdam, June 1973.

## INFORMAL DISCUSSION

SOBEL: In the context of this conference, how do you define "citizen"?

WEBBER: I think that means somebody who is outside the supply system, who is a nontechnician in the world of the system under discussion. Is that fair?

MAURICE: Pursuing that answer, would you classify other agency people in a local context, let's say, as citizens, or would those people be part of the system that you are talking about?

WEBBER: My concern is that the professionals who have taken over control of the governmental agencies, particularly those that are sole suppliers of a service, have put themselves into a position of power and authoritarian control, so that the products that they supply are the sole products available. Those who do not like them, whoever they may be—city councilmen, legislators, congressmen, folks, anybody outside that professionalized agency control system—have little chance to influence it. My concern here is somehow to open the debate to engage an array of opinion and an array of valued positions.

L'AMOREAUX: You mentioned that in this complex system we will leave the final solutions to bargaining and negotiations and pull away from the technical solution. I do not disagree with that in general principle. A debated or negotiated solution may have a short-range pleasing effect, but what about the long-range effect because we are trying to solve a very complex problem?

WEBBER: We are worried about the same thing. I, too, am concerned that we somehow turn these trivial arguments to the larger questions of what the transportation system ought to be—to the larger and longer term effects. I do not know how to do that. I hope this conference offers some suggestions. We need a major institutional invention, a way of broadening the political process to engage people in what have previously been technical debates about short-run and small-scale outcomes.



# CITIZEN PARTICIPATION IN REGIONAL PLANNING

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The purpose of this paper is to set forth and comment on some of the efforts to obtain citizen participation in the planning process in the Twin City metropolitan area during the past few years. I will give special emphasis to the regional transportation planning process.

I am a member of the Twin City Metropolitan Council. There is nothing particular in my background or that of my colleagues on the council that makes us professionals in any of the planning areas we deal with except perhaps, in my case, criminal justice. I suppose from one standpoint, therefore, that my appointment to the Metropolitan Council satisfied at least one citizen's aim for involvement in the decisional process. But that, of course, is hardly enough for those thousands of people in the metropolitan area who have been claiming some right to participate in regional planning decisions that they perceive as affecting them.

During 1972 I was chairman of the Development Guide Committee, which is the council's committee concerned with the production and formulation of the Development Guide, which happens to be our terminology for our regional master plan. At the present time, I am chairman of the Human Resources Committee, which was recently created in a council reorganization to bring together planning responsibilities in the human resources area such as health, criminal justice, and housing. The council as a vehicle for metropolitan decision-making has been receiving increasing national attention, and a brief review of its history and concept is perhaps in order.

Metropolitan planning came to the Twin City area through the Metropolitan Planning Commission, which was created in 1957. The commission had a large membership planning body and a high-grade staff that reported to nobody, held a lot of interesting meetings, and drew a lot of interesting maps. However, it had no political base and no clout and was unable to serve even as a convenient forum for the resolution of any of the metropolitan-wide issues, most notably, the sewer crisis that defied resolution in 3 legislative sessions.

In 1967, the Minnesota legislature created the Metropolitan Council as the planning and coordinating agency for our 7-county metropolitan area. It has 14 members appointed from 14 equal-population districts and a chairman appointed at large. All appointments are by the governor at the present time although a bill to make the mem-

bership elective has cleared the house but not the senate.

In 1969, the legislature created the Metropolitan Sewer Board as a dependent board operating under the council, which has appointment and budget authority over it. We are the A-95 review agency for the metropolitan area, and increased authority naturally flowed to the council through its exercise of review powers over a broad range of federal grants. The most notable and controversial exercise of this power has been in the implementation of our so-called Policy 31 under which we recommend denial of federal grants in nonhousing areas for communities that are not making an adequate effort to provide low- and moderate-income housing, i.e., no housing, no sewer grants or park grants.

There has been considerable debate as to what the council really is. Some claim it is another layer of government; others claim it is a council of governments gone wrong. It is clear to me, anyway, and I think clear to the Minnesota legislature, that the council is a regional agency operating as the legislature's metropolitan decision-making arm for the 7-county area on the problems that have regional magnitude and complexity and that would be virtually impossible for the legislature to study and resolve on its own. I think the unique perception of the Minnesota legislature was that there already was "regional government"; that occurred the minute it created a special purpose district with more than county-wide jurisdiction. The only issue was whether the "governing" of those special functional districts would be uncoordinated or coordinated. The Metropolitan Council in the legislature's perception is the agency that is supposed to "bell" the special district "cat" and to coordinate the separate functional agencies. But the role of the generalist coordinator is not an easy one. The special district cats do not like bells, and the future of the council as the planning, coordinating, generalist decision-maker for the region is not free from doubt.

We were challenged forcefully and directly in the recent legislative session by both the Metropolitan Airports Commission, a long-standing special district operating our major airport and satellite fields, and by the Metropolitan Transit Commission, which was created at the same time as the council but whose coordinating authority has been defined much less sharply than that of the Sewer Board, which is appointed by the council and which operates under capital and budget control of the council. The legislature adjourned without resolving any of the metropolitan issues, but impartial observers think that the council is behind at half time at least 20 to 0. The second half will be played in subsequent sessions, so in some ways this paper must serve as an interim report.

The challenge by the Airports Commission was not unexpected, nor is the problem of coordinating airports, in my opinion, fundamental to the creation of transportation plans in a 7-county area. The council has by statute veto power over the timing and site location of any new major airport, a power it has already exercised once and could exercise again if necessary. The council's conflict with the Transit Commission raises another set of issues that relate very directly to those of particular interest to this conference, that is, citizen participation in the planning process; and I intend to devote some time to the council's role in metropolitan transportation planning.

The old Metropolitan Planning Commission had engaged with the Minnesota Department of Highways in a joint transportation planning program, which generated a fair amount of data and kept a fair number of consultants reasonably occupied and solvent but, as far as I can see, had made little progress in solving any of the regional transportation issues. In 1967, the Metropolitan Transit Commission started transit planning in the 7-county area. Much of the Transit Commission's early life was taken up with acquiring the then privately owned bus company, renovating the bus fleet, and providing increased bus service to the people in the area.

The council had been involved mostly on a staff basis in the transportation decisions. In 1969, the council became a party to the so-called transportation planning program. As implemented in our area, it was not a runaway success if success is defined as the ability to arrive at a decision. There were, of course, a host of task forces and the 2 basic committees: the Policy Advisory Committee, composed of local selected officials, and a Technical Advisory Committee, composed of technical people. There was a fair amount of staff interaction, and people talked to each other; but, when the

Metropolitan Council decided to take up transportation planning in earnest starting in January 1972, there was no evidence, so far as we could see, that the transportation planning program had produced any decisions. Even participation was questionable judging from the miserable attendance at committee meetings. The inability of participants to arrive at any basic policy decisions was evident to all. What was lacking, we on the Council felt, was a metropolitan transportation planning group that could construct and decide on a coordinated transportation plan involving both highways and transit on a regional level. The decision was made to turn the Development Guide Committee into a transportation planning committee for the purpose of developing a metropolitan-wide coordinated transportation plan.

In 1971, the legislature passed a statute that directed the Transit Commission to implement the transportation sections of the Metropolitan Council Development Guide. In so doing, the legislature served notice on all parties that they were tired of talk and consultant studies (\$2 million worth). Decision on basic transportation problems, particularly the transit issue, was called for. In 1971, the Metropolitan Council did not have a transportation section in the Development Guide, and it was the job of my committee to produce one.

We commenced our work on January 2, 1972. We had no authority by state statute over the Minnesota Department of Highways (A-95 review authority, of course, existed), and I was assured by many that the highway department would refuse to cooperate with any regional transportation planning process that had a major transit component. It so happened that the commissioner of highways was an experienced high-level administrator with prior experience as the head of other state agencies. His basic decision was to delegate to the Metropolitan Council the responsibility for making the regional planning decisions involving metropolitan-scale highways. At the first meeting of our committee, he appeared personally to announce this and to pledge his full help and cooperation in developing a regional transportation plan. His statement has not turned out to be merely political puff. We have since then had full cooperation from the highway department in our regional planning effort. There is no question in my mind that, during a series of prior public hearings on freeway location, the highway department had learned a bitter lesson. The old coalition of local officials, technical people, and key legislators was not enough to get a highway decision made. There was no generalist political group of citizens supporting highways anymore. The highway department in Minnesota, like many others throughout the country, was finally starting to pay the price for long decades of practically unfettered construction of freeways. The commissioner's perception was that he lacked general planning and political support for highways in the urban area. True, the so-called highway lobby was still in evidence and there was still strength in various legislative subcommittees, but at no level, be it city council, county, or region, had the highway department achieved the status of much more than that of public whipping boy for whatever the citizens felt ailed modern society.

The first problem facing our committee was how to achieve a transportation plan, and that raised the question of how we could achieve this mysterious but wonderful thing called citizen participation in something so esoteric and long range as a chapter in the Development Guide on transportation. It is true that the professionals and major land developers could recognize the profound and long-range implications of such a guide and people experienced in the government knew that, in preparing the Development Guide, the council was not engaging in an exercise in futility or mapping just for the sake of mapping.

As I have pointed out, the council is more than a planning commission; it is a political planning body with decisional powers, and in many areas, unless overruled by the legislature, its plans are going to stick. We attempted to do several things.

In addition to preparing our regional transportation plan, we agreed to participate as an active mediator in a corridor dispute for an unbuilt but planned freeway going west out of Minneapolis. There were citizen groups organized to the point of having bumper stickers with the slogan "No I-394" on them. A representative from the council, the highway department, the Transit Commission, and a citizen group became a steering committee to coordinate the consultant study of the various routes and alter-

natives in that particular corridor. That study is still progressing, and I would say that the effectiveness of that attempt to deal with citizen participation in the corridor level is still open to question. If innumerable and loud public meetings are a sign of effective citizen participation, then it is effective. If happy citizens or a consensus is what is desired, then the omens are not good.

Our major concern in developing the transportation plan, however, was not a corridor problem. I think it is safe to say that getting citizen participation is no particular problem when engineers start drawing on a map lines that represent highways that are at or near people's property. The difficult problem was and is the issue of the long-range planning process on a metropolitan basis and how you engage the citizen's attention in that. I have no final answers for you, but I can tell you what we did, where I think we achieved some success, and where we have been less than successful.

The question of citizen participation at a regional level presupposes some sort of implied supposition on what you want citizen participation for. A friend of mine on the Minneapolis City Council says he believes in citizen participation. He calls it the ballot, and he suggests that citizens who do not like what he does can participate by voting him out. Of course, he has been elected several times from a very safe district for a person with his political persuasion; and, barring a crime of moral turpitude or a surprise link-up to Watergate, he is probably safe in maintaining his position on the true nature of representative government. If the point of citizen participation is to legitimize or make possible the political decision, that is to say, to educate enough people so that the heat goes off the political decision-makers so that they can approve the functional project, that is another thing. That presupposes political decision-makers. Of course, that has been part of the problem in the past with transportation facility decisions. They were not in fact made by political decision-makers at all but by the engineers or their immediate superiors. This history may be viewed as a blessing and not a problem, but in today's milieu the inability of technical people in the big line agencies to get a decision on facility construction in urban areas is what I suspect brought us together in this conference.

The council was and is a political decision-maker. We are structured for trade-offs of a variety of types including geographic advantage or disadvantage. When a reporter asked me how in the world after 6 years of planning in transportation by others we on the Development Guide Committee even hoped to make a decision, I had a simple but I think correct answer. "We will vote," I said. "We will call the roll and take the yeas and the nays."

In the case of preparation of a metropolitan transportation plan, however, the need that I saw for citizen participation was that we policy planners needed help in arriving at the decision and in fact wanted citizen input into the decision process in order to make the decision better. I think all of us on the council by that time had developed a very jaundiced view toward the formal public hearing type of citizen participation. Under our council policy, every section of the Development Guide goes out to formal public hearings after duly published notice in the newspapers and the hearing is duly recorded by a court reporter. All kinds of people come before us to give their views on the particular section of the Development Guide that is being readied for adoption as well as anything else that comes to their minds. Almost all of the hearings have been very useful therapy sessions for the people involved and have, with few exceptions, contributed little to the understanding of the council in arriving at its final decision on the plan. There are some exceptions but not many. The public hearings apparently serve as an outlet for pent-up emotional frustrations or in many cases serve as a means by which the spokesmen for the various groups earn their keep. The last observation is based on a number of experiences as a policy "jury" at these hearings. If the point of the spokesman is to persuade the decision-makers to accept his point of view, then to call the jury senile, corrupt, and stupid before one even gets to the merits of the argument is a fairly chancy way, it seems to me as a professor of trial advocacy, to persuade the jury although it may make one's client very happy.

How then do we get citizen participation if formal public hearings were too little and too late? The committee decided to get participation by conducting the planning process in the open in a series of scheduled public meetings during which we would discuss

and decide the relevant issues. There would be no private meetings and no showcase public forums with speeches for the record only when in reality the decision had already been made. We postulated that by doing this we could generate interest in the usual groups with professional interest in our deliberations and also generate media interest that would translate into widespread dissemination of what we were about and what the questions were we were trying to decide. We hoped this would generate public response.

To accomplish this required that we lay out a strict decisional schedule. That is, we had to and did decide what questions we were going to decide and when we were going to decide them. A staff memorandum (see next page) setting forth those questions and the decision dates was widely distributed. The mailing list contained about 1,000 names, including those of all government and citizen groups that we were aware of. We structured the process around finding answers to questions we had posed. We had decided that our area was burdened with answers and not enough thought had been given to framing the real questions for decision. We wanted citizens to help us shape the decision as we went along and not to react after we had prepared the answer.

We promised a tentative plan by July 6. We kept our promise although there were times when it was a close matter. There are always reasons why a problem can be restudied or one should or could make one more computer run. A further look at the questions posed for decision, the answers to which would constitute our plan, reveals nothing too remarkable. They are questions that need asking and that helped us and the citizens to understand the dimensions of the problem. We had excellent citizen input. It was excellent because it was generally informed, thoughtful, to the point, and in some cases thoroughly researched. We naturally had presentations from various affected government agencies such as the Transit Commission, Department of Highways, and county and city engineers. Our staff was instructed to work up pro-and-con arguments on all the questions. We applied what I termed the "straight-face" test to the formulation of questions. "Can a reasonable public figure in our area argue with a straight face on either side of the question?" If not, then we put the question in the platitude heap along with a lot of other material with which planners dearly love to sprinkle their documents. The council tries to avoid nondebates on the obvious if it can; all too often we cannot.

We generally had a full house at our meetings and a full compliment of newspaper and radio reporters and occasionally TV reporters.

One problem is having a decisional group with enough confidence to be willing to take chances on making fools of themselves publicly from time to time by asking dumb questions. The tendency of policy-makers to discuss things privately is natural and I am afraid endemic, but the decision here was that we could only involve the citizenry through full disclosure of the decisional process. Basically, we relied on the press and radio to report our meetings and the course of our decisions. We had extensive newspaper coverage, which did, of course, require structuring the meetings so important decisions got made when promised. The radio coverage was also extensive. Although this type of procedure is an open way to arrive at decisions, the difficulty is that it can be hard on the participants because one must do one's thinking out loud in areas where one is not by definition an expert. To those who are shy, timid, or worried about public images, this can be fairly traumatic. Actually, it worked very well in practice; the committee members felt freer and freer to really conduct a public debate in front of the people. I recognize that relying on the media as a means of getting broader citizen participation is chancy. Reporters do quote out of context in many cases. Many are not sufficiently informed about the background or data to write intelligent stories, and almost all, of course, are eternally searching for personality conflicts and other headline type of material rather than explaining the prosaic but crucial policy consideration involved at times in transportation planning. But that was our theory, and that is what we did with reasonably good results. We worked with the reporters, not the publishers. We did not want editorial support for a decision; we wanted news coverage with sophistication, and we usually got it.

Another technique we tried was to structure the questions so they would generate pro-and-con public debate. Sometimes we could rely on the various interest groups that had already taken positions to supply the pro and con on issues. Sometimes we

**MEMORANDUM REGARDING RECOMMENDED  
DECISION SEQUENCE AND SCHEDULE FOR  
TRANSPORTATION PLANNING**  
January 28, 1972

We have revised the schedule presented at the January 20 meeting. The first series of meetings should be directed toward development of policies describing the role of transit. These policies should define the metropolitan objectives for the relative importance of transit over time and in different parts of the area.

The role of transit in transportation should be established first for several reasons: (a) Transit is the area of transportation in which the Metropolitan Council has most clearly been assigned responsibility; (b) until the role transit is to perform is defined, highway design and planning, both short and long-range, will be difficult and cloudy; (c) early guidance by the council can aid the Metropolitan Transit Commission in its current studies; (d) opportunities now available for transit implementation may be gone in a short time (for example, construction of busways, or reservation of rights-of-way, as part of completing the Interstate System, if we want to do it, would have to be decided quite soon); and (e) in our planning work during the next few months, definition of the transit role should lead logically to definition of the highway role.

Most of the questions in the January 27 memorandum are still included. There is a need for policy decision on the questions relating to capacity and travel demand. Questions on why we need transit and what we expect of it have been added. The staff recognizes that there are good issues not included here and that as we progress changes may be needed. More detail on the work after March 30 will be added later. The recommended sequence follows.

March 30—Adoption of policies describing the role of transit (why, what for, how much, where, when). The first 4 meetings are intended to lead toward March 30.

February 10—Why do we want a transit system of any kind? What is the policy for supplying capacity to meet travel need? Meet all forecast need? In total? For each mode? Policy modal split? What degree of congestion? Who should transit serve? Captive riders only? Current riders? Downtown employees? Diversified centers' destinations? Major corridors' destinations? Significant or major portion of peak-hour work trips? Goods movement? Would we install a fixed-guideway transit system if it would not remove the need for additional freeways in the central cities? If it would?

February 24—How is transit or highways or both to be used for influencing urban development patterns? Guiding new development? Total spread of urban growth? Major diversified centers? Downtowns? High density corridors? Others? What has happened in cities where transit was built during the automobile age (since World War II)? Can we influence transit usage through pricing policies? What have previous consultant studies said about the development impacts of transit? What do developers and financial institutions feel about the development impact of transit? What specifically can be done in the Twin Cities to influence development, with transit, or a combination of other public actions? High density corridors? Major centers? Downtowns?

March 9—What can improved transit hardware do to increase transit patronage? Enough to eliminate the need for additional central city freeways? When? What are the findings from previous transit studies? What are the findings of the current transit studies relative to the effect of hardware on patronage? When could various types of hardware be on the ground? What are the evolutionary (incremental) possibilities for improving our transit system?

March 23—When and where do we need improved transit? What priority? What do the 1980 and 1990 travel forecasts (presented on this date) suggest in terms of transit location, priorities, timing, and patronage, and the possible role of transit in specific corridors? What are the transit priorities by geographic area?

March 30—Policy presentation, discussion, and adoption on the role of transit over time and in different parts of the metropolitan area.

April 13—What is the role of highways over time and in different parts of the metropolitan area?

April 27—Staff presentation of a thoroughfare-transit plan, program, and cost estimates based on previous decisions.

May 11—How might we pay for transit and other transportation facilities?

May 25—Recommendations on transportation financing.

June 8—Review of Transit Commission Phase III-A-2 and Minneapolis downtown study results.

June 22—Further discussion of plan, program, and finance.

July 6—First draft of the Metropolitan Development Guide.

deliberately set our staff up to make pro-and-con arguments so that all the points could be brought out. I wish to say more about this type of adversary approach to planning a little later because I think it holds a great deal of promise in some areas in helping the decision-maker arrive at sound planning decisions. That technique was attempted with I think rather good success if the point was to get before the public body in a public way the various arguments surrounding the major issues.

We also relied on citizen participation in the meetings. I announced very early that, although I was highly interested in citizen participation, I was really only interested in informed citizen participation because I was not a psychiatrist engaging in therapy during the 3 hours we would meet each week concerning the transportation issues. We are fortunate in the Twin City area in having a number of broad-based generalist citizen groups with an interest in a broad range of issues. The foremost of these is the Citizens League, which has an almost unique status in the Twin City area. It is a 3,000-member citizen group with extensive research capabilities that it develops through the use of citizen committees. It is backed by professional staff and makes reports to public bodies on any number of issues. The Citizens League was very influential in the formation of the Metropolitan Council and in the transportation area has done a number of studies that gave it valuable perspective on the various transportation issues. Committee chairmen and other members of the Citizens League appeared constantly before us, raising questions and giving input from their studies on the various things their committees had done.

The League of Women Voters had also been active, and a number of environmental groups in our area had already taken the time to organize task forces to take a rather balanced look at the transportation planning issues. There were many more as well as individual citizens with a general fascination for transportation issues who took the time and did us the courtesy of making and preparing reasoned statements from time to time on the various questions as they arose. Each one of those groups had our decisional schedule and knew at which meeting we would be debating each of the issues. Very obviously, thousands of people were untouched by the process.

Pursuant to our schedule, we voted on preliminary transportation plans involving both transit and highways on July 6. The vote was unanimous on our committee although the 8 members had entered the process in January with widely divergent views on both highway and transit issues. The council then sent it back to us, and we had a series of 3 public meetings at night involving all aspects of the plan. We had a large attendance, and one night an hour of the meeting was broadcast live over the radio station. The broadcast had the largest listenership in the state; it concluded with an open-mike feature so that we could get as much input as possible. Our major concern, however, was to inform ourselves to help us with the decision rather than to attempt any political validation of our planning process by "consulting the area" so to speak.

One device that I had thought about using but did not bears mentioning, however, because I think it may prove useful under certain circumstances. Essentially, what I had in mind in the transit area was a major public debate before the council with the area legislators sitting in the background as observers (for the issue was bound to come to the legislature). This would give the legislators a chance to hear the arguments without having to commit themselves publicly prior to action by the council. The vehicle issue, i.e., Should transit be expanded by bus, PRT, or rail rapid? was on everyone's mind. It was my intent for the council to hire advocate lawyers to represent each of the positions. We put out a great deal of money in the council for planning consultants, and it seemed to me that advocate consultants with training in marshalling facts and arguments might be useful. As a teacher of trial practice, I think there is a lot to be said for the use of the adversary system of truth determination in situations as well as in the courtroom, particularly when you are dealing with areas where the truth is not revealed. All too often the viewpoints are presented in incompetent or inarticulate fashion by various untrained spokesmen. It seemed to me that this might present a new area for advocacy—not representing a client but a position before the decisional body. That body would retain the lawyer and tell him what position he was to represent and then give him enough money, time, and experts to prepare for the public hearing. He then can be in a position to cross-examine the experts and consultants for the

opposing positions and, of course, have his experts cross-examined also.

Particularly in the transportation planning area but in other areas too, some mechanism should be found to peel away the present slickness of some of the consultant products and get down to basics. Speaking of consultants, I might note that our committee used consultants a little differently from the way they are normally used. We did have a team of consultants to assist on the transportation planning process, but we used them basically as resource people. I told them we did not want 40-page reports and maps after the fact but wanted to use them as experts to assist us while we are in the process of making our decision. As you recall, we were making those decisions as we went along, and we had no intention of contracting the decision out to them or to our staff for that matter. We insisted that our consultants be present and respond verbally to the questions asked by the committee or to the audience. If they did not have the information that we needed, we would expect them to bring it to us at a subsequent meeting. It was a little nerve-racking at first for the consultants, but they soon adjusted to it and seemed to thrive on the challenge of being a resource participant in the decisional process. We also insisted that the consultants publicly criticize our staff product as we went along. This as you know poses a traumatic problem for consultants because they know that the future consultant recommendations generally come from staff not from the policy-makers. Thus, this may be fairly strong medicine to expect public consultant criticism of staff product. Our transportation planning staff happened to be the kind of people who enjoyed a debate and were not so stuck on their own ideas or theories that criticism was a threat and not a challenge. I suspect this is not always going to be the case.

After our 3 public hearings on the tentative plan, we then firmed the plan up a bit more and scheduled it for a formal public hearing. On December 14, the council adopted a final version of the transportation plan by a vote of 14 to 1. The formal public hearing in this case was not totally wasted, and in fact changes were made in the plan as a result of the hearing.

The present status of the council's transportation plan is, as I indicated in my opening, still in doubt. The 1971 law said that the Transit Commission should implement our transportation plan. The present Transit Commission has no intention of implementing our plan, and has gone to the legislature in an attempt to secure approval of its own plan. The Transit Commission members see the dispute in the terms of vehicle selection. They want a 57-mile automated rail subway system, and the council plan rejects this in favor of a vastly expanded bus service with busways leading into automated dual-mode operation when the technology becomes available. This is clearly not a vehicle decision at all but a basic system decision with profound implications in terms of the development and growth of the area. The Transit Commission in our area has substantial support for its plan. Rail transit is the glamour mode of the 70s in our area because many politicians believe it will solve all urban area problems, including environmental impact, air pollution, and traffic congestion.

I wish I could report that our effort at citizen participation in the regional transportation planning process was a success, but I cannot do so at this time. It was an immediate success as far as the council was concerned because it had a demonstrated impact on what we think was the quality of our decision. Suggestions from the citizens were incorporated in the plan and probably would not have been in the plan if citizens had not been present. The problem is that the final political decision has yet to be made, and we may merely have engaged in an interesting exercise in futility.

In addition to the I-394 study that involves the 4-member steering committee, the Twin City area has one other interesting attempt at citizen participation in our so-called Northtown Corridor Study. There, the consultant has held a number of public meetings presenting a number of alternatives alignments. This has involved a great number of local public officials and citizens. I think it is successful in creating a consensus on timing and routing in what could have been a very controversial highway alignment in our northern suburbs. This is not clear yet, for the study is not completed, but intensive effort by the consultants and particularly an attempt to present real alternatives rather than pat solutions seem to be instrumental in developing a good atmosphere in that particular corridor.



Thus far, I have discussed citizen participation in our transportation planning process. We are attempting to apply the same technique to our other regional functional planning areas. At the present time, the Human Resource Committee is trying to develop a metropolitan health plan. If you think that there are difficult problems in developing a regional long-range plan for highways and transit, then you should know that the problems in developing social plans, such as for health care, are staggering. Not only is there the lack of much government involvement in the system, but also there is the difficulty of the health planners to think in terms of problems or issues rather than of solutions. The necessity for citizen participation in the health area becomes virtually a religion for some, and we have attempted to apply the lessons we have learned in the transportation planning process to the health area. We recently held our first meeting on a set of questions developed in a series of previous meetings as to what the issues in health are. We have written to all the interest groups we could think of asking for debate and comment. We are, in fact, scheduling debates on each of the major issues in the health area and asking various lawyers to act as spokesmen for some of the positions. The media is, of course, invited again as are any of the interested people. The chambers were packed when we took up primary health care questions. The problem in this area, I am told, is that the providers, that is, the doctors, hospital, pharmacists, and nursing home operators, are prepared to debate this issue but that the average person interested in health care is not. However, there are some very interesting citizen groups, including a new student research group that was spawned from the Nader movement and that has taken a great interest in health and is in a position to provide a fair amount of advocacy for us.

Another committee in council is undertaking to develop a total development framework plan for the area; that is to say, What kind of growth policy or restraints on growth and land use and timing controls do we want or are necessary in the 7-county area? It is described as the Mt. Everest of planning, and no metropolitan area has scaled it yet. It has been much more difficult for us to formulate debatable questions in this area, but we hope that the process started in transportation can continue here.

I should also mention in the transportation area the study conducted jointly by 3 municipalities and the Metropolitan Council involving traffic patterns around our most successful regional shopping area at Southdale. The historical transportation planning for the area has proved inadequate, and it turns out that in and around this particular regional shopping center the traffic patterns and other developments are behaving much like the central city. There was obviously great interest in determining what could be done about it. Suggestions included what sort of automated people-mover could be used in the area to help with internal traffic. The consultant study received a fair amount of local public attention. However, the study itself was prepared and presented by the consultants alone. In other words, the consultants had presented their solutions to the people for reaction. It seemed to me that this is fairly typical of the transportation planning process in the past and is what we on the council have been trying to get away from. We believe that generalist policy-makers should be making the decisions in each of these functional areas. They are obviously not expert in these areas, and they are at the mercy of the functional experts unless they get assistance. They need assistance that comes from the clash of ideas in terms of public debate by various advocates, and that requires, it seems to me, careful attention to shaping the basic questions for debate so that the decision-makers are not at the mercy of their staffs, the consultants, or their own preconceived emotional ideas on a given subject.

The council seeks citizen involvement in the planning process for another reason. Planning, like the law, should not concern itself with trifles. Important things are being planned, and these things have got to be political. The attempt of planners to remove themselves from political processes has given planning the lack of clout it often deserves. The problem with many politicians is that they are always worried about "they." "They" is often the last person to call or the last person they have talked to. A hundred people filling a room can intimidate and have in fact intimidated the council. Logic will tell you that 100 people can in no way represent the metropolitan area, and it is important, therefore, that the decision-makers have a broad enough contact with the public to understand the political implications of their planning decisions and not be

influenced unduly by aroused single-purpose constituents.

Several other ideas in terms of citizen participation are going on in the metropolitan area independent of the council, and I think they are worthy of brief note. The Citizens League has pioneered in a study that recommended "sub-urbs" in the city. It has set forth ways to expand the participation of citizens in Minneapolis government. The report basically makes note of the trends toward centralization and bigness at a regional level and the need for decentralization to the neighborhoods. The attempt is to generate experienced and elected general-purpose citizen groups in the neighborhoods as a means of advising city hall or anyone else including highway departments or councils as to the desires of the citizens of a particular neighborhood. Single-purpose or ad hoc groups do not present balanced neighborhood views. Many do not have adequate internal decision-making mechanisms. There needs to be a group with a broad enough interest or geographical base to achieve a balanced neighborhood view. Thus far it has not been implemented in Minneapolis. Although the Minneapolis City Council has given some support to it, many view it as a threat to their power even though the neighborhood groups would be only institutionalized advisory groups. In fairness to Minneapolis, it should be said that its city charter is one that political scientists can prove will not work. It does, but I think only because the structure is so bad that the only way that the government works at all is by a tremendous amount of citizen cooperation on seemingly hundreds of committees and task forces.

In contrast, St. Paul, the other Twin City, has had historically an oligarchical form of decision-making. That is to say, in Minneapolis 50 select people in one room can reach a consensus and still not guarantee a result, but in St. Paul, historically, 5 of the right people in a room can reach an agreement and guarantee almost any result. Perhaps as a result, St. Paul is now in the process of trying to get more citizen participation into its decision-making, and the mayor's office has issued for city council consideration a report that urges setting up a number of general purpose neighborhood community councils to involve citizens in the governmental issues of the city.

Citizen participation is the latest thing in public decision-making. I see no abatement of the claims of an increasingly well-educated population for a bigger role in governmental planning. Much has been made of the claims of the poor and the minorities for participation in decisions affecting them. These pressures will continue unabated. But I see additional pressures coming from our suburbs filled with educated but underused men and particularly women who seek a piece of the decisional action without necessarily paying the price of direct political and electoral activity. The ballot is no longer enough for more and more people. My perceptions as to what has happened in the Twin Cities are not necessarily shared by others in a planning role in our area. From a vantage point on the Metropolitan Council, I see that we are still grappling imperfectly with the challenge of trying to obtain citizen judgments in endeavors that have long-range and widely scattered effects rather than those that are short-range and localized. We think at this time that benefits are achieved by open planning that is widely publicized and involves full public debate before and by as many informed citizens as one can induce to participate.

# CITIZEN PARTICIPATION AND THE MINORITY VIEWPOINT

GERARD ANDERSON

*G. A. Anderson and Company*

If I may, I would like to amend the topic given me so that instead of the minority point of view I will discuss the nonwhite group point of view. We might get into a semantic question as to what constitutes a minority. What we are really talking about are people who are not white.

I could just as well suggest that the topic be "a view from the back of the bus." That is not difficult for you to understand. The fact of the matter is that there is a very close relation in this country between race and transportation. If some of the planners in the past had taken into account this historic perspective, then, I suggest, much of the urban crisis could have been avoided. When you talk about nonwhites, you are talking about hyphenated citizens who are in most instances not even recognized as viable entities in the community. So when we suggest that they should participate in a democracy, in which on various occasions they have been legislated out of citizenship roles, we are really coming around full circle.

The reason, in some years past, that nonwhites had to ride in the back of the bus was that this was the most objectionable place to ride. On a train, the most objectionable place to ride was toward the front, and so nonwhites rode there. In some communities, a number of years ago, a black person could not purchase a new automobile; he had to buy a used car. To suggest that these people now be allowed to assist in the planning of a total community is not an easy thing for some people to understand. To many, there is still a question of why they should be asked at all.

The question of transportation is one of mobility. Mobility in nonwhite life is being able to survive by using whatever has been assigned to you. Perhaps the most graphic example of that relates to housing. Nonwhites still as of this minute cannot move freely in the housing market. Furniture, clothing, automobiles, and trips abroad can be easily obtained, but a house in any location is still obtained with difficulty if at all.

The housing that nonwhites occupy serves as a means of still identifying race with transportation. The tendency has been to build certain roadways through what is referred to as the poor or nonwhite districts. The advantages are that the people would not protest too much because they had no political clout and the land is inexpensive. Those districts have, therefore, become favored locations for highways, federal buildings, hospital expansions, and so on.

You take away a certain number of housing units on the theory that you are going to improve transportation by new capital facilities or that you are going to replace a blighted area in an urban renewal program. But the question is, Where are the people to go? In many cases when the relocation procedures were not so closely followed as they are now, a governmental agency would suggest to the federal government that it had an ample inventory of clean, decent, safe, and sanitary homes to relocate these people in when, in fact, that would be a lie.

The people forced to move would move to the next area vacated by whites, and that became the next slum because, in every urban renewal project that I know of, the number of units that were rebuilt on the land where the people were forced to move from was less than the units there in the beginning, and the units were too high-priced for the people to afford. So the planning process as it pertains to citizen participation in urban renewal and transportation is only of late giving any sort of recognition at all to the fact that perhaps planners have created more ill than good in the sense of compounding social problems.

The basic reason that I got involved in the consulting business was because of the failure of the city of Cleveland in the early 50s to involve people in the planning process. Cleveland was one of the first cities to have a major urban renewal program and is perhaps the only city that had all of its funds cut off by the U.S. Department of Housing and Urban Development because it did such a miserable job in executing that program.

But those at city hall were playing a trick not only on the nonwhites but also on everybody else as well from the standpoint of citizen participation, which was required under the program in urban renewal. What would happen is that a letter would be sent to various organizations suggesting the intent and the benefits of a program and asking the organization to endorse it. If the organization sent an endorsement, it would be used as evidence to the federal government of citizen participation. Many of us challenged this and spoke in opposition to the kind of demolition programs that were planned for certain areas in the city. We pointed out that the law requiring the formation of at least 2 committees was not being followed and that there had been no certification that there was enough housing available for the nonwhites they were forcing to relocate. In response, they used figures of anticipated new housing starts that were exaggerated way out of proportion. If they thought a house might be available, they would suggest that it would accommodate 3 families.

The end result is that the political decision was made for the benefit of private developers. The result of this strictly monetary operation was the creation of the Cleveland slum that is called the Hough area and that many people hear of during the 60s because of the street demonstrations (I do not use the word riot). Many people were forced into Hough because it was the next community in terms of low-cost housing and availability to nonwhites.

Who can adequately represent nonwhites? Can the existing process be used politically by nonwhites as it is used by whites to stop—let me emphasize—to stop certain transportation programs that were designed for them instead of with them?

I suggest that, were planners to view nonwhites not as objects of suspicion but as human beings who have the same desires as everybody else, this would not be a complicated problem. But we do not do that to a large extent because we do not want to get too close to the masses. If we can find a good reverend with a sizable church, we use him to talk through the pulpit to the population in that area. If we can find a councilman who has perpetuated his office by seeing that certain people get on welfare rolls and in certain housing units, we might ask him to deal with all those people. Or perhaps we can work through a black newspaper editor or a nonwhite editor in the community who needs advertising from a major firm.

We will deal with the citizens themselves only if we have to. Many white planners have never had the experience of talking with nonwhite people on an equal level. They may talk with somebody who takes care of the house or the yard, who drives the car, or who serves at the club but not with somebody who is an equal as a citizen. I suggest that the white planner who has this hang-up has complicated the urban problem more than the nonwhite resident who has been moved involuntarily from one place to another without the chance to adequately help himself through the citizen participation process.

Very few legislators I have ever worked with—and I have worked with quite a few across this country—have ever adopted the point of view of disadvantaged people in their consideration of legislation. Those who have done so only to the extent required to get reelected. The advantaged and the people with vested interests who have lobbyists get the ear of the legislators. The people who have a stake in what the laws are see that those legislators are taken care of in any number of ways in return for favorable votes on those laws that increase or do not interfere with profits.

Because the nonwhite citizens have not been able to express themselves in the present governmental procedures in a manner they find comfortable, they have developed the idea of controlling their turf. If they cannot get the governmental process to work for them or to work fast enough, then they will now control the schools in their area and the police departments and the fire departments and everything else; the rest of you just stay out! It is self-defeating, of course, but what else is available other than to burn the neighborhoods down because one cannot get bus transportation to town?

So we see a frustrated nonwhite community that has been left leaderless to a large extent by assassinations and by people who have grown tired of the struggle or who perhaps have attained a measure of economic sufficiency so that they can go home at night instead of going to meetings. The lack of leadership at the national level reverberates down to the state and local level, where the void is filled by people who will assert themselves as leaders. The only way they know how to get attention is by doing something that some in the community will probably not like but that the newspapers will cover. In the area of transportation, nonwhites will control their areas. If a highway or a transit system is built through those areas, then that means 40 percent of the jobs will go to nonwhites. If a shopping center is built in those areas, then that means putting citizens on the boards of directors so that they have a voice in the control and in the sharing of the profits of those enterprises.

Whether that is good or bad depends on the total plan. Who is the plan supposed to serve: the people in the suburban area who get the first attention or the people in the inner city? If you talk to the people in Washington, D.C., they probably will suggest to you that Metro is designed for the suburbanites. If you talk to people in San Francisco, they will say that BART was designed for the suburbanites. Whether that is true will be observed in the months ahead as those systems are completed and we see how many stops are in the inner city and how many people actually benefit.

There is another aspect of transportation that has a very relevant and very receptive history with regard to nonwhites. It happened in Alabama when Rosa Parks decided she was tired, wanted to sit down, and would not get up and give her seat to a white person. This led to a bus boycott that gave rise to one of this country's most gifted leaders, Martin Luther King, Jr. Here again, it was an incident on a bus, a transport facility, that traditionally has symbolized the degree of racism to nonwhites in this country. From that one boycott, we had the 1964 civil rights laws, public accommodation laws, voting rights law, and, even more important than the laws themselves, the whole question of enforcement of those laws. The federal government started enforcing those laws to ensure a measure of citizenship to those people who had not been able to vote before. So in a sort of a strange way, this whole question of transportation gave rise to perhaps the greatest social legislation in any one 10-year period this country had ever seen.

There is still abuse, however. Some of us equate transportation facilities with certain jobs. For example, if you happen to work for a bus company—whether inner city, Greyhound, or Trailways— and are a nonwhite, you will probably wash the bus, but you will not work on the engine. If you work for a railroad company, you work either in the dining car or as a porter, but you are never a conductor or engineer; those are white jobs.

In 1973, the prospect of a highway coming through the city raises all sorts of notions in the minds of nonwhites and the poor based on past experiences of what highways and the transportation planning officials do that adversely affect them as citizens. I suggest that the same procedures that are used in encouraging white people to take part in the decision-making process be used in encouraging nonwhites to share in the decision-making process. But let me suggest further that there may be many gripe sessions

involved and there may be a lot of wind blown that is not really catching any sails. But you have to remember there are very few public forums where people who have been intentionally cut out of the system can have a chance to vent their emotions and to get off their chest things that they had on their chest for 10 or 15 years. Although we may not have psychiatric training, I think we ought to fully understand the social consequences of our physical planning before we inaugurate the plan.

There was a highway planned for Cleveland not long ago that would have displaced some 1,400 black families. Not one official in the entire city suggested where they would be relocated even though existing law requires that there must be existing housing to move people into. So the planner with his yardstick and T-square, with his budget and timetable takes no account of the social elements and consequences of his planning, particularly as they apply to that part of the community that has intentionally been cut out of the decision-making process.

I hope that more conferences of this type will be conducted for planners so that there will be a total awareness of what happens in nonwhite neighborhoods when any kind of capital improvement program is implemented. I would suggest further that the planning process, which traditionally has routed highways through the so-called least expensive areas, might now attempt to determine where the facilities are actually needed as opposed to where land can be obtained for the least price. What must be included in that process is that (a) out of respect, if nothing else, the people must be consulted, for the people are currently aware that planners have to talk to them or else they will not get their program through; (b) if any relocation is required, planners must take into account the special problems so that the people are not simply pushed into the slum next to their community; and (c) capital grant projects should become new avenues of employment for nonwhite people.

The nonwhite unemployment runs 3 or 4 times that of white unemployment. Jobs must be made available for nonwhites on capital projects is what I am saying. When you tell me about the jetport that will generate \$70 million more to the community, my question is, How does that affect this part of the community that was never included in the economy that you already have? If a new transit system is to be built that will take 10 years to complete, who will get the jobs? Where are the opportunities for employment so that a project can serve more than one purpose?

In my judgment, most of the problems that have occurred in the past with regard to white and nonwhite relations have been caused by the roles whites have assigned to nonwhites. For example, the blacks were brought to this country to work in the fields in the South. The Chinese came over primarily during the post-Civil War period to lay railroads to the West Coast, and that is where they are today. The Indian would not be put in slavery, so he was put on a reservation, and that is where he is today. We need not continue to perpetuate those roles today. As planners, we must realize that all want some control over their lives and that all need jobs—nonwhite as well as white. If we then look at the potential growth of this country in terms of not having limitations, then I suggest planning in nonwhite communities not only would be beneficial but also would result in the total community progress that has eluded us for so many years.

# CITIZEN PARTICIPATION AND AN ELECTED OFFICIAL'S VIEWPOINT

ARTHUR J. HOLLAND

*Mayor*

*City of Trenton, New Jersey*

I thought I would briefly review the chronology of formal citizen participation in prominent public programs. The programs start with public housing, which has not had and does not now have any provision for citizen participation. The housing authority decides to put up a project and does it. There is increasing demand on the part of tenants in those projects for participation either as members of the authority or as advisors to it.

Then came urban renewal, which called for an urban renewal advisory committee. Of course, that was a built-in requirement for citizen participation. The Economic Opportunity Act was being implemented based on 2 schools of thought: one, keep it in city hall; and the other, have a nonprofit corporation, a partnership between government and the public. We had the latter in our city, and it worked very well. For the first time, there was mass citizen involvement, especially of the nonwhite community.

Then, of course, the ultimate came, as far as citizen participation is concerned: model cities. In 1966, when I was a consultant with the U. S. Department of Housing and Urban Development my last assignment was to advise on this new city demonstration program under the Metropolitan Development Act of 1966. They decided not to call it the Demonstration Cities Program because the demonstrations were breaking out at the time, and they did not want the people to be confused or have the program not get off the ground. So they called it the Model Cities Program, and there is still no formal provision for that terminology. At any rate, in the Model Cities Program, at least in Trenton, there is provision for a mutual veto. In other words, the citizens have the same power as the government in the model neighborhood—except that, to be honest about it, because the checks are written at city hall, the government still does ultimately have the final say if there is an impasse.

I was a big citizen participation man when I was in office before, but I changed somewhat after I came back because I saw that the citizens were so strong that they were, in effect, demanding the kind of power that comes—all things being equal—with the vote. In other words, I think we must admit that, however strong the partnership, if there is an impasse, then obviously the person who is subjected to the electorate is entitled to have some balance of power. Of course, if the elected official does not exercise that balance of power properly, then those same citizens can seek redress at the next election.

The citizens appreciate this power, so much so that just last week the Model Cities Policy Committee, which is the highest level committee for citizens, voted to use limited funds (we have been cut back by 45 percent) for planning staff rather than for programs, the real bread-and-butter matters out in the neighborhoods. In effect black leaders were saying, "We will let community development workers go rather than the higher paid community planner, physical planner, social planner." I agree with that only because I think that, until it is closed out, the Model Cities Program should be protected as far as its integrity as an experiment is concerned. Unless there is this balanced partnership, this equal partnership between city demonstration agencies and the Model Cities Policy Committee, then you cannot have a true experiment. The citizens realize that, if the Delaware Valley Transportation Committee is going to compete with the Delaware Valley Regional Planning Commission, they have to have staff resources.

Until recently, the attitude of the average highway engineer and transportation man was to locate highways "as the crow flies," even though that might mean some big trees or houses would be taken. That notion took a lot of confidence and optimism. Of course, there was no legal prohibition to it, so it worked out all right.

Then along came the National Environmental Policy Act of 1969, and that created an altogether different situation. I can give you a case study of NJ-29, the road that runs along the river to the rear of our state capitol building. About 20 years ago, it was decided that the water power, which ran parallel to the river, was needed as an east-west highway base. There was a fight between the citizens who lived along this beautiful area and the locally elected officials, and the local officials did explore alternates. But this was really the only route, so they built it. The mayor lost some votes from the districts along that route, but no one made any attempt to hold up construction. About 10 years later, and about 10 years ago, the next section was to be constructed. That section was to the rear of the state capitol building; no residences were involved, and no environmental impact study was required. I was mayor at the time this took place. The major question regarded negotiation between the local government and the state government as to the price of the land, and we were able to get \$60 thousand an acre for it. Twenty years earlier the city had turned over the water power for a dollar.

We are now planning a third section of NJ-29, which involves a densely populated white area. About 7 years ago, there was a public hearing, and, as a result of that public hearing, the direction of the road was changed because it would have created what in effect would have been a Chinese wall.

About 1½ years ago the requirements of the Environmental Protection Agency had to be implemented. We had negotiated with the New Jersey Department of Transportation a "dream" arrangement for the first time in history. We were getting not only dollars for the land but also replacement for a lot of recreational area that unfortunately had to be taken. The new recreational facilities would be superior to the ones that would be taken along the right-of-way. But trees would still have to be cut, and this is the last natural area along the river.

After we had negotiated the dream arrangement, the citizens found out that there was no environmental impact study; we had forgotten about it, and apparently the federal government had forgotten about it. We are now awaiting the report on that study. During this period, we have had several meetings with local officials, state officials, and citizens. The citizens enlisted the aid of the student workshop at Princeton University. In their study of how to preserve the environment, the students came up with another route. When the detailed designs were completed, we had another meeting. As it turned out, the student engineers did not really do a sufficient job of documentation, and the pros were really right. But even so, the situation was ambiguous again, and the project was slowed down.

The basic problem in these meetings is that the citizen sees each stretch of road in terms of his neighborhood, and the officials and planners see it as one part of a regional plan. In retrospect, I think that, if we would start at the bottom rather than at the top, we could save an awful lot of time. If a certain route must be taken, then it is going to be taken a lot sooner if the people who have to be persuaded that it is the only route are brought into the discussions at the very beginning. I think thereafter that it is important to have advisory committees not only at the local level but at the national level, at the state level, at the regional level, and at the county level.



For example, Mercer County, in which Trenton is the county seat, announced a plan for a new railroad station between Princeton and Trenton. We did not know about it until it was announced. We reacted like citizens; I can tell you that! Perhaps because of the political power that a city has and can bring to the attention of elected county officials, that plan will be changed, but that is not the basis on which a plan should be changed. Perhaps because of the way they did it, even though it was a valid suggestion, they will never get a reasonable hearing from us because we resent the fact that they sprang it on us.

In the city, we have recently announced through our planning board a plan for citizen involvement. We have task forces on transportation, on housing, on the environment, and on several other areas. The task forces are composed of people from everywhere in the city. They research projects in their areas of interest and report to the board so that, when the board adopts a plan, it can be sure that the plan has already had broad exposure before it goes to public hearing.

The role of a mayor is a community relations leader, a group relations leader, a race relations leader, a human relations specialist. We try to anticipate problems and prepare for them by going about this comprehensive involvement process. That kind of attitude, I think, if present at all levels, is most likely to ensure that what needs to be done not only will get done but will get done in the shortest possible time.

## INFORMAL DISCUSSION

PARSONS: How do you select personnel for advisory committees?

HOLLAND: I think you have to retain your independence as an appointing authority. It is easy to let this be taken from you by letting different organizations assume that they have the right to determine which ethnic person will be on the various committees. Also, I think you have to have technically informed people and lay people. I do not think there is any one formula; you have to play it by ear. It is important for the mayor or any appointing authority to be involved to the extent he can.

ROLLET: With all due respect, I think what we have lost sight of is the fact that citizens need not just be put on advisory committees but have the kind of expertise and knowledge so that they can be put into decision-making committees and decision-making situations. That model cities program you talked about in which they had a double veto, in which the city government and the public could veto, should be extended. That is not something that we should try to modify with a strong mayor, but something we should encourage with strong citizens.

HOLLAND: Trenton was the first city in the nation to have members on the decision-making board elected by the people. Philadelphia did it some months later and got national publicity, but it really started in Trenton. So I agree with you. However, if an impasse is reached and it is impossible for one side to prove to the other that it is right, somebody has to make a decision. I think that responsibility clearly lies with the elected officials. The alternative is a kind of anarchy.

ROLLET: Or a democracy.

HOLLAND: We are a representative government.

RAIDER: As a citizen, I will come to the defense of a past fellow citizen. I think Mayor Holland has indicated that he is one of the few mayors that I know of who has an open-door policy where anybody can call him without having to make an announcement of who they are and what they are asking for. I think this is a credit to him for this type of citizen participation.

HOLLAND: It is true that we have a completely open-door policy. Anyone can walk into the mayor's office. There is no such thing as a closed meeting. I have town meetings in each ward of the city periodically. My phone at home is in the book. Whether I agree with them or not, at least the citizens can reach me. Every now and then I force myself to recall my citizen days when Leon Raider and I were fighting Walter Sullivan.

**BENSTOCK:** If citizens want to be notified of what your open meetings are, can they get notification, and have you developed a procedure for that?

**HOLLAND:** The meeting time to me is common knowledge. The last Thursday night of each month is "Meet the Mayor Night." We announce to the schools and so on when we have town meetings, so the public knows about that. Then we have special meetings; for example, when Governor Cahill proposed a tax reform, we had meetings in each of the 4 wards.

One of my reasons for keeping my phone number listed in the book is to build in responsiveness on the part of officials. The department directors and other key officials who might not want to be responsive when citizens call them know that the citizen can go over their heads to the mayor's home. When anybody calls the mayor's office, the staff are forbidden to ask who is calling; so I do not even know who is on the phone when I answer. The whole idea is to inspire confidence in the public that there is open government.

But let me say that, in recent years because of the war on poverty and because of the Model Cities Program, I found the citizen side was outweighing the government side. I think that is as wrong as the government side dominating the citizen side. Ultimately you get to the point where you have to say, all things being equal, that the decision lies with the elected official who is put in office after all by the people who can replace him by recall, if it is important enough at the moment, or at the next regular election.

**BENSTOCK:** The place decisions are made means to none of us a town meeting or forum or hearing.

**HOLLAND:** Keep in mind that we have a city government that is modeled after federal and state governments. Ours is the executive branch where we make administrative decisions all the time. We can only recommend policy to the governing body, the city council, which makes the basic planning and zoning decisions. The planning board appointed by the mayor recommends to the city council whether a street shall be closed off or not.

**ANDERSON:** Do you have an opinion on the wisdom of having closed legislative meetings by legislative bodies? That is the practice of a number of city councils and state legislatures.

**HOLLAND:** I do not know how high you can carry that policy. We have 106,000 people. I think, to the extent that you can, you should always have public meetings. The only things we have kept off the record were real estate matters that are in process because of the possible effect on price were it to be announced that the city was negotiating to acquire the land. Also, we kept secret the site of the mass grave should there be an atomic attack, a decision that was made at the height of the civil defense program. Why worry citizens by letting them know they are living next to the mass grave site. But, in general, I think the public's business should be public. At the federal level, obviously there have to be certain matters, especially of a military nature, that are secret. If I were president, I do not think that I could have anyone walk into my office at any time. We also have a policy with the press. If a reporter walks in, we say, "This is off the record." I have never had that deliberately violated.

**ANDERSON:** I am referring to a situation in which a rules committee votes whether to permit a bill to come to the floor for a vote. That committee meets in secrecy and the vote is never published. These are the kinds of activities by elected officials, I think, that create what might be overreaction by citizen groups once they get a chance at the veto.

**HOLLAND:** You made a very good point earlier when you said that it depends on whether people think that a matter is being handled properly and in the public interest. If they think that it is, then they do not care about going to the meeting. I think that is the key and is the type of thing I had in mind when I talked about the open door we try to maintain. If people have confidence that things are not being withheld from them, they will not be that concerned to come in. Except for the few matters I mentioned, I do not think there should be anything private. It is public business. Also there is a

tremendous advantage to the elected official; it is unlikely that anything really wrong can take place in that kind of atmosphere.

PARSONS: Have you had in the Trenton area various citizens' groups that have requested participation in transportation decision-making in the initial planning?

HOLLAND: They do not have to do so now because of the task-force approach we have. We will make sure that every section of the city, whether it is affected in the near or distant future by transportation projects, will be included in any discussions automatically. The word will automatically get out to them. This is what the Delaware Valley Regional Planning Commission does regionally.

CARSON: If I write to you, will you give me the names of these citizens' groups whom you have asked to participate in your task forces?

HOLLAND: At the public meeting last week, we invited everyone who came to the meeting to sign up for a task force. We are asking the public per se to become involved. I think if we need any strengthening of committees, we probably would go to recognized citizen organizations like the NAACP or the South Ward Civic Association.

CARSON: Do they sign up or apply for certain ones?

HOLLAND: They can serve on more than one if they want. Here is the interesting part: Each planning board member will be assigned to a task force and may be assigned to more than one. So individual planning board members will meet with the citizens.

# CITIZEN PARTICIPATION IN AN URBAN STATE

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Pennsylvania Department of Transportation*

This paper describes how the Pennsylvania Department of Transportation views citizen involvement in transportation planning, location, and design. Past and current accomplishments are described, and recommendations are made for extending and perfecting those efforts.

The department's transportation planning activities include policy planning; systems planning at the statewide, regional, and metropolitan levels; and project location and design. Systems planning is done in the Philadelphia and Pittsburgh regions by regional planning commissions under contract to the department and elsewhere by department staff; considered are all modes of transportation and their relations to land use, community structure, and economy. Project planning is done by department staff and is legislatively restricted to the highway mode only.

The purpose of citizen participation, as viewed by the department, is not simply to clear the way to project implementation but to achieve more effective decision-making in the public interest. We recognize that good decision-making requires the participation of a knowledgeable public and its elected representatives. Community acceptance was, until fairly recently, relatively easy to achieve when the public at large either supported the highway program without serious question or was relatively disinterested. In the past, the support of elected officials and of a few key community leaders was all that was necessary to advance a project to implementation. Today, however, we must intensify citizen participation efforts and innovate to achieve community acceptance of new transportation improvements.

It is generally recognized that a wide range of public programs currently face difficulties in achieving community acceptance. Urban renewal projects, power generating stations, housing projects, navigation projects, pipelines, and all manner of transportation programs are seriously threatened by substantial community opposition. A number of key rail transit projects in Philadelphia and an entirely new proposed rail transit system in Pittsburgh have been stopped because of community opposition and opposition or indecision by local public officials.

Community resistance to public programs can be attributed to a range of factors including loss of confidence in public officials, programs, and priorities; a better educated, more articulate, and more activist public; the civil rights, student activism,

and consumer movements; and the growing concern about resource depletion and environmental degradation. Active citizen participation is the hallmark of a well-functioning democracy and must be viewed as an opportunity for creative action rather than as an obstacle to progress.

Citizen opposition often appears to focus on the highway program. This is perhaps because it is highly visible, well-funded, and has affected most neighborhoods throughout the country, particularly since the beginning of Interstate Highway construction. Highways, if poorly planned or constructed, can be hazardous to safety, disruptive to communities, wasteful of resources, and environmentally damaging. To put matters into their proper perspective, however, we must point out that the number of citizen groups and the volume of mail favoring road improvements far outweigh those opposing highways, and this is true even in our 2 large metropolitan areas.

## FUNCTIONS OF CITIZEN PARTICIPATION

Citizen participation is intended to ensure that public decisions will reflect the values, needs, and priorities of those affected by those decisions. To achieve this, citizens and public officials must assume certain responsibilities. Citizens must be willing to devote time and energy to become acquainted with issues, to communicate their views to public officials, and often to act as a channel of communication between the public official and the community. Public officials must be willing to listen to the citizens and allow them free access to information, adequate and continuing commitment of resources, impartial technical aid, and an opportunity to influence decisions.

Citizens can be empowered neither to make final decisions concerning public courses of action nor to veto final decisions. These are prerogatives of the elected official and his authorized representatives. Of course, the citizen has the ultimate power through the ballot box to replace the elected official, and it is the wise official who keeps close touch with his constituents.

Citizen groups must be given the opportunity to express their views on the whole range of alternatives and factors considered throughout the transportation planning process: the establishment of regional or statewide goals and objectives and policy positions; the formulation of future land use, demographic and socioeconomic forecasts and projections; the development of alternative transportation systems, modal mixes, and resource allocation; the selection of recommended area-wide or statewide systems; and the project planning phases including the evaluation of alternative project locations, design types, and scales of design. It should be recognized that merely granting an opportunity to citizens to become involved in decision-making will satisfy many of their frustrations and feelings of powerlessness and may not always result in plans substantially different from what they would have looked like had no participation been allowed to take place.

To be systematic, citizen participation must satisfy the needs, wants, and priorities of a variety of interest groups. Groups and individuals can be classified according to interest: (a) those who want to be kept informed, (b) those who want to control events, and (c) those who have very little interest in community affairs and who will remain aloof unless their very personal concerns are likely to be affected.

Groups or communities can also be categorized according to function: (a) those whose homes and businesses will be displaced; (b) those whose homes and businesses will remain adjacent to the proposed facility; (c) those who live or work within neighborhoods and areas close to the proposed facility; (d) those who live or work within municipalities close to the proposed facility; (e) those who live or work within public service districts affected by the proposed facility; (f) county-wide or metropolitan organizations, their constituents, and potential users of the facility; (g) regional and statewide organizations and policy interests; and (h) national organizations and policy interests. There is obviously an overlap of interests in these interest groups. The overlap reflects the fact that individuals and groups do have a number of roles and perspectives in relation to project impacts. An individual may have an entirely different evaluation of a project depending on whether his home or business is to be displaced.

## STRATEGIES FOR CITIZEN PARTICIPATION

If the needs of different groups are to be satisfied, a wide range of potential impacts must be evaluated, corresponding to the interests of these various groups. This range of impacts includes site, neighborhood, community, regional, state, or national effects. Potential environmental impacts that must be evaluated according to a range of interests are as follows:

1. Displacement or the taking of residential properties, businesses, other institutional properties, recreational land, cultural and historical landmarks, wildlife and waterfowl refuges, open space land, agricultural areas, and unique aesthetic features;
2. Effects on adjoining or nearby areas that result in changes in noise levels, micro-scale air quality, aesthetic qualities, neighborhood cohesion, accessibility to community facilities (schools, churches, shopping, medical care), availability of public utility and protection services, local land use patterns, property values, geologic patterns, hydrographic patterns, patterns of vegetation, and patterns of animal nesting, breeding, and migration; and
3. Community-wide or regional effects that result in changes in mesoscale and macroscale air quality, patterns and intensity of land use, employment opportunities, cultural opportunities, recreational opportunities, housing opportunities, commercial activity, industrial activity, resource conservation or development, tax base, and national defense.

A range of community participation strategies can be formulated in order to provide the appropriate community interest group with the appropriate opportunity to interact with the planning process. A list of 27 possible community interaction strategies are given in Table 1; these are all contained in the Highway Action Plan of the Pennsylvania Department of Transportation.

The department employs the Pennsylvania Transportation Advisory Committee in formulating its broad policies with regard to transportation issues. This 30-member group, established by state law, is composed of key cabinet officials and legislators and representatives of the transportation industry, labor, and universities. Although it does not represent the lay community at large, it does represent those established groups that are knowledgeable about and active in transportation, legislative, and governmental affairs.

The Highway Action Plan also calls for the creation of 1 statewide and 10 regional transportation advisory councils to be composed of planning and transportation operating officials and citizens. These advisory councils will assist the department in its current preparation of a 1995 statewide highway plan and a 1995 statewide aviation plan and in its future preparation of a statewide railroad plan. The concept evolved from our present experience with already established statewide and regional aviation advisory committees. Numbering several hundred members now, it seems obvious that, by the addition of representatives from highway, trucking, busing, and railroading industries and agencies, the aviation committees can become transportation councils, permanently established for continuing activity in all aspects of transportation planning (Fig. 1).

Citizen participation in the department's urban transportation process is derived largely through public information programs consisting of newsletters, press releases, technical reports, and summary brochures; through open and well-publicized meetings of technical and policy committees; through public meetings now scheduled prior to major plan adoption or plan revision and (with the adoption of the department's action plan) to be scheduled annually prior to plan recertification; and through citizen advisory committees largely representing existing community groups having a wide range of interests. Such citizen participation is intended to monitor, review, comment, and influence both policy and staff activities.

Citizen advisory committees are given the opportunity to review and discuss with staff and policy groups the setting of goals and objectives; the adoption of work programs for the planning process; the formulation and adoption of socioeconomic land use and demographic projections; the identification of community and transportation needs,

wants, and priorities; the formulation of alternative solutions; the development of evaluation techniques and processes used to analyze alternative solutions; and the selection of final plans and programs. Policy issues such as resource allocation among modes, geographic areas, and functional classification are also subject to citizen comment and review through statewide and regional advisory councils.

As mentioned previously, citizen participation must address both policy and technical issues. Initially, community groups focus their attention on policy issues such as resource allocation; identification of needs, wants, and priorities; and formulation of work programs. Depending on their composition and the length of time they have been functioning, citizen groups increasingly become involved in technical issues such as alternative transportation solutions, modal split, cost estimating, and environmental impact predictions and evaluations. Initially, citizen groups, particularly those with little background and experience in transportation planning affairs, can be used to best advantage by expressing community values, problems, and aspirations. Citizens with relatively little planning experience can also often adequately evaluate and express the perceived impacts of proposed alternative courses of action on themselves and on the community at large but cannot be relied on to actually formulate alternative solutions; the latter often is a task that is best left to the technicians.

In systems planning, resistance to active citizen participation on a regional level is often expressed by local, city, and county elected officials who feel this to be an intrusion into their own more localized citizen participation efforts. In systems planning, use of citizen representatives from existing local groups would at least reduce duplication of effort but may not entirely placate the concerned local official.

Most local elected officials believe, I think, that the concept is good—that it is important to have avenues through which citizens can express their opinions and interests. At the same time, they have concern that citizens will attempt to reduce the official's final decision-making responsibility. They also have reservations about the ability of citizen groups to run their own programs. There often exists a problem of getting democratically determined citizen leadership, and some community groups are often viewed by officials as clique-dominated and concerned with raising issues to justify their own existence.

The state official, on the other hand, may view the local official's relation with citizens with something less than admiration. The state official, being somewhat removed from the locally generated special interest pressures, is often more committed to citizen participation as a constructive means of achieving better decisions. He may sometimes witness a local elected official surrender to the views of a noisy local minority where he had reason to hope for a courageous stand in favor of the greater overall benefit of the community or region. At times, the local official will take one position in front of a noisy minority and express a completely opposite private view to the state official. Although a commitment to citizen participation is clearly required by all responsible public officials, they must base their final decisions on equitable and balanced consideration of the needs of all interests—the user and the nonuser, those immediately affected, the broader community needs, and ultimately the needs of the region, state, and nation.

Citizen advisory committees can be multifunctional and consist of representatives of citizen groups with a variety of constituents and points of view. We have found that in large metropolitan areas it is best to form several separate citizen advisory groups according to individual points of view. In a large area where there is a substantial minority population, it is almost always best to have a separate low-income and minority advisory committee because of unique characteristics and mode of operation. Sometimes it is also best to have separate citizen advisory committees involved with environment, transportation, and perhaps housing and to attempt to orchestrate the separate groups by having representatives from them meet with each other frequently to formulate coordinated positions.

In the small urban areas and for project planning, a single advisory group whose members have a range of interests and constituencies would seem to be desirable.

It is our standard practice, except in Philadelphia and Pittsburgh, to establish a single citizens advisory committee composed of low-income and minority groups as

well as representatives of broad interest groups. Such committees typically are appointed by the local elected officials constituting the coordinating committees to whom they report (Fig. 2) and have from 10 to 30 members. We find that this arrangement is workable, although, because the importance of such committees has not been stressed in the past, there have been many notable failures and few successes in terms of committee impacts on the transportation planning process.

Until fairly recently, active citizen participation during area-wide systems planning was seen to be extremely difficult and of doubtful value because it was thought that citizens were largely interested in imminent projects that would have a direct impact on their lives and property. However, it is becoming increasingly apparent that a growing proportion of citizens who want to be involved in transportation planning are concerned primarily about neighborhood, community, and regional values and needs rather than specific project impacts on their direct lives. As a result, citizen participation during systems planning is becoming a more promising area for participation and negotiation. It is clear that participation at this early stage of planning has substantial advantages because this is where basic values, needs, and area-wide solutions are being formulated. It is also here that the greatest flexibility exists for trade-offs and basic decisions are made concerning future land use, relations between land use and transportation, and mixes of transportation modes.

Generally, however, group interests are not now focused on systems planning, and citizen groups are often not organized at the regional level and do not understand systems planning, techniques, procedures, and potentialities. Group spokesmen need to be identified, educated, and cultivated in order to achieve sustained interest at the state or regional systems planning stages where broad and early issues can be resolved.

The Highway Action Plan of the Pennsylvania Department of Transportation proposes a new preproject planning phase called subarea planning, which spans the long-range area-wide planning on the one hand and more detailed project planning on the other. Subarea planning is defined as comprehensive transportation planning that focuses on a sector or logical subarea of a major metropolitan area and proposes those actions that need to be taken during a 10- to 15-year period. Such a planning process would probably be most appropriate only in Pennsylvania's major metropolitan areas of Philadelphia and Pittsburgh. We expect that subarea planning will be found to be the best scale for analysis and evaluation of environmental and social impacts; for detailed development, testing, and evaluation of alternatives; and for negotiating trade-offs with community groups and elected officials. At present, systems planning in both Philadelphia and Pittsburgh involves some subarea planning activities in which separate community groups in selected subareas are being involved in order to evaluate needs, proposals, and impacts of proposed courses of action. This is an innovation that we believe will substantially increase the effectiveness of decision-making with the full involvement of the citizens.

Citizen participation for detailed location and design planning activities will occur largely at mandated public hearings and through informal prehearing meetings with interested citizens and local elected officials. Current department policy requires district engineers to publicize through mailings and newspaper advertisements the beginning of corridor location and design location studies so that the public at large and selected individuals and groups who have registered an interest can express their views at the outset of the study and can request further, similar meetings during subsequent stages. These informal efforts have not been totally successful, and generally a light public response has been encountered. It is believed, however, that with the initiation of more thorough and systematic attempts at prehearing public participation, as discussed toward the end of this paper, more success will be achieved.

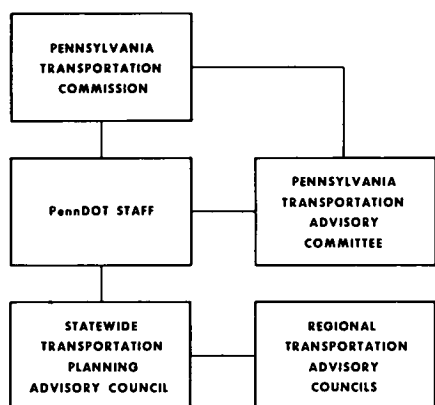
Public hearings have been characterized by general opposition to individual projects by those whose property will be displaced or by those who believe their adjacent properties will be adversely affected by the highway. These opponents often question the need for the improvement and the proposed location and design. Opposition from persons to be displaced or persons who will be adversely affected can be expected to continue into the future. Two logical ways of ameliorating these difficulties are to provide full and generous compensation to those who will be directly affected and to locate and



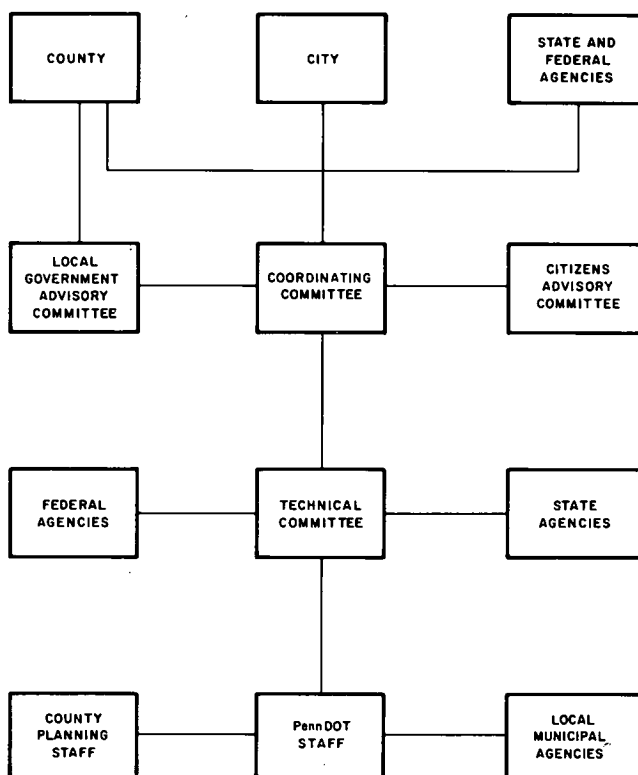
**Table 1. Community interaction strategies.**

Method	Effective Areas		
	Transportation Department Learns About Community	Community Learns About Transportation Department	Community and Department Work Together
Public hearings	X	X	
Large public meetings	X	X	
Small group meetings	X	X	X
Program before civic groups	X	X	
Panel discussions with development and conservation groups	X	X	
Presentation to elected officials	X	X	
Interagency staff charettes	X	X	X
Workshops with local agencies and neighborhood representatives	X	X	X
Community advisory committee	X	X	X
Transportation department staff assigned to neighborhood council	X	X	X
Programs before PTA and students		X	
Participant observer field studies	X		
Sample surveys and opinion polls	X		
In-Depth interviews with community leaders	X		
Central information offices		X	
Local information offices	X	X	
Mobile information offices	X	X	
Press releases		X	
Monitoring local news media	X		
Newsletters		X	
Essay and design contests		X	X
Map showings and model displays	X	X	
Unofficial preference polls	X		
Formal referenda	X		
Hiring planning advocates	X	X	X
Hiring ombudsmen		X	X
Hiring local residents	X	X	X

**Figure 1. Organization of statewide transportation studies.**



**Figure 2. Organization of urban transportation studies.**



design projects that have reduced adverse impacts. The possibility of providing consequential damages to persons indirectly affected by highway improvements should be seriously explored. In addition, the early involvement of citizen groups during pre-project systems planning, it is hoped, will allow an earlier resolution of alternatives and needs so that only more specific issues need to be debated during project planning hearings.

## PAST EXPERIENCE

Let us now review in greater detail some of our more recent experience with citizen participation in systems, subarea, and project planning.

### Large Urban Areas

In the past several years, both the Delaware Valley Regional Planning Commission (DVRPC) and the Southwestern Pennsylvania Regional Planning Commission (SPRPC) using rather different approaches have made significant progress in developing effective citizen participation at the systems and subarea planning levels.

At SPRPC, a single 18-member citizens advisory committee consisting of low-income and minority group representatives spans all functional planning activities, including housing, transportation, recreation, poverty, problems of the elderly, and environmental pollution. Established in July 1970 to permit minority and disadvantaged citizens to participate in the regional planning process, the committee will be an ongoing function of the commission, and it has met at least monthly since then. One of its most active interests has been transportation and transportation planning, especially the relocation of people as a result of highway and transit projects. The transportation department has supported efforts, so far unsuccessful, to grant the chairman a voting seat on the commission.

The committee has influenced the planning work of the commission and has been generally a constructive force throughout. Possibly the key to its success has been that the commission and its staff have not restricted or directed the committee's activities but have, at the same time, worked closely with its members. This cooperative approach is evident, for example, in 2 reports, "A Time for Concern: The Status of Elderly and Handicapped in Southwestern Pennsylvania" and "Poverty In Southwestern Pennsylvania," both disseminated as a joint effort of the committee and the commission.

Even so, the commission's citizen participation process is flawed by the fact that it encompasses only citizens from low-income and minority groups rather than from the public at large. It is suggested that majority interests are already adequately represented by "citizen" members of the 33-member SPRPC Board itself. We doubt this. In addition to its low-income and minority membership, we believe that the commission must provide for participation by other broader groups representing the cross section of community interest.

In discussions with SPRPC staff, the concept of a "people bank" was advanced. Although a cross section of people throughout the region randomly selected from census figures might be useful in providing insight into broad community points of view, we are not sure whether having the opinions of the "great silent majority" would be particularly useful for purposes of regional planning. A majority of the public is neither knowledgeable nor interested and therefore will hardly be in a position to render useful service. We believe it is much more useful to have one or more citizen committees composed of representatives of existing citizen coalition groups representing environmental interests, public interests, automobile clubs, transit groups, service clubs, labor unions, chambers of commerce, and similarly concerned organizations. These are the groups that have a sustained interest in the region, that would be most likely to participate actively, and that would be most likely to obstruct plan implementation if not brought into the planning process at an early stage.

At DVRPC, there are currently 3 citizen advisory groups: The 11-county, tri-state Delaware Valley Citizen's Transportation Committee, the Pennjerdel Open Space Committee, and the Regional Citizens' Advisory Committee for Community Improvements. The one last named is, in effect, a low-income and minority group reporting directly to the DVRPC Board and advising it on matters that are primarily central-city oriented. The other 2 advisory committees report to the Highway and Transit Technical Advisory Committees and the Open Space Technical Advisory Committee respectively, and have the option of reporting directly to the DVRPC Board on matters it deems sufficiently urgent.

The Delaware Valley Citizen's Transportation Committee is an independent regional group that has agreed to continually counsel DVRPC in regard to transportation and transportation planning. Its 60 members represent a broad cross section of the public. Although a number of organized interest groups, drawn primarily from local planning bodies, are represented, if anything, we think, the committee probably has too many "just plain citizens." Some highly organized groups have declined to serve because they have a powerful voice even without serving, for example, the Transportation Committee of the Greater Philadelphia Chamber of Commerce and a transportation environmental group. Apparently some organized groups are afraid of losing effectiveness by "submersion" in a consortium of related groups.

This 11-county Transportation Committee is composed largely of interested lay citizens, meets once a week, and suffers from having too much ground to cover and too little time to consider all issues. It does not report problems of lack of understanding of technical issues and regional perspective because members of the Transportation Committee are generally people with a background and understanding of technical issues within their specific field of expertise. However, it reports that it often lacks adequate advance opportunity to review work programs, plans, and program changes that are to be acted on by the board.

Although the committee has occasionally influenced DVRPC decisions, we do not consider that it is a particularly successful committee, and more work should be done to identify the committee's functions and role; its relation to the board, advisory committees, and staff; and its best way to influence policy decisions and staff work.

The DVRPC Regional Citizens' Advisory Committee for Community Improvement, composed only of low-income and minority group representatives, was created by commission resolution April 28, 1971, "to advise DVRPC on matters relating to the goals, problems, and needs of low income areas in the region and the possibilities of directing DVRPC planning efforts toward the development of solutions to such problems and satisfaction of such needs." It consists of 22 representatives appointed by local elected officials on the DVRPC Board from each of the commission's 4 member cities and 8 member counties: 10 from Philadelphia; 1 each from the cities of Trenton, Camden, and Chester; 2 from Montgomery County; and 1 from the other 7 suburban counties. This allocation is in proportion to the number of low-income families in each county and city. The committee's effectiveness is very much enhanced by the fact that DVRPC has assigned a full-time staff member to provide assistance for its organization and management. Like their SPRPC counterparts, committee members are compensated where necessary when attendance at meetings involves loss of wages, baby-sitters, travel expenses, and so forth. (Citizens in large metropolitan regions prefer daytime meetings in the center city. Apparently because of poor transportation and security problems, evening meetings are appropriate only if held in respectable neighborhoods.)

This committee has several problems. Members report that a major initial problem was a lack of understanding by the low-income members of technical issues, a lack of regional perspective and appreciation of the time frame within which regional planning is being done, substantial differences of views and inability to reach consensus, many resignations and changes in membership, and a desire to be involved in immediate-action programs that affect their particular neighborhoods. This suggests that low-income members must be educated to broaden their views toward a longer time frame and a regional need, and at the same time the planning program must encompass certain immediate-action programs to satisfy the needs of citizen members and local elected officials who are obviously much more interested in quick pay-off operations.

The citizen group wants to have a voting membership on the board and full opportunity to express points of view to the board. Formal votes are taken within this low-income committee on particular positions. Staff attends citizen advisory committee meetings, and this is the principal point of contact and point of influence on staff efforts. A problem is that low-income members largely represent their own particular neighborhoods and particular organizations from which they come, but they lack the resources to make liaison with a variety of communities and low-income groups in the region.

To formalize the participation by citizen groups, the DVRPC and SPRPC Boards may well adopt a policy position similar to the one recommended in the transportation department's Highway Action Plan; that is, the boards will take no action on work programs, capital programs, and regional plan adoption and changes without first receiving a report on such activities from its citizen groups or, as a minimum, giving such citizen groups opportunity to comment. That, of course, will require that draft documents and proposed actions be submitted to citizen groups for review and comment well in advance of proposed board action.

So far, the committee has concerned itself with policy issues rather than with technical problems (although at present 2 members are assigned to attend meetings of each individual technical advisory committee to maintain liaison with technical activities). This is why it reports directly to the DVRPC instead of to the Planning Coordinating Committee, which is the multifunctional technical planning arm of the commission. We believe there would be merit in the committee's working more closely with DVRPC staff. Although staff would not be directed by the committee in a policy sense (the direction would necessarily come from the commission), both staff and committee alike, in our view, would benefit from a better understanding of mutual problems.

Both the transportation and the low-income groups consider staff support satisfactory. According to the DVRPC policy, staff services are provided to advisory committees to provide convening support (notices of meetings, taking of minutes) and to provide technical support in the form of explaining technical issues. However, the low-income group has requested training opportunities, workshops, and meetings perhaps more frequently than once a month in order to fully understand and process issues. It is apparent that monthly meetings by lay people cannot always do justice to the complex issues at hand. (An obvious, although difficult, solution is to let citizen advisory groups have the resources to hire and gain the support of independent staff.)

A general problem is that DVRPC's 3 citizen groups do not now have satisfactory cross communications. We have suggested 2 courses of action: (a) At a minimum, the 3 committee chairmen should meet once a month to compare notes and attempt to find a common standpoint on issues of overlapping concerns; and (b) better yet, there should be an overall citizen group council to which each of the 3 committees might appoint 2 or 3 members and whose chairmen might report to the DVRPC on behalf of all. A subcommittee of the board is now working with the low-income and minority citizen group to set forth a position paper on functions, scope of work, relations to the board and staff and technical committees, and reimbursement policy. This suggests a wise course of action generally; that is, as soon as a citizen group has been appointed and formed, it should be left up to that group to set down what it perceives to be its functions, purpose, responsibilities, and authorities, all of which can then be negotiated with the policy group to which it reports.

To sum up, we think the regional citizen advisory committees at both DVRPC and SPRPC need work. They are effective to some extent, but much more could be done. As all concerned recognize, the principal needs are to find more staff time, more money, and more citizens with sustained regional interests.

But regional committees are only part of the job of involving citizens in the Pittsburgh and Philadelphia planning activities. Clearly, both regions have many transportation and general planning problems, involving many crucial social and environmental issues that cannot be handled on a regional, long-range scale. A new planning technique finding increasing support is the refinement of regional planning through comprehensive efforts at a subarea scale and for a shorter time span. To be effective, this technique requires community participation at a more localized scale, closely approximating the geographic coverage of many existing action groups. Both SPRPC and DVRPC are beginning to work with subarea groups.

In Pittsburgh, SPRPC is currently nearing completion of the regional transportation plan. Prior to adoption by the commission, preliminary alternative plans, both for highway and transit, were to be taken to the public for reactions, suggestions, criticisms, and insights into what was or was not "acceptable" to the community at large. The campaign began by inviting public participation through a newsletter entitled "TRANSPORTATION." SPRPC asked citizen groups and individuals to submit suggestions or criticism and set up a transportation information center to handle responses. In September 1972, 2 widely publicized public meetings were held to report on the status of transportation planning and to invite future participation on the part of anyone interested. SPRPC has since formed a transportation planning team that devotes its entire time to citizen involvement in transportation planning. The team has concentrated its attention in the eastern sector of Allegheny County (since this is where most of the problems exist) and so far has held approximately 15 meetings with selected community groups in various sections of the eastern sector.

It is a bit early to assess the effectiveness of this more recent effort, but we do know that more citizen interest and involvement are engendered through SPRPC than through previous efforts. It is gearing its work to provide responses from the technical staff to questions that are raised by the citizen groups. As a result of citizen participation activities, SPRPC has also opened its technical committees to monitoring by any interested citizen groups. There are usually 3 or 4 citizens who attend the technical committee meetings and participate by asking questions and making comments.

Meanwhile, DVRPC has begun preparations to take the lead in the first full-scale subarea study following the transportation department's Highway Action Plan procedures. Since its formal adoption in 1969, the DVRPC regional transportation plan has been recognized as containing a number of controversial, and probably impossible-to-implement, expressway proposals and insufficient transit proposals, the interlocking nature of which require resolution at a subarea study scale. The first such study will involve the southwest sector of the Philadelphia region that has a population of nearly half a million citizens.

DVRPC staff has identified 3 steps needed to generate the type of initial community contact that will establish a sound, continuing dialogue during the entire study: (a) identify individuals and groups to be contacted; (b) contact those individuals to determine the basic nature of their concerns, goals, and needs; and (c) hold meetings to exchange information between community elements and DVRPC staff. A community liaison worker will be employed to undertake these initial contacts.

As the study develops, of course, a formalized study structure will be established. There will be a special subarea citizen group, with open membership, to report to a special technical advisory committee for the subarea. A special subarea technical staff, drawn from DVRPC, the transportation department, the regional transit operating agency, and other staffs, will also work with the technical advisory committee. These groups will then be plugged into the regular DVRPC regional staff and technical advisory committees for technical and, finally, policy decisions (Fig. 3).

### Small Urban Areas

Let us now turn to a small urban area—Harrisburg—and the rather unique experience of the Harrisburg Area Transportation Study (HATS) in involving citizen participation. As in all urbanized area transportation studies in Pennsylvania, the legal agreement that established HATS in 1965 called for the creation of 4 guiding committees: The Coordinating Committee, the Technical Committee, the Local Government Advisory Committee, and the Citizens Advisory Committee. The legal agreement said simply:

The parties hereto agree that, in connection with Phases III and IV, plan adoption and continuing planning, it is desirable to provide for local understanding of the matters involved in those phases by the creation of a Transportation Study Citizens Advisory Committee. Excluding only the Department, the parties to this agreement, acting together, shall establish such a Committee. It is further agreed that the Citizens Advisory Committee may elect its own chairman, and such

other officers as it may deem appropriate. The Committee may communicate its various opinions and recommendations with respect to the Study to the parties creating the Committee and to the Coordinating Committee. The Coordinating Committee shall notify the parties hereto, other than the Departments, of the appropriate time for creation of a Citizens Advisory Committee.

Between 1965 and the summer of 1971, when study staff was ready to present its first cut at a recommended area-wide highway plan for 1990, the Coordinating, Technical, and Local Government Advisory committees had met more than 95 times, but the Citizens Advisory Committee had not met at all because it had not yet been appointed by the responsible elected officials. Not until late spring of 1972 was that committee, in fact, formed, and not until midsummer could it be considered effective, well after the Technical Committee (at least) had agreed on the major components of the plan that was eventually adopted by the Coordinating Committee.

How did this happen?

First, the elected officials responsible for establishing the committee did not seem at first to consider its formation important. By the time they did, they began to view its role with some apprehension and felt that their appointments would be considered politically sensitive. Considerable delay was experienced while it was decided that the mayor of Harrisburg and the chairmen of the county commissions of Dauphin and Cumberland counties would each appoint 2 residents of their respective jurisdictions and that this 6-appointee nucleus committee would then appoint additional members at its own discretion.

Second, there was a concurrent need for the Tri-County Regional Planning Commission to create a regional citizen advisory committee whose interest would span all planning functions (not just transportation) for its entire 3-county area (rather than just the 171-square-mile transportation study area). There was merit to making common membership appointments, but the mechanics failed and, further, time was lost.

By early spring of 1972, then, we were still waiting action by the responsible public officials. In some frustration, we decided to take the preliminary recommended plan to the citizens at large by way of a public meeting in the New England town meeting tradition. As it happened, the first HATS public meeting and the creation of the Citizens Advisory Committee were practically concurrent.

The time and place for the public meeting were duly advertised in the Harrisburg newspapers by paid advertisements and on radio and television by public service announcements. An evening meeting required a large auditorium where there was convenient parking and transit service. The transportation department staff passed out programs and background materials as attendees entered and served as ushers and microphone attendants. The program provided for an hour's formal presentation of the preliminary plan and an open-ended question-answer session. Fewer than 50 citizens attended, and we were all greatly disappointed, even though we felt the presentation and the mechanics of the meeting had been professionally handled.

Meanwhile, the Citizens Advisory Committee had just been formed. At the organizational meeting, the initial appointees were told that they should elect a chairman and a secretary, create bylaws, make additional appointments, and then proceed with formulating a position on the preliminary recommended plan, including commentary on the advantages and disadvantages on a project-by-project basis. The appointees were advised that, although the transportation department was pledged to review and consider committee positions, the committee's influence would largely reflect its own degree of interest, energy, rationality, and persuasiveness. Even though the transportation department was to furnish informational material and staff assistance as required, the committee was still very much on its own.

Since then, the committee has grown to 31 members and in frequent meetings has taken the following major actions: approved the recommended plan, approved the plan priorities, approved the work program for the long-range transit study about to get under way, approved a work program for a bikeway planning effort, and reviewed and commented on a variety of plan-related reports. Attendance has been good, and it is felt that most members have maintained interest out of concern for what happens to the region rather than for what happens in their own backyards.

In short, the HATS Citizens Advisory Committee is by far the most successful of all our urbanized area citizens advisory committees, even including those in Pittsburgh and Philadelphia. I think this may be true because high-level transportation department officials were able to attend most of the meetings personally and to provide a kind of sideline policy-oriented leadership normally impossible for central office planning staff at more distant urbanized areas.

The controversial part of the action, however, followed from the first public forum meeting. We had planned only one such meeting to which residents of all parts of our study area would be attracted. We quickly found out, after that first meeting, that residents of particular communities wanted their own public meetings. Many people said, "We are not part of the Harrisburg metropolitan area. We are from Mechanicsburg (or wherever)."

So we ended up with a series of public meetings in 7 municipalities with a total attendance of several thousand. None of the subsequent meetings was formally publicized. Attendance was spurred by community-oriented word-of-mouth campaigns, and that was something else we learned: There is no substitute for getting civic organizations, churches, and school boards personally interested in a problem. When that happens, advertising a meeting appears to be unnecessary. From those meetings, some of them very unruly, we found out quickly that we were in the middle of a minefield. It was clear that citizens had strong feelings about highway improvements.

1. Citizens by the thousands simply rejected any highway improvement that would bring more traffic into or through their community, even where they were not personally impacted. They cited air and noise pollution, school crossing safety problems, community division effects, property taking, and other problems.

2. Other citizens, perhaps counted in the hundreds, objected most vigorously to any proposal that threatened to impact their own properties. They did so even though we explained (a) that the plan was a "corridor plan" in which we had identified broad, major travel corridors within which somewhere, eventually, a major transportation improvement would be needed, but that subsequent studies would be needed to specify actual centerlines; (b) that any particular improvement project would require the preparation of an approved environmental impact statement; and (c) that any particular project would have to be programmed by the Pennsylvania Transportation Commission and budgeted by the Pennsylvania General Assembly. To this explanation, some citizens even said, "Yes, we understand all that, but approval of your corridor plan is one step closer to taking our property, and we oppose it!" This revealed one important fact: Public trust has eroded to the point that citizens often no longer accept broad plans on the basis that further details will be left for subsequent planning stages.

3. At least one well-organized group, the Citizens for a Balanced Transportation System for the Harrisburg Area, adamantly opposed any highway improvements as being inefficient, unwanted, and environmentally deleterious and was actively pursuing every available means at its disposal to stop approval of any area-wide highway plan. Their principal arguments were that federal guidelines required the concurrent preparation of transit alternatives in highway plan preparation and that an environmental impact statement must be prepared for an area-wide highway plan before its approval, neither of which they said had been done. We argued that adequate consideration had been given to transit (and that in any case the results of an area-wide transit study started in mid-summer would be used subsequently to modify the highway plan) and that an environmental impact statement simply was not required for master planning activities.

One of our responses was to conduct intensive prefeasibility studies of 3 major problem corridors; we met throughout those studies with representative groups from the affected communities. This effort cost \$50,000, took 3 months, involved at least another 20 community meetings, and "solved" half of our problem of finding acceptable alternatives to the objectionable portions of the area-wide plan. Two communities agreed with alternatives presented; 2 other communities still objected to every alternative presented.

We consider those prefeasibility studies fairly imaginative. Although they were not subarea or sector studies such as will be used in Philadelphia and Pittsburgh, they in-

involved alternatives within fairly broad corridors, and they considered community disruption and environmental impacts as well as traditional engineering cost-benefit studies. Even so, they stopped short of being completed corridor studies, and they would not satisfy the public hearing requirements for those kinds of studies in that, although they identified at least one feasible and socially and environmentally acceptable alignment, they did not fully analyze all alternative alignments and did not identify the preferable one, as corridor location studies are required to do.

After those studies and before approval was sought from the Coordinating Committee, it was necessary to obtain approvals of the recommended plan from the Citizens Advisory Committee, the Local Government Advisory Committee, and the Technical Committee. The "problem areas" for which no solution had been found were simply shaded on a map indicating that further studies would be required. We did not attempt further solutions at that time because the July 1, 1973, deadline for FHWA certification was past, and we could wait no longer to adopt a plan of record.

All of the committees did adopt the plan. It is interesting to speculate, however, whether unanimous Coordinating Committee approval could have been gained with much less citizen participation. In any event, citizen participation led, we believe, to a better plan than the one that would have been prescribed for approval had we not gone through the long and difficult process of seeking community acceptance.

### District Engineering Offices

Although greater citizen participation in systems planning will smooth the way toward public acceptance of particular projects when they reach the mandatory public hearing phase, exclusive reliance cannot be placed on systems planning to achieve this goal. Our district engineering offices also work with the public in a variety of pre-hearing contexts: (a) They discuss potentially controversial projects with local elected officials; (b) they meet with the technical committees of our urban transportation studies at least twice in the course of any corridor study, once at the beginning and once part way through; (c) they place advertisements, with maps of the corridors to be studied, in local newspapers prior to the start of such studies; (d) they attempt to directly contact community groups or community leaders in the affected corridors; and (e) they formulate special task forces where needed to involve community groups in continuing discussion of special problems.

How well does all this work?

There seems to be little consistency of approach among our 11 district offices. Some districts seem to solve many location controversies prior to public hearings. One district claims that it has not even had a request for a public hearing in more than 3 years. By actively seeking out those individuals or groups who can speak for affected communities and by involving them at an early stage, it finds acceptable solutions "out of court." Other districts do not report that experience. We suspect that the district engineers' attitudes and the capability and interest of their location and design staffs may be significant to the success or failure of this approach.

Our experience tends to show, too, that it is difficult to involve the citizenry until some specific action is contemplated. In a corridor study involving several alignments, for example, the level of citizen interest may be slight until it appears that a particular alignment begins to emerge as the preferred one. In some instances, however, almost the reverse is true: Where no preferred alignment has yet emerged, citizens from all of the possible alignment areas may actively seek to prevent any alignment. Obviously, it is difficult to discuss the merits of alternative alignments when citizens are still debating whether a highway is needed in the first place.

A good example of a major prehearing effort in project planning can be found in the activities of the Radnor Interchange Task Force. In an effort to resolve opposition to the location of an interchange between the Mid-County Expressway (I-476) and US-30 in "main-line" suburban Philadelphia, this task force met 17 times officially, met at least 10 times unofficially, and concluded its work by presenting its recommendations at a series of 5 public meetings throughout Radnor Township and vicinity. The task force recommended that the interchange be built.



A part of the regional transportation plan, the interchange was opposed by Radnor Township officials on specific grounds that it would require a large amount of land that would be taken off local tax rolls, would generate increased traffic thus adding to local traffic in the already congested area, and would promote in the immediate area development detrimental to its primarily residential character. The fact that local officials were at the same time actively and successfully soliciting industrial development and expansion in the township was apparently not viewed by them as being incompatible with their position on the interchange.

In late 1970, the Pennsylvania Secretary of Transportation recommended the creation of a task force to study possible alternatives. Shortly, thereafter, the task force was established and consisted of representatives from Radnor Township, Delaware County, DVRPC, and the transportation department. Subsequently, because possible solutions would affect neighboring Lower Merion Township and its parent Montgomery County, representatives from these jurisdictions were added as well. The task force spent more than 2 years studying alternatives and produced a 300-page final report for public distribution.

At the end, the task force agreed 8 to 2 that the interchange should be built (Radnor Township representatives voting against). To date, we have not budgeted the interchange and, because of the long delay already experienced, have requested Federal Highway Administration concurrence in completing the Mid-County Expressway without it (such a decision also reflects certain knowledge of adamant political opposition to the interchange by a state senator who could block budgetary approval). A recent surprising event, however, was the revelation that 7 out of 8 candidates for township commissioner were in favor of the interchange. Should a majority of them be elected this fall, the whole situation could reverse itself. Meanwhile, we are recommending that the final report be processed through the DVRPC advisory committees to the DVRPC Board for the purpose of establishing a DVRPC position.

Despite its outcome, we consider the Radnor Interchange Task Force a successful effort. Through its studies and meetings, everyone concerned now at least has a much broader understanding of the implications of building or not building the interchange, and the final report preserves for future reference the changing attitudes and expectations of the participants. We count on using this approach much more frequently in the future.

Thus, our efforts at involving the public in prehearing project planning have been inconsistent. But more has been gained than lost, and we are encouraged to emphasize more work in this area by district staffs. In our Highway Action Plan, for example, we specifically formalize those activities and require engineering districts consistently to involve the public at every stage of corridor and design study activities (Figs. 4 and 5).

One means of ensuring greater success, I feel, is for the districts to work more closely with the citizen groups involved at the systems planning level. Carry-over and integration of citizen participation at systems and project planning are natural developments that we believe hold much promise. Not only will some of the same citizens or citizen groups be involved but projects can be viewed in a broader context—as part of area-wide systems development rather than as individual projects. Such follow-up is intended by the procedures outlined in our Highway Action Plan.

## CURRENT RESEARCH AND FUTURE PLANS

We should also mention our current research in this subject area. Consulting firms are currently under contract with the department to prepare a manual on citizen participation in transportation planning. It will span participation from systems planning all the way through project construction. Under a second-phase contract, the manual will be implemented in special test cases, and then refinement will be made. (You would be amused at our extended consideration of the best way to establish citizen participation in this study of citizen participation!)

One of the most difficult aspects of citizen participation is the frequency of change in citizen values, citizen leadership, elected leadership, and legal requirements. All

Figure 3. Committee structure of subarea study.

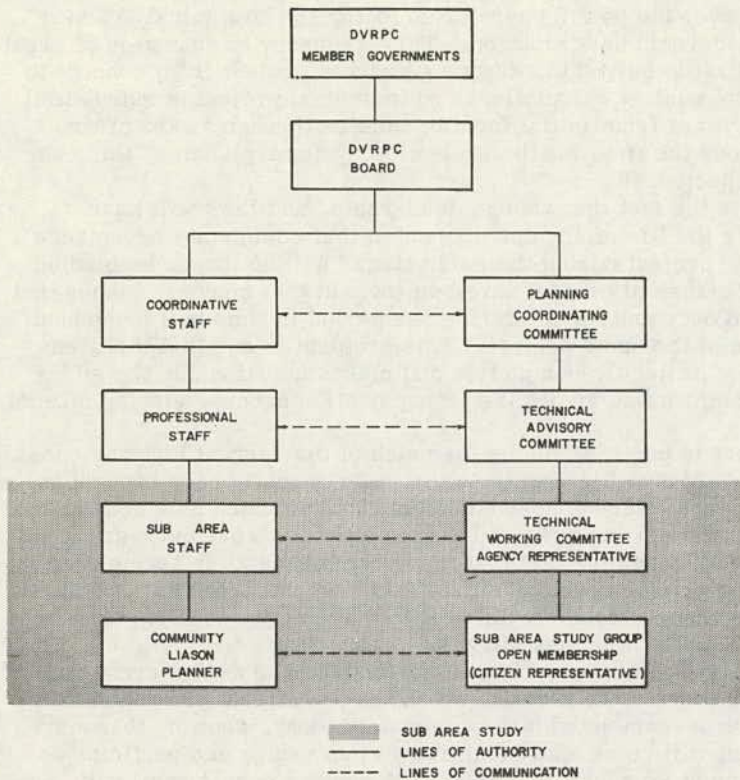


Figure 4. Structure of corridor location study.

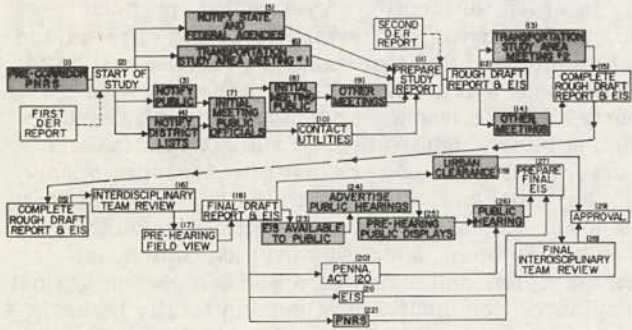
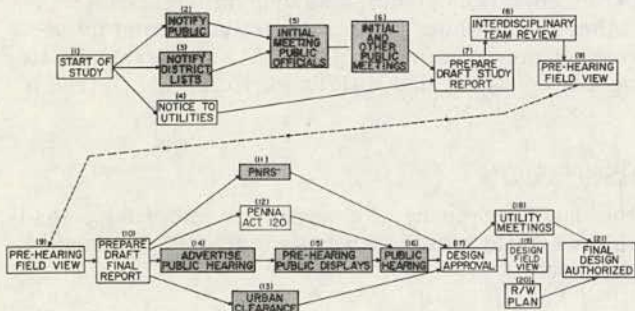


Figure 5. Structure of design location study.



of us need only to look back over the past 5 years or so to realize how quickly values, requirements, and public leadership have changed. This frequency of change is at great variance with the long lead time required to advance a highway project from concept to construction. According to our latest calculations, an individual project of substantial proportion requires about 7 years from initial location studies through award of construction contracts. If one adds the time for the area-wide systems planning, this can become a 12-year gestation period.

What is most perplexing is the fact that values, leadership, and laws will have changed several times during the life of any one project so that community acceptance and legal compliance with the project during the early stages will no longer be binding or effective during the later stages of project development. In this manner, issues that appear to have been resolved once and for all during one period in time will be opened up again later during the life of the same project. This problem is one that threatens our ability to bring any major project to completion and makes questionable the effectiveness of any negotiated compromise among the transportation agency, elected official, and community groups.

It is this very problem that is partly to blame for much of the current highway controversy and court litigation. Many of the projects that have recently been brought to the design and construction stages were conceived and planned as much as a decade ago when values, guidelines, legal requirements, and citizen attitudes were quite different. Considering bureaucratic inertia and the fact that many commitments in terms of design, property takings, and private development actions have occurred as a result of these planned projects, it becomes extremely difficult to make major location or design changes during the latter project development stages.

In light of the mismatch between the project decision-making and design cycle and the public value and leadership cycle, is it really worth the investment of so much time and effort to reach a common agreement with the community today, knowing that more than likely such an agreement will come apart tomorrow when values and participants have changed? The answer must be a qualified yes. Although we cannot know with certainty how successful our citizen participation programs will be in the future, one thing is certain: Without such participation, we will be confronted with even more opposition and litigation than we are today.

Certainly our Highway Action Plan, in which we identify a systematic approach toward evaluating environmental, social, and economic factors and involving citizens and local elected officials in the conduct of studies and decision-making process, will be of substantial help. Hope for new legislation that will allow joint and multiple use of rights-of-way and acquisition of property well in advance of construction will also help. Advance acquisition will help in protecting future rights-of-way from speculation and encroachment by development. It is the lack of these powers that often results in substantial disruption when our slowly moving process finally gets to the construction stage.

Finally, there is a great need to empower states and regions to influence land use decisions of regional or state significance. So often, a highway project, which was sensible in its early concept, becomes disruptive and controversial when viewed against the adopted land use plan because of unplanned community development totally inconsistent with the adopted plan. More effective land use controls would avoid future problem of this kind.

We are optimistic that, with greater effort and a true commitment to working with citizens and to regaining public trust and confidence, successful programs can be achieved. It is not enough that we in transportation agencies have good intentions to work with citizens. Citizens and all others with whom we work must have good intentions, too, so that mutual trust and respect may continue to grow. As we develop better procedures to allow this to happen, we are confident that citizen participation in transportation planning can and will work.

## INFORMAL DISCUSSION

LARRABEE: You mentioned the problem of frequency of change in membership, leadership, values, and so on. What should we build into the process to provide continuity that will offset the changes that you point out?

**KINSTLINGER:** I would rather work at it from the other end and effect changes that will allow our planning cycle to be expedited, and I think perhaps cutting federal red tape might be effective in that regard. I am not sure we can massage the other end of the scale. That is the democratic process. People are entitled to change elected officials and change community leaders as they will. I think we are moving into the era of future shock; I think that values and the real-life situations are going to change with increasing rapidity. That is the nature of our society, and I am not sure we can do anything about that.

One thing that does occur to me and was touched on briefly in the paper is that we should get away from the quick-changing ad hoc type of committee structure. Until fairly recently, a group was formed for a particular project; and, if there was another project, another group would be formed, and so on. There was no continuity. We think that an area-wide, continuing citizen group will lend some continuity and will make it easier for the citizens to be familiar with the entire history of the planning process, the reasons certain improvements are needed, and the alternatives that were evaluated. They will get the broad perspective and act as an umbrella over all citizen activity. I think that continuing area-wide citizen participation to supplement the ad hoc project participation would be quite useful.

**KISH:** We are dealing with a lot of problems that bring about citizen opposition to projects. One of the key problems is relocation. Will you address that? My second question relates to an area that you may not want to get into. Rather than a matter of citizen participation or pro or con as far as the project is concerned, is it not more a matter of one position being taken by regional politicians and another position being taken by city politicians that contributes to the holding up of plans?

**KINSTLINGER:** I did address relocation briefly, and obviously there are some solutions: Build as few new major facilities as possible, try to improve the efficiency of existing facilities, or influence land use and travel habits so that travel demand is minimized. Until fairly recently, we always allowed travel demand to be an independent variable, and we tried to meet the demand by building more and more facilities. We really need to apply incentives on the one hand and disincentives on the other hand so that people travel less, trip length is shortened, peaking is reduced thereby, and more efficient modes of transportation are utilized.

There will always be a need to relocate some, and full compensation is obviously a solution. No one should bear a disproportionate share of the cost of the project; and, therefore, the full cost of being relocated must be compensated. This requires probably broadening of the law so that even those people who are left adjacent to an area and who ought to be compensated will be. We ought to be allowed to exercise excess condemnation beyond the right-of-way simply for the purpose of relocating people otherwise adversely affected.

As far as the problem of disagreement among citizen groups and elected officials, that problem has been with us and probably will increase. That is the nature of politics, of course. Perhaps if we got stronger levels of leadership, that would help.

**WILLEKE:** I would like to challenge the view that changing citizen values are responsible for the conflict that you and other speakers have indicated. I certainly agree that public values are changing, but I also question whether this agreement with communities has ever occurred. I would say that it has not. There is no consensus in the community that the particular project is in accord with the goals and was well planned initially. The process was too closed in the past. A large percentage of the public was not aware of what was happening until very late stages, and only very recently has an opening taken place.

**KINSTLINGER:** I think your statement is partly true. I do not think, though, that a deliberate attempt was made by public officials to push something over on the citizens. Until recently most citizens were disinterested. Only recently have a substantial number of groups developed a social conscience. There are now citizen groups concerned about the community, about values, about environmental and resource problems; those groups simply did not exist 5 years ago. By and large, these are relatively new con-

stituencies that were not around then; therefore, dealing with these groups and accommodating their wishes was something not necessary 5 or 10 years ago.

WILLEKE: According to the study developed by Altshuler, the San Francisco freeway revolt had its origins in the 50s, and that pattern was repeated in many cities. Here we have 20 years involved. I think you can find its roots even farther back than that. Would you say this is recent, within the past 5 years?

ANDERSON: With regard to the recent interest of citizens in transportation planning, I suggest that perhaps there may be a correlation between the transportation plans that now include some of the more affluent and wealthier neighborhoods and those of past years that involved areas where people had no political clout. While a number of people have witnessed successful opposition to plans in which they had no input, they have adopted methods of their own. Did you say that in some instances you have citizen advisory committees restricted to nonwhites?

KINSTLINGER: The formally constituted Citizens' Advisory Committee in Pittsburgh comprises exclusively representatives of black and poor groups.

ANDERSON: Are there whites in that group?

KINSTLINGER: Yes.

ANDERSON: In many instances nonwhite communities in large urban areas are so poorly served by public transportation that individuals travel in their private cars and also transport other people from one destination to another. I have witnessed this new transit facility in operation, and it has been done with the acquiescence of those in city government as well as those that represent the transit authority. I wonder whether you have an opinion on that type of transport facility?

KINSTLINGER: I know that such services operate in a number of major cities, primarily in the ghetto areas, for a number of reasons: Public transportation is not adequate, there are security problems, and sometimes private cabs are reluctant to enter those areas. That this service is being provided suggests that there is a transportation need. Demand-actuated public transportation is one way to meet that need. Probably increasing the number of taxicabs and regulating their costs is another. That demand does exist and has not been considered in the planning process. We tend to look at the major formal types of operations, and this is one of those informal ones that we are not sensitive to. Citizen advisory groups—particularly from minorities—will help bring these problems to our attention, and that is one of the reasons for having those groups.

SMITH: You seem to draw the distinction between people who are on advisory commissions and people who are ordinary citizens. You said that some of these groups suffered from having too many ordinary citizens on them. Will you elaborate on what you consider to be the distinction between them?

KINSTLINGER: The distinction is between the individual who represents only himself and the individual who represents a group. I have no great problem in having a limited number of individuals representing only themselves, but often a citizen group has to be limited in total number to be effective. It is preferable, therefore, that each individual represent more than merely his own point of view. If most individuals represent groups, then 30 people on the committee would represent many more than 30 points of view. That is why we seek to have our committees consist of representative groups rather than simply individuals who come in and represent only themselves.

McMANUS: I am executive director of a project called "Choices for '76," which is a series of television town meetings that were held in the New York area and were sponsored by the Regional Planning Association. We were concerned with the problem of how to give opportunities to be heard not just to those who are well organized and have been thinking about these problems for some years but to the broader public so that there can be wider input and particularly new possibilities for dealing with some of these issues. What we have attempted to do is to pose the basic choices that face the region in a series of television programs in which we pose 8 or 10 concrete choices on what might be done and attempt to show pros and cons of these choices. We published a book

that presented the issues in more detail than we could present on television. We convinced all the stations in the New York area (19 of them between New Haven and Trenton) to broadcast the programs. We got the newspapers to publish ballots that the people could mail in and tried to organize people to participate, not just the League of Women Voters but school children, minority groups, and corporations. The corporations actually helped us organize their employees to watch the television programs so that they could be heard on not just whether we ought to build more highways but what ought to be done if we are to become more dependent on public transportation and how ought we to subsidize it.

It seems to me that the federal government ought to encourage, with Department of Transportation funds as seed money, the packaging of the basic information or the options and alternatives for presentation to the people through the mass media. The response of the people would give a broader basis and help avoid the problem that you alluded to of not knowing whether to count this person as an individual or as someone more significant because he has an organization behind him. Besides, an organization rarely allows an individual to speak for it.

We have had about 30,000 or 35,000 people send in ballots in response to our transportation program. This is not necessarily a mandate for political leadership one way or the other. Most ballots come from better educated people and from somewhat higher income people. But we are willing to look at how different income groups voted. On two-thirds of the issues regardless of age, income, or anything else, there is a surprising consensus of what ought to be done. Getting that kind of consensus seems unlikely to take place with the rather limited approach to citizen participation that I heard about in this conference; that is, we ought to form a committee and have a committee deal with this. Unless there is a much more aggressive attempt not just to provide an opportunity for people to come in but to hear the options explained and then to be listened to as they respond, I do not think we will get out of this suspicious relation that exists between citizen and government agencies in most of the cities of this country.

KINSTLINGER: I must apologize if I did not get across that all of our systems planning is multimodal. We do develop transit plans. The mix of plans is one of the issues we seek participation in from the public. My background is not in highways. My agency does plan transit, although we are only authorized to build highways, and transit construction and operations is a local responsibility.

I am acquainted with the efforts you mention. It points us all, perhaps, in the right direction. The Regional Planning Association is traditionally 10 to 15 years ahead of other planning operations in the country, although we hope that we will not stay that many years behind. What you are suggesting is a much more vigorous attempt of going to the communities and soliciting support and trying to involve people, and I think television is an excellent medium for doing that. We have to take one step at a time. You are a privately endowed group, and perhaps you can move faster. What we have suggested is a step forward, and perhaps the next step will be something more the kind of thing you do.

# CITIZEN PARTICIPATION IN A RURAL STATE

*DAVID H. STEVENS*  
*Commissioner*  
*Maine Department of Transportation*

During the years I have found myself attending national meetings of one sort or another and defending and explaining the problems that exist in what I call the 35 rural states in this country. I have not had complete success in some of these efforts because most of our activities today in the transportation field seem to be tuned to the problems that exist in urban areas. I do not know whether I will have much success here in attempting to discuss some of the activities or lack of activities and problems in my rather small rural state.

First of all, some background: My state geographically speaking is fairly small although compared with other New England states it is fairly large. It is sparsely settled. We have fewer than 1 million people. We have 450 cities, towns, and plantations, and we have only 16 counties (thank the Lord for that!). The counties, of course, have little to do except to elect a sheriff, keep some records, and be politically active. Regarding transportation, we follow the New England type of government, downgrading of counties and upgrading of municipalities and local groups. Interestingly enough, a great section of my state is not organized at all so far as government is concerned. The counties there do act in the form of, or replace, the municipality.

We have two rather substantial urban areas: the Portland area and the Lewiston-Auburn area. We also have about half a dozen cities that are in the 20,000- to 25,000-population group. Most of our local groups and municipalities are in the 2,500-population group. We probably have no more than 10 active local planning groups, and only about half of those have any type of staff at all. Much of the planning has been done in the past by the State Highway Commission, which became the Department of Transportation on July 1, 1972. We now have a state planning office, but it is struggling to exist and is handicapped by lack of funds and a very narrow responsibility from the standpoint of the state statutes and also the governor's charge to that group.

I am giving this background so that others may understand something about a rural state. Many people are unaware that there are such states in this country. Maine also has one other distinction: It is attached to the remainder of the United States by one state only, New Hampshire. I believe that it is the only state in the country that has that distinction. We grab for those crumbs because there are not too many distinctions we can claim.

In this discussion of citizen participation, I am going to be immodest enough to relate the fact that I have been in local and state government for the past 40 years, and my remarks here will reflect some of that experience, I hope. Obviously, because we have so few planning groups (we have only about 3 regional planning groups in the state, all understaffed, underpaid, and underfinanced, of course), we do have some difficulty in using planning groups as a vehicle to secure citizen participation.

I might as well say at the outset that we have great difficulty in securing citizen participation; not that we do not want such participation, but the mechanics are rather difficult to establish. We have made efforts to do this. We have been coached diligently by representatives of the U. S. Department of Transportation as to how to achieve these things. We have had conferences in connection with the so-called Highway Action Plan.

I might also say at the outset I am a little amazed about this Highway Action Plan because I have had occasion to testify before committees of Congress once or twice; and from the testimony that we have given to Congress and from the actions of Congress, it has issued one short paragraph that relates to air pollution, water pollution, and of course citizen participation. But then we have 15 pages of requirements issued by the U. S. Department of Transportation. At the outset I would like to say I am not being critical of the transportation department. I have many friends there and frankly I was there during the conference seeking more money for my little state in connection with highways. But out of the department comes 15 pages of requirements based on one paragraph of the statute passed by Congress. We have to have 35 pages of procedural material in order to implement the 15 pages of requirements.

In Maine, we have some very real doubts as to whether the total of 40, 50, 60, or 100 more pages of procedural material is going to bring about citizen participation. Quite frankly, we feel frustrated when we try to influence a housewife to become terribly interested in highways or transportation when she is probably worrying about whether her son is going to pass the reading course in the fourth or fifth grade or whether she will wax the floor that day or the next day. We followed the advice of the folks that come in to tell us how to do these things and sent out letters to all the folks we could find who might be interested. Of the 1,400 letters we sent out, I think we got 60 replies. The replies we got did not indicate much interest in what we were trying to accomplish.

The other side of the coin, of course, is that we have not been as diligent as we should have been in these matters. But we are motivated by one fundamental fact (if you will pardon another personal reference based on 40 years experience in government): No procedure or no program involving government and governmental funds derived from taxation can succeed very long or continue to any great extent with any success at all without public acceptance. It is a very fundamental, elementary, basic fact.

So, it behooves everyone involved in governmental programs, at least at state and local levels, to attempt to bring about that kind of acceptance. We think we have it in my state. We have periodic tests (this again will indicate to you how poor we are) in that under our constitution we have to go to the people every time we have a bond issue approved by the legislature to finance capital improvements at the state level. Unfortunately, we have had to go every 2 years in connection with our highway program. During the long period of years that we have been going to the people with referenda, we have had only one failure. That was when the legislature got chicken, so to speak, and put 13 bond issues on one ballot. Unfortunately the public mixed them all up, and half of them passed and half of them did not. The highway program was in the half that did not pass. We went out within a matter of 4 months after that with one issue on the ballot, highways, and it passed by 2 to 1. We did this by communicating. We talked to people. We explained what was going on. We got a vote of confidence as the result. We have been getting them ever since.

That in some small way conveys to us at least the public acceptance of our program. Whether or not that is citizen participation, I do not know. We choose to think it is a form of citizen participation.

Let me say something about typical situations involving transportation in my state. First, one has to remember that we have no passenger train service in Maine except one train that goes across the state during the night on the Canadian Pacific Railroad.



We do have rails for freight, of course. Our air service is at best somewhat inadequate. Right now I am trying to convince the Civil Aeronautics Board that it is inadequate but not having much success because we are, of course, in the northeastern part of this country and somewhat isolated. Fundamentally, the principal mode of transportation in my state is and will be highways. We are trying to tell people about highways in order to bring about formalization of citizen participation.

What we are attempting to do in organizing citizen participation is probably doomed to failure because of our sparsely settled areas but, more particularly, because of the nature of my problems as the commissioner of transportation since July 1, 1972. Those problems relate not to citizens' objections to highways or to determining what modes of transportation will suit a particular corridor but citizens pounding the desk and demanding why I do not build more highways.

We do have groups that are interested in curtailing highway construction activities; we have environmental groups, and we try to work with them. I think we have some degree of understanding between each other. We have some folks who would like us to build no more highways under any circumstances, but they are a very, very small minority.

Consequently, our concern in regard to citizen participation perhaps is twofold: One, we do not have it, and we do not know exactly how to get it to the extent that we ought to have it; and, second, we are concerned that, as a result of recent legislation, there are going to be too many federal requirements that will be placed on us as a rural state—requirements that are unnecessary, are undesirable, and will lead to confusion rather than understanding.

I admit that some of these requirements and formal procedures are perhaps necessary for urban states. But the typical highway project in my state perhaps encompasses reconstructing a 2-mile segment of an existing highway along which there are possibly 4 or 5 improved properties including farm property that is probably not farmed too successfully. The public hearing is attended by 15 or 20 individuals, half of whom will be interested in the property that is involved next to the highway. Woe unto us if we try to hold 2 public hearings on that situation because the first one on location, if we are successful at all, will degenerate into a design hearing where everybody there will want to know what will happen to their shade trees or their wells or barn entrances. So we usually have one hearing. But public hearings, as far as I am concerned and based on presiding at several hundred of them in the past few years, are nothing more than documentary evidence that such a hearing has been held.

The folks who get to these hearings are those who have a sincere concern about the effect on their property and probably a few who see no need for such a project at all.

We have taken recognition of this, and we are now doing all of our constructive work (this may be a form of citizen participation) in what we call pre-public-hearing information meetings. We have had a great deal of success from these meetings. We think this is where we do our most valuable work with people. In my state, somehow a formal public hearing with a recorder and notices in newspapers and charts and formalized procedures in which people have to go to microphones to ask questions turns people off. We have more success in sending our right-of-way people and design engineers out to gather around a table informally, explain everything about the project, and chat with the people. Here is where we get the real thoughts of the people who are concerned with this project, and we have changed our designs many times on the basis of those meetings. By the time of the public hearing, the project is well formalized.

Let me emphasize that we have had some success in getting and continuing to get public acceptance for our programs. We do think that we should have communication with people. We are communicating, we think, but not as well as we should perhaps. We are concerned by the extreme formalized procedures and requirements that are now coming from our federal friends regarding how we should prepare documents and shuffle papers in order to get public participation. We think perhaps we are going to spend too much money in that kind of procedure, money that we would like to see placed under the wheels of motorists rather than in developing paperwork.

I walked through the office of our project scheduling group the other day; it has the responsibility for setting up the Highway Action Plan. The person in charge of this

work said, "Do you realize we are going to have to have 144,000 sheets of paper produced in our department in order to implement the action plan?" To me, that seems to be a little bit unnecessary. It seems to me that we can achieve public participation without that kind of documentation. I am sure that there are many who refute that statement, but I persist in thinking that I speak unofficially at least for the 35 rural states in this country who have similar problems to mine.

## INFORMAL DISCUSSION

TAYLOR: Although I do live in the city now, I am from a predominantly rural state and I did grow up in a rural area myself. You have pretty much dismissed the environmental movement out of hand as being of any importance in your state. Are you aware that in many rural states, including mine, the majority of highway controversies are over rural roads?

STEVENS: I am aware of the fact that any highway project is controversial. I come back to the statement I made previously that we attempt to—and I think rather successfully—take care of those controversies in what we call our pre-public-hearing informational meetings. I did state in my remarks that we have our environmental groups, and I also stated we have I think a fairly good relation with those groups. I think they understand what we are attempting to accomplish, and we certainly understand what they have in the way of concerns. We are communicating.

WASHBURN: I come from Massachusetts, only two states away from you. I would like to preface my questions with a short statement. I think I can say that our experience in Massachusetts indicates that transportation controversies are not a phenomenon bound to urban areas. It was in fact in the extreme western part of Massachusetts, the part that borders Vermont and New Hampshire, that citizens did haul the Department of Public Works into court. Rural controversies can reach a degree of polarization that is wasteful and should be made unnecessary by a proper process. I certainly would agree with you that whatever federal suggestions about process are made ought to be flexible enough to recognize that one form of communication is appropriate in communities of one population level and that television and other mass forms of communication are suitable in communities of another population level like New York City.

I am concerned that people who do not have formal statements of the possibilities for involvement in a transportation planning process will not adequately define their interests. What level of involvement do you have in Maine in having citizens help you to define where roads are needed? Certainly citizen groups can be helpful in pushing roads to completion. As you pointed out, people see you and argue for both rail and highway construction. How do you find out which groups you should invite to these informal pre-public-hearing information meetings?

STEVENS: I indicated that we had not been as successful as we would like to be in bringing citizens into the planning process. Frankly, I have to say about the first time we have been able to generate interest on the part of citizen groups was the time we reached the so-called pre-public-hearing information meeting. We also have the problems of our geographical area, sparsely settled areas, and the disinterest of individuals until such time as the project is announced and then their concern about their properties.

Knowing which groups to invite to the meetings is not too difficult because the population in the various communities is usually no more than 2,500 to 5,000. We tell them we are coming on a certain date or whenever it is convenient and ask them to invite the folks from the conservation commission, the planning board, the board of industry, and the chamber of commerce and the folks who own property along the road. So they spread the word around. We issue a news release with a notice that we will be there. The press is sometimes present, sometimes not.

CLARK: I would like to make an observation and then ask a question. The observation is this: I would not be too concerned about your trouble in achieving citizen participation. If you really want it, just propose a road right through the middle of Bangor

or through some fragile ecosystem and you will get it. I think the situation in Maine describes very well that, where there is satisfaction among citizens and where they have trust and confidence in their public officials, then what the officials are doing is acceptable. But if citizens think that their public officials are not giving proper recognition to social or environmental problems caused by highway improvements, then it really does not matter whether there is a system or organization for citizen participation because the officials will hear from the citizens. So if you really want it, just propose those kinds of roads. What I think is important is to allow it when citizens want to participate but not to induce it. If you try to induce it when there is no need for it, it makes people mad. Far more important, I think, is for public officials to adopt the frame of mind that permits them to begin to examine what citizens are saying. In fact, if I were to name this conference I would call it agency participation or responsiveness on the part of agencies to what citizens are saying. Citizens have been speaking for years; their messages have not been heard. We know what they are saying; we are not responding. That is the observation.

Now the question. It is very interesting to compare the populations of Maine and the Washington, D. C., area. If everyone in Maine wanted to get out on your roads, you would have one-third as many people, and the situation would probably be manageable. If everybody in the Washington, D.C., area wanted to get out on our roads, that would be quite another situation. That is just an attempt to illustrate the difference between a rural and a metropolitan area. What position should your rural state have with regard to the position that urban areas are now trying to promote? We want freedom for expenditure of money. Such freedom may not be important to you because you do not consider the need for a large, expensive public transportation system to ever really occur in Maine for the foreseeable future. What is your position with regard to urban areas outside of your state? Do you think you should have any position on that, and do you think that freedom should be given to another state?

STEVENS: What Mr. Clark is speaking about is a possibility of diverting money from the Highway Trust Fund in urban states for use on transit and more specifically on rail commuter transit. I have every sympathy for the Greater Boston area, the Philadelphia area, and all areas where they have commuter rail transit problems. But I also have a very real need to complete the Interstate Highway System in my little state and do it as expeditiously as possible. I also have real problems in my little state with primary and secondary roads that have been sadly neglected in the past 10 years because we concentrated on the Interstate Highway construction. As far as I am concerned, I want that money out of the Highway Trust Fund in my state for highway purposes and furthermore and fundamentally I do not want anything done to the Highway Trust Fund in connection with urban states that jeopardizes the receipt of money in my state for highway purposes.

Now those who advocate diversion of money in the urban states from the Highway Trust Fund for rail transit say to me this will not occur because this is permissive only. But in the next breath they talk about an amendment that will allow those sections of the Interstate System that are highly controversial to be omitted from the system and the money that would normally be used for construction of those controversial sections to be used in turn for rail transit.

Now it does not take me too long, having had 40 years of experience in government, to recognize that during a period of years the needs for urban rail commuter transit will be such that the muscle in Congress will be limited to the point where my state will suffer from the standpoint of the money we will have for highways. I am entirely sympathetic with the need for federal money for urban commuter traffic. As a matter of fact, before both houses of Congress, we recognized this need and advocated money to be appropriated from the federal treasury for this purpose but not from the Highway Trust Fund.

PARSONS: The U. S. Department of Transportation has jurisdiction over sea transportation in Penobscot Bay where there has been a good deal of controversy about tankers coming in to load and unload at refineries that would be built on the mainland. Do you anticipate that there will be considerable citizen participation with respect to that matter?

STEVENS: Yes, and I would like to elaborate. Maine, to my mind and I am prejudiced of course, is a beautiful state. We have many, many things about our state that I personally want to see retained: open spaces, woodlands, mountains, lakes. I am a native of the state of Maine, and the only time I ever departed the state was when I worked 3 years in New York City, which was a very, very bad mistake for me and probably was not too beneficial for New York City.

I believe that in our state we can regulate industry and can retain those things that we cherish. I recognize it has to be done through governmental action, and the state legislature has taken that kind of action. In fact, I think we probably have as many and as far-reaching laws to protect our environment on our statute books as any other state in the country today. Sometimes this gets to be a little annoying to me personally as an administrator because we have to actually get approval from another state agency in order to put some of our projects into effect.

One of the real controversial points, of course, has been oil. We do have probably the best deep water port potential, if they can be developed, of any other place along the Atlantic Coast. But we have some militant environmentalists who think their development is a very horrible thing. Unfortunately, Canada does not take that position. We are right across the bay from Nova Scotia. Several refineries are active today in Nova Scotia and one is now being considered for Eastport right next to Canada. The Canadian people are doing what I would do if I were there: They are finding reasons why they cannot let the tankers through but are at the same time holding out their other hand for that particular refinery. Yes, there will be citizen participation. There has been already in that respect. I think it is good, healthy, and desirable. I do not know whether we will have the good judgment to try to balance our industrial aspirations with our aspirations to retain our environmental "goodies," so to speak. I hope we will have.

# CITIZEN PARTICIPATION AND THE CITIZEN'S VIEWPOINT

*PANKE BRADLEY*  
*Alderman*  
*City of Atlanta, Georgia*

In the 50s and 60s Atlanta became a city of regional and national importance. A strong business economy, a building boom in the central business district (mostly offices, hotels, and convention facilities), the development of the second busiest airport in the United States, and increased access to the central city via 5 limited-access freeways are all cited even now in Atlanta as major indexes of progress. Obviously, those achievements were not without cost.

Primarily because of transportation and airport systems and other public actions, we lost a great deal of our housing stock. We experienced a great deal of neighborhood disruption and dispersal of residents. Other public decisions facilitated white migration to the suburbs and thereby undermined the city's fiscal condition.

In the midst of these developments, whether they are termed progress or otherwise, citizens have increasingly begun to question the growth-serving goals to which the private and public sector seem committed. A coalition of neighborhood groups and individual community organizations are increasingly advancing the goal of improving the quality of life by preserving and upgrading neighborhoods. The citizens are saying that that goal is as important a planning parameter as is the goal of facilitating regional growth through serving the needs of the CBD and making it easily accessible by automobile.

These kinds of different goal formulations have resulted in what I see as the development of two very strong interest groups in the city. One is the Chamber of Commerce, which has been responsible for a very vibrant business economy, a growth spurt in the CBD. Its goals have tended to revolve around business prosperity and have included maximizing automobile access downtown. The other is an interest group that I would characterize as residential-community oriented. It feels that these kinds of growth- and business-serving goals are diametrically opposed to its own goals for preservation of neighborhoods.

Whenever we talk about community groups and citizen participation, immediately the question of representativeness arises. I would like to underscore my own conclusion that transportation is a major issue in Atlanta by saying that in 1970 a branch of the Georgia State University conducted a study on citizen attitudes toward public policies in Atlanta. The study found that Atlanta respondents used public transportation more

than citizens of all but 2 other cities in the 9-city comparison study. Sixty-two percent of the respondents felt the city should devote efforts toward improving public transportation rather than making it easier to drive a car.

Let me turn to a sort of a brief historical sketch of the transportation planning process in Atlanta. The process historically has been fragmented among a number of operating and planning agencies. Some portions of our present transportation plan were formulated in the 1940s.

There was a series of different studies since the 1940s that were brought together in 1962 in the Atlanta Area Transportation Study (AATS). The staff of that study consisted of the state highway department and the Atlanta Metropolitan Region Planning Commission that had contributed staff from various local governments, but no one agency was responsible for the total planning effort.

The data for AATS were gathered, analyzed, completed, and approved by the end of the 1960s, that is, before our rapid transit referendum passed in 1971. Before completion of this study and based on the prior studies that culminated in the 1968 AAT study, the Atlanta area had built 5 Interstate freeways and 1 limited-access state freeway that traversed the city and occupied 48 miles and approximately 3,000 acres.

The 5 major new expressways projected by AATS included 3 extensions of existing expressways and will increase both the mileage and the acreage devoted to the urban expressways by more than 50 percent. It is this outlook of doubling urban expressways—and taking them right to the central business district—that greatly increased opposition to the new freeways.

This opposition was also facilitated by a series of significant developments. In 1971 the Metropolitan Atlanta Rapid Transit Authority (MARTA) referendum was passed. That gave us 64 miles of rail and busway to be completed in about a 10-year period. Immediately after MARTA acquired the privately owned bus system, the bus fare was changed from 40 to 15 cents and patronage increased 27 percent or 9 million rides.

Immediately citizen groups claimed for the first time rapid transit was a viable option. A rapid transit referendum had previously been defeated; and, even though transit was included in the 1968 AATS plan, it was a secondary system to accommodate the overflow from the freeway system. We are paying for this with a 1-cent sales tax. We ought to experience some relief from preoccupation with freeways in that MARTA system.

Another significant event in 1971 was that one very organized and articulate community group hired a lawyer, who obtained a court injunction against further land acquisition along Interstate 45 pending completion of an environmental impact statement. The absence of the statement led to the injunction, but the 2-hearing process had been completed. A great deal of money had been invested, and a lot of land had been acquired for the route.

The significance of that road, and the only reason I mention it, is that it is the key to the system. If it is not built, the pieces that it connects cannot be built. The environmental impact study is under federal review now, so we do not have the results of that. The lawyers are at hand.

Another significant event was the creation in 1972 of the Atlanta Regional Commission (ARC), which assumed responsibility for comprehensive transportation planning involving coordination among ARC, MARTA, and the Georgia Department of Transportation.

For the first time the locus of planning was shifted from the Georgia Department of Transportation to regional commissions. There was better coordinated planning for the first time. MARTA was participating as an active agency rather than as a gleam in somebody's eye. The existence of ARC and the funding that came to it to do the transportation planning were cited by many citizens' groups as a reason to do a major updating review of the AATS plan because that plan, which had been very long in the making anyway, preceded both MARTA and ARC.

The development of MARTA and ARC obviously was viewed optimistically by the opponents of the freeway system. Those same opponents suffered a defeat in 1972 when a state toll authority was voted in by the Georgia legislature and three of the projected freeways were designated as toll roads. The federal money was not coming fast enough,

it was felt. There was a need, because of increasing citizen opposition, to complete the freeway system and for that reason, as well as others, certain freeways were designated toll roads. The problem of the toll road authority act to citizens' groups is that there are no provisions in that act to force compliance with federal guidelines for either environmental protection or relocation assistance.

A fragmented but widespread citizen group called the Atlanta Coalition on the Transportation Crisis was created partly to oppose toll road legislation, but also to try to raise the whole question of transportation planning and citizens' participation in that planning to the level of political dialogue and debate.

I would like to describe the constituent groups of that organization because I have heard a lot about the fact that citizens' groups participating in transportation planning had been weighted toward disadvantaged or minority groups. This is not true in Atlanta. One of the things that worried me in working with the organization or a coalition of transportation groups was that we started out as a predominantly white middle-class neighborhood coalition. We had a tendency to compete with other neighborhoods to see who would get the urban renewal highway. Because I live in a deteriorating neighborhood, I care about that kind of parochialism among citizen groups. It is certainly in existence, and it is negative.

In the transportation coalition, we received help from professional planners. Many planners live in the neighborhoods of Atlanta, and we even got assistance from planning staffs of the city and of agencies that would usually be considered to be highway oriented.

In our membership, we also have environmental organizations and their members. One of the interesting things to me about the coalition is that it is not predominantly identifiable as a conservation group, i. e., a group concerned with wilderness preservation or with conservation of natural resources. Many people in the organization are, of course, concerned with those things, but primarily we are talking about the quality of urban life.

Some activities and accomplishments of the coalition have been that they have raised money and hired a lawyer to explore the legal basis for a class action suit against the toll road authority or against the entire freeway system as proposed by AATS. The coalition (I suppose this is an accomplishment) was instrumental in my appointment to the Board of Aldermen early in 1972. I in turn was instrumental in passage by the Board of Aldermen of a resolution that stated for the first time the city's own goals. Heretofore, the city had simply rubber-stamped the comprehensive transportation plan document that came to it, but had not injected any of its goals into that plan. The resolution was the first policy statement from the city. It was sent to ARC with the request that the commission do a comprehensive review and update the old AATS plan and include in that review the goals of changing the modal split and of emphasizing for the first time rapid transit over freeways as a desired mode of transportation for the inner city. One of the goals was to explore the substitutability of rapid transit lines for currently proposed new freeway lines and to consider no additional freeways in the area.

The other important accomplishment of the coalition was to obtain a decision to stop construction of the Stone Mountain toll road. I am going to use that particular road as sort of a case study to show the kind of power struggle that goes on as I see it between a state transportation department and citizen groups.

The Stone Mountain toll road is the east-west leg of the system. The rest of the system does not particularly depend on it; it simply goes into that part of the system that is radial. In 1968 we had the first location hearing on the Stone Mountain project. The facility was originally designated a freeway and received that designation after the toll authority was passed. Construction was halted after that first location hearing pending completion of an environmental impact statement, which evaluated 3 alternate routes. When the transportation department presented the results of the environmental impact statement, our position was one of opposition (I will not go into what that opposition was based on, for I am sure you are familiar with it.)

The significant thing is that the staff of the transportation department and the director of the toll road authority communicated with the governor that they were unable to make a recommendation about which of the routes would be the best one for the Stone Mountain toll road. Based on their own recommendation, the governor then created a

governor's commission on the Stone Mountain toll road and committed himself to be bound by its decision as to whether to build the road. The transportation department also committed itself to that decision.

I was a member of that commission, so I am aware of the basis on which it made its recommendations. We went through the usual hearings, and we studied all available documents (there were tons of those). Some new information emerged that may have influenced our decision more than all of those documents: By using the transportation department's own estimates, we found that two-thirds of the automobile trips that were to originate within the corridor had destinations in the central area. We also found that approximately 15 percent of the projected traffic would occur during peak hours. What was compelling to us was that the corridor, by the department's own estimates, was to largely serve trips of people who lived within the corridor and that these were the very people who literally, 99 to 1, were opposing the road. That opposition was representative, we felt, because there were so many hearings held and there were so many attempts made to bring groups out and elicit their pros and cons.

We reached the conclusion that a large percentage of the peak-hour commuter trips could be served best by rapid transit, and we were also persuaded that rapid transit was a preferable mode of transportation because it already existed in the same corridor; that is to say, a rapid transit busway was planned and had gone into operation by the time the governor's commission made its report.

The chief planner stated that the busway could accommodate a substantial amount of excess capacity in the absence of a freeway. It became clear that the busway project would operate under capacity because of competition from the toll road, and nobody had ever considered what would happen if a rail line were substituted for that rapid busway. That, in fact, is what was agreed on as the best mode for handling trips to the central business district.

There was no question but that the decision of the governor's commission not to build the Stone Mountain toll road resulted in some trip suppression. The consideration was, however, that suppressing some automobile trips was worthwhile in the interest of allowing MARTA to function so that its capacity could be determined. The freeway could then handle the overflow, if any.

We were not opposing the freeway for all time. We were saying, "Let's reverse the priority of mode and give MARTA a chance to operate to absolute capacity. If somebody can then demonstrate a need for the freeway, fine! Let them!"

The governor's commission did report back in December, recommending against building the Stone Mountain freeway. The governor committed himself to that conclusion as did the director of the transportation department.

In January, the transportation board voted not to build that toll road and immediately instructed its staff to design a transportation alternative that was to be like a parkway. The staff was given no land use alternative other than for traffic use.

The staff came up with the most major traffic reuse, a facility just under the level of a limited-access expressway. The total corridor was to be used, a proposal that exactly paralleled the Stone Mountain proposal. It simply was a parkway. It was not so large a road as the toll road. It would not serve the same capacity, but the environmental impact had not been established. The staff of the transportation department was instructed to solicit the opinions of interested citizen groups and affected jurisdictions, but obviously they were soliciting reactions not to a range of alternatives for the land use there but to a plan they had been told to proceed with, which is my whole objection to the way the department operates.

They then went one at a time to ARC, and, though the acquired right-of-way was in my ward, it was interesting to me that they talked to me and my community only at my request. We heard that they were soliciting citizen opinions from other organizations.

I have to say again that in Georgia there is enormous cynicism about the value or desirability of qualifications of citizens to have any input into transportation planning processes. The transportation department is eager for us to participate in a dialogue over routes, but any sort of goal setting is something that I think they would consider an inappropriate input for citizens to have.



The Board of Aldermen passed unanimously a resolution mandating the city planning department to coordinate the planning for reuse of the Stone Mountain toll road right-of-way and to examine all alternatives advocated by different citizen groups and interested organizations. The city planning department has done that and has recommended against any traffic reuse in that corridor. The governor's commission has had to restate its intentions, which were obviously against a major traffic use in the corridor.

We did not even deal with toll financing, so when the Georgia Department of Transportation says that what we turned down was a toll road but not a parkway—well, it can be called by any number of names! The governor's commission has had to reiterate that its position was against a major traffic artery competing with MARTA. We wanted MARTA to be tested to capacity.

Today the city planning department has issued a report on alternative reuses for that land. The thing that concerns me, of course, is that final decision as to whether or not a highway will be constructed in the Stone Mountain corridor rests with the transportation department, which owns the land.

My own position (although obviously a very biased position in favor of community group inputs) has been not that there should be no further toll roads or expressways built in Atlanta or that there should be no more street improvements. I was very impressed by the statement of the director of the transportation department when the commission brought back its recommendation not to build the Stone Mountain toll road. He said, "You know, I can live with that, but the precedent being set for community groups is that they will oppose any further construction of not only limited-access roads but also street widening. They will be against any automobile-serving road construction." I did not agree with that position. There are people who feel that way; I do not, however.

At that point, I committed myself to exploring with the citizens' group with which I work most closely in my own community to determine what sort of traffic improvements would be palatable. We had to do that in the context of the coalition because we recognized that what is good for one community may be harmful to others.

Several community groups were able to agree that there was in fact a corridor that could be widened to serve some of the automobile travel that would have been served by the Stone Mountain toll road had it been built. This corridor paralleled the MARTA rail rapid line to be constructed. The road would be constructed in conjunction with the MARTA line, would not split existing communities, and would not interfere with any housing. It was to be built in a corridor where deterioration had occurred and where those in the community most directly affected felt it would be a positive benefit. So I thought that that kind of citizen consideration of acceptable transportation modes other than rapid transit was a sign that we were not just obstructionists, which is often what we are accused of being.

Other aldermen and I went to the Georgia transportation department and advocated that this road be considered. It was endorsed by the Board of Aldermen, the city and regional commissions, the county planning department, all affected jurisdictions, and all citizens' groups. The response of the transportation department was that they would proceed with the engineering on the road. However, the major planning groups were astounded when the department did not fund the preliminary engineering at a level that they did on all other freeways.

I do not think that the outlook for change through the incorporation of citizen input into goal formulation and system planning is good. I think that the transportation department has demonstrated a rigidity and inflexibility in reexamining or updating old plans. It has continually verbalized a contempt for citizen groups and a desire to limit their participation to choices of limited-access expressways. I feel that the department is also insensitive to the need to support street improvements and highway projects that are determined by local governments as having beneficial community impact. The department, I feel, should be more willing to implement policies made by public officials rather than to make policy. I also feel that the Atlanta Regional Commission is too new, lacks the confidence or will, and is also too dependent on the Georgia Department of Transportation for a certain amount of its funding of the comprehensive transportation planning process. It therefore appears that legal action and political process represent the best avenue for the injection of citizen values into the planning process at this time.

There are several ways, I think, to improve the transportation planning process. First, impact study procedures should be expanded to include total community impact and ameliorated procedures. Such studies would be broader than limited environmental impact statements and should be conducted before a project has been established and the decision limited to a choice between discreet alternatives. Second, the regional commission, rather than the transportation department, should be responsible for impact studies. In the impact studies, more serious consideration should be given to the alternatives or to the substitutability of rapid transit for new expressways. Third, representative citizen participation should be built into the formal study process at its outset.

## INFORMAL DISCUSSION

**TORREY:** Will you restate the point you made on community impact work? Are you saying that the community context for transportation improvements must be in terms of not only the facilities that the community wants but also the way that decisions are made with the community?

**BRADLEY:** Yes. I want the impact study procedures expanded to include total community impact and ameliorative procedures, and I will give an example. My community has 3 expressways and an interchange planned for it, but the impact study will evaluate one road at a time. The community will cease to exist if all those roads are put through, but no examination is made of the total impact on the community of all the programmed roads. Neither is enough attention given to social considerations such as impact on housing stock. We have put greater concern on environmental implications such as removal of park land.

**KISH:** Does your regional planning commission have an advisory board of citizens?

**BRADLEY:** There has been a citizens' advisory board, but the problem has been that it could not initiate action but only respond at the request of regional commission staffers to questions put to it. Also it had to filter its recommendations up through ARC staff, who would take the recommendations to the people who made the final decision. The people who were involved in the transportation advisory committee of ARC were very much disillusioned. They felt it was a futile experience. There is no understanding of a need to update that plan in a way that would alter the system. I keep hearing that what the federal government has approved is a continuous plan, and a continuous plan means that, once adopted, it is not changed. Now that is really out of touch with what citizen groups are saying!

**KISH:** How is input of the citizens provided to the regional planning commission?

**TAYLOR:** As a representative of the Atlanta Coalition on the Transportation Crisis, I say the citizens' advisory board is defunct. The people have stopped going, and the staff discouraged its existence and never had any meetings. The necessity for it is now realized, for there is a problem in getting a new plan, which is not yet in effect. The approach is going to be to nominate all the organizations to be represented.

**CARSON:** We have spent hours in workshops discussing at what point citizens can function most effectively in transportation planning. I now have the idea from you that they are not very useful at a certain point. At what point are citizens useful?

**BRADLEY:** My point really was that citizens were not allowed to be useful. I have been impressed by the level of sophistication of the citizens' group that started out as sort of a parochial "take somebody else's neighborhood, not mine" attitude. In their presentations during the past few months, they have talked about a system and a modal split and basic planning parameters and policies that are reflected in those kinds of decisions. I think citizen input is valuable when citizens are allowed to participate in setting goals and in the initial stages of the planning process. They will only be allowed to do that when the old transportation system plans cannot be implemented. Then somebody will have to go out and bring in the citizens. My training is in community organi-

zations. I keep waiting for the major establishment to co-opt us, and they do not want to yet, which means that we are not perceived as being powerful enough. That has to happen politically. When that does, there will be attempts to get to us.

CARSON: When goals are set, do you relate that to the adoption of the budget?

BRADLEY: Yes. I think what the communities are saying is that their goals should be reflected in the planning process and should compete with other alternatives for public investments. I am not saying those goals should control policy-making. I am saying that they should compete and that the elected officials should come to grips with the hard policy decisions.

CARSON: Why should they not control policy-making? They are set by the people who are going to pay for the implementation of the plan that is determined by the policy.

BRADLEY: The chamber of commerce also pays and happens to be another interest group that is a legitimate interest group; but I do not want it to take over the policy-making. I do not think any interest group should make policy for a city. Each has to compete, and the elected officials have to make the policy decisions. I know of no more democratic way to do it.

CAMPBELL: You say that the Georgia Department of Transportation was not interested in letting citizens participate in a meaningful way. Has MARTA shown citizens the different alternatives for rapid transit and busways and schedules and been completely open and free in adjusting its facilities?

BRADLEY: Not at all. I have to qualify that by saying that MARTA failed the first referendum and barely succeeded in the second. It is on pins and needles in terms of its own problems with housing relocation now that U. S. Department of Housing and Urban Development money is cut back. It is also dependent to an extent on the state transportation department's control over a certain amount of federal money. It is so afraid to cross the transportation department that it communicated (I suppose to our congressmen) that it did not want or really need the Highway Trust Fund to be "busted." The citizens have tried to be allies of MARTA, but it considers us dangerous. I think they think we are going to zap everything.

McMANUS: Should a metropolitan area such as yours have an elected board making decisions on both highways and transit for the metropolitan area?

BRADLEY: No, because we have an elected board of the regional commission who is doing that.

McMANUS: Why can't they resolve those disputes?

BRADLEY: I tried to indicate that the highway planning process is years old and the highway system that generated it was decided on in 1968. Rapid transit was voted in in 1971, after the fact. ARC was activated in 1972, after the fact. A lot has happened during the past 3 years. The new authorities and the commission have problems with taking over completely from a department that historically has done the major transportation planning in Georgia.

Boston  
Transportation  
Planning  
Review  
Papers

# INTRODUCTION

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The Boston Transportation Planning Review (BTPR) was an experience in citizen participation and interdisciplinary planning. It was an 18-month study, which stretched from July 1971 to January 1973.

The emphasis in the papers that follow is on the way in which the intensive participatory approach of the BTPR has affected the various elements of the study. To introduce these papers, my first obligation is to affirm that indeed the Boston Transportation Planning Review was a participatory study by almost any measure of the phenomenon. The requirement of participation in a planning study has necessarily to be up for grabs among engineers and planners, depending on their ideological commitments; but, again by almost any nonpolemic definition of the word, the BTPR was a very participatory study. With regard to the exposure of technical work and technical decision-making to observation, public view, and comment by participatory community groups and regional interest groups; with regard to efforts at education of community and other participatory groups toward the participation in a transportation planning process; or with regard to the development of community-advocated options with respect to facility alternatives within the project corridor framework of the BTPR—by any of these criteria, the study was intensive in involvement of community interests. There were at least 300 formal community meetings held during the 18-month duration of the study, and I believe that approximately 35 percent of total staff time was devoted to involvement of the staff with community groups.

John Wofford will focus on the broader aspects of the process and its institutional participants and on how the process and the products of the BTPR sought to deal with the controversies with which it was charged. Stephen Lockwood will present the way in which participation affected the methodology of the BTPR. Walter Hansen will discuss the system management aspects of the study and in particular will focus on the kinds of facilities and improvements and proposals that emerged from an environment of intensive participation of this sort. Jason Cortell will comment on the ecological analysis in an environment of responsiveness to community interests. Finally, Allan Sloan will discuss the deployment of effort to the representation of community views, the kinds of releases from normal constraints and conceptualizations of solutions that occurred because of this form of the process, and a number of other characteristics that it showed.

There is one more general point that I might add that perhaps will help some of these topics, which otherwise might seem somewhat heterogeneous, to fall a little more easily into place. That concerns the division of work between the "traditional land use-transportation study" type of activity and the more localized project-level work that went on simultaneously at the BTPR. The background of the study in this connection is particularly interesting. In 1969, Governor Sargent of Massachusetts formed a task force to study the series of transportation controversies that existed in the Boston metropolitan area. The task force proposed 2 things important for present purposes: first, that the moratorium on further expressway construction within Mass-128 in the Boston metropolitan area be temporarily imposed with certain specified exceptions and, second, that the BTPR be mounted to determine what to do in those corridors covered by the moratorium.

The BTPR was proposed by the task force to consider the transportation problem in a very broad scope; it was to be an open, large-scale, flexible, expansive approach to transportation planning. The task force was followed by a study design committee, which developed in 1971 a proposal of more detailed programs for the BTPR but which was forced to come to terms more specifically with the project decisions that beset the commonwealth and most particularly the governor, who was committed to come to specific build/no-build conclusions on a set of 4 highly controversial expressways. The proposal, Study Design for a Balanced Transportation Development Program (which incidentally is a most interesting document), at the same time limited the exercise of more traditional land use-transportation planning techniques at the larger scale. Therefore, the BTPR has 2 elements in its background: (a) a larger scale, generous, expansive, flexible kind of format of study and (b) a mandate to settle very specific and highly controversial build/no-build decisions concerning expressways.

This latter aspect placed a very large proportion of the effort in the study on project-level consideration, which I think is one of its most innovative characteristics. The consequence of this dualism, this apparent paradox in the charge to the study, is that the regional aspects of the BTPR study are more a cumulative consequence of the process of study of phenomena at the local level than they are a prelude to that study (as formal planning methodology tells you it is supposed to be). The regional focus for local project selection that the study came up with in its latter stages and that enabled the definitively regionally focused set of decisions on the part of Governor Sargent in his decisions of November 30 was again more a secondary consequence of the process of study than it was a direct objective of the study in its early stages. This is a most important contribution of the BTPR. It is also, incidentally, a most important aspect of any study that is to be characterized by a high grade of participatory activity because participation really has to take place at a scale that is tangible to the participant.

# PUBLIC PARTICIPATION IN BALANCED TRANSPORTATION PLANNING

*JOHN G. WOFFORD*

*Associate Commissioner*

*Massachusetts Department of Public Works*

The Boston Transportation Planning Review (BTPR)—its scope, its methods, its objectives—was both a product of its times and a forerunner of things to come.

In Boston, December 1969 was a time when Governor Sargent was considering a recommendation from the citizen task force that he had appointed. The recommendation was that he stop work on most of the expressways then under planning and construction inside of Mass-128 and that he order a restudy of the need for those expressways in a broad, open, multivalued, and multimodal context.

In Washington, this was the same month that the U.S. Congress enacted the National Environmental Policy Act.

It is one of my favorite themes in talking about the Boston Transportation Planning Review to note that both of these efforts were responses to the same set of problems—namely, intense controversy over the value placed on transportation improvements as compared with nontransportation values. In many ways, the Boston Transportation Planning Review was a precursor of what was to be set down in federal Policy and Procedure Memoranda 90-1 and 90-4 that outline procedural requirements remarkably similar to local procedures that we have slowly developed out of our own experience in the Boston area.

Early in 1970, following his consideration of the task force recommendation, Governor Sargent halted work on a number of controversial highway projects in the Boston area, and he established the BTPR to advise him on those controversies. He directed that the controversies be reviewed together as part of a balanced transportation program responding to the full range of metropolitan values, both transportation and nontransportation. He directed that the planning review process be open and broadly participatory so as adequately to reflect values, priorities, and competing proposals that the region's public agencies, private institutions, and private groups might wish to contribute.

The governor emphasized that he wanted the BTPR to give high priority to several key objectives: first, the integration of expressway planning with planning for arterial and local streets, parking, and public transportation; second, the integration of transportation planning itself with planning for housing, neighborhood amenity, environmental

protection, open space, and economic development; and, third, maximum participation by local governments and the public in the planning process. He directed that the process be an open one; that an interdisciplinary team of consultants be assembled to develop and compare widely different alternatives; that the consultants produce not a preferred solution but an analysis of the different alternatives from different value perspectives; that the analysis be subjected to critical review by public agencies and private groups; and that at the end of a specified period of time elected public officials, principally the governor himself, make decisions based on the analysis and response. The task of the consultants was not to give their judgment on what would be "the best" thing to do but rather to develop widely different alternatives to equal levels of detail, compare them as best they could, surface the comparison for public debate and discussion, and thereby provide the basis for informed decision-making by public officials.

In this sense the governor established a technical study and an open process all within a very political context, established deadlines, and placed principal responsibility for decisions with elected officials accountable as they are in a democracy to the electorate.

## STUDY FRAMEWORK

### Definition of Scope of Study

Our first task was to define the scope of the study. This was done in the open with an advisory, participatory working committee, which was to some extent self-created. It consisted of representatives of the key local governments affected by the corridors, state agencies with responsibility in nontransportation as well as transportation areas, and the most concerned private groups. The Working Committee met in the evenings during the summer of 1970 to reach a basic consensus on what the study should do and how it should do it. We felt that it was critical to write the scope of the study in the open rather than behind closed doors because in Boston we were all too familiar with previous studies where the very scope of the study was itself a matter of controversy. We sought to avoid that.

### Selection of Multidisciplined Consultant Team

We then selected a team of consultants to do the technical work. That too was done with advice from an open participatory review committee. We received written proposals from 15 firms seeking the prime contract. These were read intensively by a review committee of about a dozen representatives of the public agencies, private groups, and local governments. We had oral review sessions with each consultant team; usually more people were on the interviewing panel than on the team representing the consultant. The panel was a rather mixed and unusual group whose members represented agencies ranging from neighborhoods to the state highway department. We achieved virtually a unanimous selection of who the prime consultant should be and, in particular, who the project manager should be. That was very much a matter of concern to the committee; we wanted to know who was actually going to run the technical team. (Walter Hansen was selected and has a paper later in this report.)

This process established confidence in the technical team on the part of the key participants; it also emphasized to the leader of the technical team that the client was not simply one state bureaucracy. One of the questions posed in the course of the review session with Walter Hansen and his team was, "Who is the client, Mr. Hansen?" He responded, "I don't know, but there always is one." It was a very diplomatic response, but in a way it turned out to be not a correct one because in fact there were many clients (Walt, I think, discovered that as the process went along). The state itself did not present a unified front: The transit agency was a client, the state highway department was a client, the new state secretary of transportation was a client, and the



governor's office was at least 3 clients. It was a complicated context of local bureaucratic politics in which the technical team had to operate.

### Local Project Office

After selecting the team of consultants, we required that the team establish itself locally for the 18 months in one office location so that the interdisciplinary nature of the team could be facilitated and outside participants could locate project staff at a single place. The team included transportation planners, engineers, highway designers, urban designers, architects, economists, ecologists, experts in open space and preservation of historic landmarks, and lawyers.

### Simplified State Administrative Procedures

On the state's part, we established a simplified administrative procedure to expedite project approvals. We pooled the highway and transit fund sources to simplify billing and accounting and to ensure flexibility in the expenditure of project funds to meet changing needs as the study progressed. We created what we called the Project Coordinating Committee composed of a representative of the highway department, a representative of the transit agency, and a representative of the state secretary of transportation. Representatives of the Federal Highway Administration also attended the committee meetings as observers; had the Urban Mass Transportation Administration at that time had regional field representatives, they too would have attended as observers. I represented the secretary of transportation and was chairman of the committee. We were delegated the power of approval on most administrative matters and, in many cases, could simply sign the papers. We received requests for administrative approvals to hire people and to embark on certain courses of work, and we tried to approve everything as expeditiously as we could.

### Community Liaison and Technical Assistance Staff

We established a separate staff for community liaison and technical assistance early in the study; it accounted for about 10 percent of the project budget and was quasi-independent on management and policy matters. The staff was under the contractual management of the prime contractor but on all policy matters reported directly to me and to our working committee. There was a potential for battles between the community liaison staff and the prime staff, but it did not work out that way. In fact, they worked very closely together in a cooperative and productive relation. One of the principal jobs of the community liaison staff was to get the prime staff to respond effectively to the wishes of community participants. Because they were out in the community just as much as the community liaison staff were, the prime staff responded not only effectively but enthusiastically.

### Open Information

We had a policy of absolutely open information. There was no clearance procedure established for the release of information. Technical drafts were made available just as they were; they stood as the product of the staff who had prepared them, and neither approval nor disapproval was implied. The staff analysis in draft form was simply there for all to react to. This turned out to be very useful both to the consultant team and to me. That magic word "draft" covered a multitude of sins and let us get very effective feedback both from public and private sectors.

## Working Committee

We formalized the Working Committee to oversee the process; it met on a weekly basis. The membership was broadened to include highway contractors, highway labor unions, and highway user groups; only one of the latter groups joined and attended several sessions, but did not actively participate. The Working Committee reached an amazing degree of consensus on all issues of process and on most issues of scope and emphasis. The one issue on which there was wide disagreement was the question of whether the meetings of the Working Committee would be open to the press. In the end, I decided that in an open process the deliberations of the Working Committee should be open and we would take the risks of speaking frankly to each other, which was one of the purposes of those meetings, and trust to the good sense of those reporters who could endure coming week after week.

There was also an amazing degree of consensus among the different groups on the product that they wanted. I remember being visited by a delegation of three, representing the city of Boston, the highway contractors, and the coalition of antihighway neighborhood groups. All of them had agreed on a set of products that they wanted: detailed engineering drawings of the highways so that an effective comparison could be made between build and no-build options and a new transit master plan. Nobody walked out of our process during the 18 months, although some had predicted that would happen. People with different views really did come to know each other as people and to understand the bases from which they spoke. They also had no real choice but to participate because the governor had made it clear that it was on the basis of this process that he would reach his decisions.

## Phases for Study and Decisions

We divided the study into phases. The early phase was devoted to getting a better understanding of the transportation needs and issues and to searching for alternative solutions to the problems. We established a device of writing issue papers, which were then widely circulated. All sides, public and private, would then let us know whether we had missed the point or had proposed some ridiculous solutions or had failed to understand some community proposals. It was a very useful way of getting a better sense of what the issues and the possibilities were. At the end of phase 1, we produced formal but preliminary documents that indicated our understanding of the problems, options for solution, and suggestions of what might be cut out as we narrowed down to a few alternatives for more intensive comparison in phase 2. This document was sent out for responses, and then the governor made a decision on what would be carried into phase 2.

Phase 2 was a detailed comparison, sufficient to meet requirements for environmental impact statements, of no-build, medium-build, and big-build decisions. Those weighty documents became the major product of the study. They were circulated formally and were then the subject of testimony at formal public hearings prior to the governor's decisions, which he made just after Thanksgiving of 1972.

Phase 3 consisted of the wrap-up of the study during which we completed our work and moved toward implementation of the governor's decisions.

## Variety of Types of Meetings

We had hundreds of meetings and a wide range of contacts, including telephone calls directly to the staff; neighborhood workshops; sessions with mayors, councillors, and legislators; formal information meetings; and public hearings. Often the most useful conversations at the meetings took place during coffee breaks with people who were reluctant to stand up in public and say what they thought. The meetings conveyed information, provided an interim deadline for useful work by the consultant team, and served to keep the focus on the technical product.

## Program Package Choices

The product was in the form of "program packages." These were multimodal choice packages, i.e., alternatives that included parking policy and transit and highway programs, each in a package that responded in a different way to different values that participants held. Our objective was in each instance to produce a package that each of our major participants could identify with and favor so that there would be at least one alternative about which a major interest group could say, "That is what we are for." We would thus avoid the usual response at public hearings, "We are opposed to what you are proposing." This was done with some, but not complete, success, given the natural suspicion that participants have of whatever the government is doing. I remember one meeting in East Boston where we had come to show our options for a third harbor crossing. They said to us, "Don't you come back to East Boston until you have an option that says 'No harbor crossing'." And, indeed, we developed such an option, a program package to show how one might get to and from Logan Airport without building a third harbor crossing. In the end it was not a package that the governor selected, but the analysis that was needed to produce that package turned out to be very useful as we prepare for an interim period of many years before a new harbor crossing is ready for use. The package included a bus-limousine type of service from pickup points in the outer area. Vehicles would be speeded on special reserved lanes and be given head-of-the-line privileges at the existing tunnel entrances.

## Corridor Issues in a Regional Framework

There was continual tension during the study regarding corridor and regional issues. There were some participants who wanted regional analyses to precede and substantially determine the corridor solutions. Others believed that extensive attention to regional analysis would lead to the kind of "master planning" that had helped produce the present controversy. Our response was to attempt to strike a balance. Clearly, our controversies were corridor controversies stemming from very specific existing project proposals, and the major part of our attention was devoted to detailed comparison of corridor impacts, including, of course, detailed consideration of the traffic implications of corridor facilities on the Boston core. Our regional studies sought to provide the transportation and land use context for the corridor analyses, but to describe long-range alternative futures (continued suburban sprawl, more concentrated downtown development, suburban development nodes) so that people could use as one factor in reaching their own corridor preferences their assessment of the relation between the facility decision and their view of the future. It was a delicate balance, but one that I believe kept us focused on the corridor decisions that the governor had to make while we set those decisions in a longer range perspective. It is no exaggeration to note that value differences over what the future could and should be like were every bit as intense as different weights given by different participants to various corridor impacts. It is also true that we would have given less attention than we did to regional and long-range concerns had our participants been less vocal in their insistence on wishing to help to shape the future through the immediate decisions confronting the governor.

## Criteria, Values, and Cost-Benefit Analysis

We decided not to attempt to reach agreement on weighting different criteria in a mathematical cost-benefit formula. We believed such an attempt could lead only to endless debate, for the weight given to different factors in decisions like these generally determines the outcome. We opted, instead, for a checklist of major impact categories and detailed descriptions of each such impact. Participants could then assess the seriousness of the impact, whether positive or negative, in terms of their own values. We did perform more traditional cost-benefit analyses of transportation costs and

benefits, but only as one element in a more qualitative approach to social decision-making.

### Pre-Review of Draft Environmental Impact Statements

The real test of our participatory process came after the staff had completed its technical work and had ready for printing the draft environmental impact statements in which different program package choices were compared for each major controversy. The Working Committee, sensing that this was a critical moment, asked that it be given an opportunity to review the drafts and make modifications in them before they were printed. The technical staff resisted because we were under intense pressure to meet the governor's deadlines, but we decided to give the committee 2 weeks to review and comment on the drafts while the final artwork was being prepared. It was a group review. The state agencies and the other participants had identical deadlines. Knowing that a printed document had to be produced, the committee was able to focus on defects in the draft, suggest modifications, and substitute language, but to understand the difference between those suggestions that we did not have time to accommodate and those that we did. This intensive 2-week review, which was done page by page and line by line while the staff held the red editorial pencil amidst a group of participants having widely different preferences, was responsible for many very significant improvements in the draft. Indeed, this review served as the final catalyst that forced the many technical disciplines to confront their value differences and to produce a draft that attempted to face directly the irreconcilable value conflicts that remained after consensus had been pushed until it could go no farther. In this sense, the participatory nature of our study was an essential ingredient in the multidisciplinary nature of the products.

### Formal Public Hearings

We finally had the draft statements printed; circulated them to approximately a thousand federal, state, and local agencies, officials, and groups; waited the required 30 days; and then held formal public hearings. The hearings on all corridors took 10 days; an afternoon session and an evening session were held at each location. Some of the evening sessions continued until one o'clock in the morning. Although the predominant number of speakers opposed further expressway construction, the full spectrum of views was represented. The hearings were conducted under the joint auspices of the secretary of transportation, the highway department, and the transit agency. For the most part, the hearings were like any other hearings except that they were based on 18 months of prior participation. It is a tribute to that participation that the hearings produced no real surprises.

I think it is a very useful feature of this kind of a participatory process to have it climaxed by formal public hearings. For us they served at least 5 functions. First, they were a summary and a formal record of what had gone before in terms of both substance and process. Second, and even more important, they were a formal milestone, a signal to both public and private participants that we were about to make a decision and move on to a new stage. Their message was, "Speak now or forever hold your peace." Third, they provided a forum for leaders of constituencies to be seen and heard by their constituents and to make the points in public that they had been making in working committee sessions for many months. That was an essential ingredient in their continued credibility, a kind of proof that they had not been co-opted. Fourth, they served as dramatic preparation for the governor's decisions that would follow in about a month. Fifth, the public hearings near the end of the process were safeguards to make us all take seriously the participatory process during the previous months, for otherwise we would have been faced with a written public record filled with claims of nonparticipation, a record that would necessarily accompany the project through all the later required approvals and possibly into the federal courts. Thus, the public hearings for us were not the participatory process but rather the capstones of that process.

## The Governor's Decision Process

Finally, we had the process of briefing the governor and his reaching a decision. As a result of more specific federal environmental criteria and our eagerness to apply those criteria, we decided to produce the full draft environmental impact statements before the governor's decisions rather than after his decisions. This meant that the timetable slipped by 4 months and his decisions were made at roughly the 16-month point instead of the 12-month point. Between the printing of the draft environmental impact statements and his decisions, we provided intensive briefings for a special task force that he had established to advise him. The task force was composed of the lieutenant governor, the secretary of transportation, and the governor's special assistant for urban affairs. The interesting thing about those briefings was that we said essentially the same things to that task force as we had been saying to the public and to the working committee.

There was one exception: The task force requested members of the technical team to state what they would do if they were governor. So we arranged for each of the major disciplines to be represented by one person and for that person to speak individually. The task force wanted not a consensus recommendation but individual views and reasons for those views. It should come as no surprise that there was a wide range of views! I think that is really the essential point of the environmental impact statement process and the planning review process: to establish a reasoned dialogue where technical data are exposed to different value premises and where people are required to give reasons for what they want to have happen.

We then met with the governor for a number of special briefings, and I can say that he personally involved himself in great detail in the issues and clearly came to his own judgment for his own reasons. During that period, too, we arranged to have 6 meetings between the governor and our main participants, three with groups representing the antihighway side and three with groups representing the prohighway side. As we had done in the technical briefings, the participants, too, made the points to the governor in private that they had been making to us during the course of the study.

The governor then made his decisions and announced them on statewide television. Essentially, he decided that there will be no more general-purpose expressways in the inner core because he believed they would have too detrimental an impact on the quality of life. Preserving open space in the face of increasing urban density and preserving neighborhoods in the face of decreasing sense of community were two important objectives. In addition, he was personally very concerned about drivers stuck in rush-hour traffic, and he came to believe that public transportation would be a better alternative for those working in Boston's concentrated downtown. His transportation program, therefore, relies primarily on using rail transit for access to the downtown, freezing downtown parking spaces, establishing a fringe parking strategy, and improving an existing extensive commuter rail system—all to become part of a truly integrated highway and transit and commuter rail network.

## GENERAL OBSERVATIONS

1. Our process was designed to deal with controversy, and we found it very useful to take federal law seriously because that law, too, is an attempt to deal with controversy. I noted earlier the relation between the planning review and the environmental impact statement process. The essential features of both processes are openly considering alternatives and rigorously analyzing the advantages and disadvantages of each to equal levels of detail and in writing; including a no-build alternative as a way of focusing on whether a facility is needed, what the effects would be of leaving a situation unchanged, and what the larger value assumptions are of the proposed course of action; and holding public hearings and providing other opportunities for participation (e.g., as in our case, a special staff for technical assistance and community liaison) and for exposing this analysis to criticism and public controversy prior to commitment on the part of the government to proceed with the project.

This process is obviously directly contrary to standard bureaucratic practice in the past. I intend this not as an attack on past practice but rather as a description of the fact that the past process does not comply with new values and new criteria. In the old process, alternative courses of action were considered, but in a closed setting. There was little pressure to pursue apparently difficult alternatives, and written analysis served chiefly to justify previously made conclusions. A no-build alternative in the past was given little attention because the agencies felt that the need to build had already been established, that their assumptions were above question, and that their mission (on which promotions were based, success was measured, and satisfaction was achieved) was to bring projects to fruition. Finally, hearings and public participation in the past were permitted, but only after all the significant decisions were made. They were then just endured and generally resulted in nothing more than minor modifications. In this sense, an environmental impact statement, like the planning review, is designed to change these past practices so that controversy is surfaced rather than submerged.

2. The second general observation is that our objective of dealing openly with controversy and of developing widely different alternatives is not easy to achieve. Technicians have not been accustomed to preparing alternatives with their own personal judgment kept to a minimum. I think they found it difficult but learned during our process to articulate the value and policy assumptions that often are hidden in their methodology in a way that people could understand. That was a challenge. An even more difficult challenge was to deal with statutory policy as a variable rather than as a given. We made it clear from the beginning that we wanted recommendations in the program packages that would include changes in law—both state and federal. That kind of product gets the technician into a new area of policy analysis. Section 4(f) of the Department of Transportation Act of 1966 is, of course, the most dramatic example of the need for such analysis. The words "feasible" and "prudent" clearly call for value and policy judgments. Our challenge was to do the Section 4(f) analysis in a way that allowed the determination of what was prudent to be made by the participants, public and private, and not by the consultants. The unanimous Overton Park case, which was handed down just before the study began, emphasized the importance of the nontechnical as well as technical aspects of the search for and comparison of "feasible and prudent alternatives." Our technical staff, in short, discovered new ground rules when they became a part of the Boston Transportation Planning Review.

3. Expectations on all sides were raised beyond our capacity to produce. All sides—the highway agencies, the contractors, the antihighway groups—wanted more details in the end than we could produce with limited money, limited time, and limited staff energy. The prohighway side wanted especially more information on economic development potential of the expressways; the antihighway side wanted more information on air quality impacts. Analyses in both areas (air pollution and economic predictions) must incorporate a great deal of uncertainty about the future, and we felt that extensive studies would not be of great value. We thus had the job of damping expectations, but in an even-handed manner. I think maybe we succeeded in leaving everyone a little bit dissatisfied, but equally so.

4. In this kind of process, personality plays a huge role, both positive and negative. The impact of staff personalities on public and private participants was a factor to be taken into account, and the impact of the participants' tones had an impact on staff work and responsiveness. I think we all learned to take a lot of brickbats in stride, but it was not always easy. Those who throw the brickbats often do not calculate their effect on people who are themselves doing a job and trying to produce a product. Those of us on the receiving end of such attacks, however, must remember that when we face the public we do represent "the government" with all the negative feelings that term often connotes. Thus, the interaction of individual personalities is complicated in a process like this by the view each has of the other's institutional base.

5. The product and the policy were much better for the participatory process. I think in the end we achieved what we basically had set out to do: informed decision-making on the part of the governor and reasoned debates on the part of the participants. When the governor made his decisions, he had a good grasp both of the technical details and of the views that different groups would have about different policy conclusions. In

that sense we were kind of political advance men for the governor ("political" is used in the best sense, i.e., understanding what different groups in the electorate felt and would like to achieve). And those groups contributed significantly to the definition of the alternatives compared and to the debate over which one to choose.

6. As we increasingly utilize this kind of process, special attention should be given to the training of technically competent people for 2 key ingredients of that process: citizen participation and policy analysis. This is not easy; most of our universities do not undertake this kind of training. The most effective training currently available is the kind of laboratory experience that we have had in Boston and that others are having in a number of cities in dealing with concrete controversies. But earlier and more systematic training in skills related to these objectives would be extremely desirable.

7. In conclusion, let me note that, under federal Policy and Procedure Memorandum 90-4, each state must submit a plan showing how it will permanently incorporate into its highway planning the major elements we have used in the Boston Transportation Planning Review: a systematic interdisciplinary process; opportunities for participation by citizens and local governments; consideration of widely different alternative solutions in a truly multimodal framework; and a clear decision-making process. Significantly, this plan is called an Action Plan. In Boston during this 18-month study, we had a good deal of action. We trust that the policy decisions that emerged from our process will be turned into action as we move to implement Governor Sargent's decisions.

We hope, too, that some of the lessons we have learned in Boston will be useful as others increasingly move in this direction. Obviously, the large scope of our study related directly to the large scale of the controversial facilities (one cannot undertake a \$3.5 million study frequently). Nevertheless, I believe that most of the ingredients and lessons of the Boston Transportation Planning Review do in fact have relevance to most transportation controversies—regardless of the size, complexity, or mode of the particular services or facilities being considered. And I am convinced that a process substantially similar to ours is essential to producing the "action" and results we all want. There is, in other words, a middle course between stalemate on the one hand and the old way on the other—a course that the Boston Transportation Planning Review has helped to chart.

# 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.

# PLANNING AND DESIGN FOR TRANSPORTATION SYSTEM MANAGEMENT

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There is probably a question in everybody's mind as to what impact participation has had on the actual results of the Boston Transportation Planning Review. There are 3 areas where participation should have and in fact has had a great deal of impact: in the generation of alternatives, in the evaluation of those alternatives, and in the selection of the alternative to be pursued.

## GENERATION OF ALTERNATIVES

In the area of generation of alternatives, participation as pursued in Boston has had the major effect of broadening the range of alternatives in 2 major areas: first, to substitute regulation of transport demand for the construction of facilities to meet that demand and, second, to substitute one type of mode for another type of mode to meet a single type of demand. There are many examples where, in fact, the participatory process generated alternatives that, I believe, would never have been developed or evaluated by technically skilled people in a more traditional process that had no participation.

### Substitution of Regulation

We were continually questioned about transportation demand and were many times embarrassed because we had no good answers as to what transport demand is. Is it an invariate? Does it respond to regulation? Does it respond to prices? Does it only respond to capacity and service? Obviously, the answers are, "It does respond to regulation. It does respond to price. Therefore, demand is not something that you first predetermine and then try to find ways of serving. But it in itself is a variable in the equation."

Another question we were forced to answer was, Is a parking pricing policy a substitution for the construction of highway facilities? Our best technical answer was, "Yes, it is. If the public body chooses to regulate itself and price itself in the form of

a parking pricing policy, you can probably get about the same impact as far as level of service on the highway system is concerned with a dollar increase in pricing as you can with an 8-lane expressway." In fact, that choice was put up for the final decision, and the governor, in concert with the mayor, announced as part of his policy a parking freeze and the possibility of parking pricing in the core area of the Boston region.

A number of communities that are impacted in a very heavy way by truck traffic also raised the question, Can the regulations or the policies or in fact the statutes be changed? (One of the major functions of the expressway system that had previously been planned was to reduce the amount of truck traffic on local streets and local arterials.) Cambridge is an area that happens to be between a particular entrance on the Massachusetts Turnpike and the destination of many trucks carrying oil and dangerous cargo. Because of current regulations by the Department of Public Utilities and because of the use of air rights over the Massachusetts Turnpike, the Prudential Center, and also some tunnels, all of those trucks must leave the turnpike and proceed through Cambridge to get to their final destination at the port. We continually looked for solutions in the form of modification of the physical street system. At the same time, there was the persistent question, Why can't the regulations be changed so that the trucks can stay on the turnpike and proceed around Cambridge on the already available freeway? Again, we said, "Because of fire hazards, the regulations will not permit that if the highway is covered more than 600 feet." The questions then were, Can't the tunnel be protected from fire? Why do we have to build something else and thereby make physical changes that will have adverse impacts in a dense urban setting when in fact regulation changes would better solve the problem? This issue has not yet been resolved and is still being worked on by our technical staff. However, we have assisted the city of Cambridge in making applications for a relaxation of the particular regulation that was in part responsible for the problem.

### Substitution of Mode

Most participants who came to our meetings wanted a change in or a substitution of mode, i. e., transit for highways. Two things happened in this process: The technical staff really found ways to extend the impact that various transit modes could have on highway travel demands, and the participants gained a better realization of the limits of substituting one mode for another. The impacts of transit are by no means as dramatic as the substitution of changes in statutory regulations on the transport-demand equation, but they are more dramatic than most of our technical staff anticipated they could be if we were imaginative in the definition and the use of various types of transit services to replace highway movements.

After the project had been under way for about 2 months, working committee meetings became consumed with a general disagreement between me and the working committee. The committee was completely dissatisfied with the technical staff in terms of its experience and view toward the development of transit alternatives. This pressure was maintained, and, as we got more and more into the development of alternatives, we did in fact massively expand the staff in terms of competence and experience in the analysis of transit. Thus, the impact of the participatory process here was on staffing.

A more concrete example is the third harbor crossing. We had studied a number of general-purpose highway tunnels, some of them having special lanes and special priorities. As a result, we were kicked around and then kicked out of a whole variety of meetings in East Boston and also in South Boston. They said, "There must be some solutions that do not involve building a general-purpose highway. We want a transit solution." In looking for a transit solution, we effectively devised what would be a new public transportation system. This was the concept of a special-purpose tunnel so that priority vehicles—in particular a new bus-limousine airport service—would have very fast access to the airport from the western portion of the metropolitan area, which generates about two-thirds to three-fourths of all the airline trips. Again, this particular option,

which I must admit we were reluctant to investigate because of our preconceived notions of what is and is not feasible, became the recommended solution, or the one that the governor is now pursuing.

## EVALUATION OF ALTERNATIVES

In the area of evaluation, participation influenced the definition of the areas of concern and how those concerns can in fact be measured. This was a continuing, back-and-forth process. We would say, "Well, it does this." And they would comment, "That is not a very good way to measure what you are telling me it does," or "I don't even understand what it does yet." In this way, the evaluation criteria themselves evolved from a technical and community participation process.

The other thing that the process did was to monitor the accuracy of the evaluation results. One of the highlights of the entire process was that, in studying alternative transit systems for the southwest corridor, we kept arriving at one particular course of action. One woman in our working committee would continually say, "But you haven't studied this alternative." After we had gone through the alternatives, and got to a draft report, she said, "But you didn't study this other alternative in the right context, and your results therefore are biased." We printed the final report, but she did not give up. Finally one day she caught me in the hall and said, "I don't think I am getting through to you. What I mean to say is that you haven't studied the right alternative. Therefore, although I believe your numbers, you haven't presented all the numbers you could." A couple of hours later we discovered that she was right and that the results we had presented were in fact biased not because we did not like her solution but because we had not looked at it quite the right way. We did a rerun and, fortunately, prior to public hearings and public meetings, we were able to issue an addendum. The alternative that this woman insisted that we study became a part of the recommended plan.

An important aspect of the community participation process—resulting from the participation on a continuing basis of a wide range of groups, the working committee particularly—is the monitoring of the clarity of the presentation. Many times we put out information that only we understood. Every one of our major reports was fully reviewed, and the reviewers would say, "I don't know what you mean by this." We would say, "Well, it is perfectly clear what we mean by that. We mean. . . ." They would say, "Well, that isn't what we thought you meant. Why don't you state it the way you explained it?" This was an extremely important contribution to the reports, which, although they are voluminous and take a great deal of energy and perseverance to read, do contain information that is understandable to a wide range of people because they participated with us and insisted that it be understandable.

## SELECTION OF ALTERNATIVES

Obviously selection of alternatives is a political process. That is as it should be. The main thing that the participatory process did was to expose the results of the studies and assemble a series of voices to influence the choice to be made by the political process. The assembly of value positions in a way that was visible to the politicians as well as to other groups who had different values was an extremely important aspect of this entire process. Had that not occurred, the governor could have been making decisions in isolation of what in fact his constituency felt. As it was, they were able to arm themselves with reasons, to assemble groups behind those reasons, and to make the presentations heard by the political process. In summary then, participation broadens the scope of alternatives, broadens the scope of evaluation, and creates a broader understanding of the issues, the options, and the results by the general public.

# ECOLOGICAL PLANNING AND HIGHWAY DESIGN

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I think it is fairly obvious to say that ecologists and environmentalists are generally skeptical of highway and transportation planners, and I do not think it would be unjustified to say that highway and transportation planners are also skeptical of ecologists. That put us at the beginning of the Boston Transportation Planning Review (BTPR) on an equal basis. We did not trust each other.

The environmental constituency, as we refer to it, is a special constituency. It is usually made up of a number of people of different persuasions and of different interests: some scientific, some political, some avocational. To identify these groups was, of course, the most difficult process of all. Yet, through the mechanism set up by the steering committee that established the BTPR process, it was determined that there would not be any exclusion of any group that expressed a formal interest in participating. Because it is difficult to determine who is legitimate and who is not, we said, "Everyone is legitimate. You may as well participate because we really do not have the basis to decide whether you are or not." This resolved itself quite fairly. The number of participants at the beginning was reasonably controlled by the number of meetings. There just were not enough people who would attend all of the meetings when they were held. This evolved into a coalition of environmental groups. Unlike contracting groups and labor unions, environmental groups are generally not organized among themselves. They are too new; they are neophytes in the organizational process. Therefore, for the most part, they have worked by themselves as individual entities.

Possibly one of the major advantages of the BTPR, therefore, is that it provided an opportunity for those organizations to unite and express themselves in a unified manner. They were in fact forced to organize and to select representatives who would present their interests alongside the interests and values of many other interest groups, social and political, that participated in the process. Their participation extended to making a major recommendation in the selection of the environmental consultant team. The selection was not made solely by the highway department or the transit authority, and certainly not by the prime contractor. It was made by those agencies in concert with the environmental groups. They interviewed all of the eligible participants and put together an environmental team that expressed to some degree what they thought was necessary for the BTPR environmental effort.



The environmental coalition, which formed a major spearhead of the ecological-environmental interest, was composed of a number of separate groups. The main groups involved were the Transportation Committee of the Sierra Club, the Mystic Valley Watershed Association, the Neponset River Watershed Association, the Save-the-Lynn-Woods Committee, the Massachusetts Clean Air Association, the Environmental Committee of the Greater Boston Coalition on the Transportation Crisis, the Environmental Committee of the Boston Industrial Mission, the Massachusetts Forest and Park Association, and a number of other groups that participated at various times during the review process as their particular interests became apparent. As soon as those were resolved, they were never heard from again.

In the region, there were basically 4 subregions: the North Shore, the northwest, the southwest, and the core. In the North Shore area, we had 13 different environmental groups whose primary concern was the routing of I-95 north of Boston; in the northwest area, we had 8 groups; in the southwest, where the truncated portion of I-95 at Mass-128 was then to carry that road into the heart of Boston, we had 16 groups; in the core, where the inner belt, the central artery, and the third harbor tunnel were issues, we had 14 groups; and in the region, where discussions related to the overall planning for possible futures and ultimate futures in terms of environmental concerns, we had 5 groups. This gives a total of 56 different environmental groups and organizations to be dealt with at one time or another during the 18-month period of the BTPR.

In addition, representatives from our environmental team attended literally hundreds of regional and subregional meetings organized by the groups to discuss with them what the various issues were that they were concerned with.

Three subregions contained a number of major problems, and a number of major constituencies were developed over these various issues. The North Shore region contained the Lynn Woods and the Saugus Marsh, 2 major environmental areas [covered by Section 4(f) of the Department of Transportation Act of 1966] through which the proposed I-95 route would pass. As a subissue (to show the kind of pressures that one can develop from a rational dollars-and-cents or cost-benefit point of view), already sitting in the midst of the Saugus Marsh was a \$14-million embankment on which the road would be placed as it passed through the Saugus Marsh across the Saugus River and up through the heart of Lynn Woods. Lynn Woods was a unique area, encompassing 2,000 acres—the largest municipally owned city park in the country. This was an uninterrupted area of relatively heavily vegetated deciduous forests in which there were 4 potable water reservoirs, a golf course on its perimeter, and a public-access recreation area to its west.

The North Shore problem was reasonably resolved 3 months before the end of phase 1 when, as a result of rather intense analysis of the natural resource element existing in that subregion, the traffic potential, and the existence of the US-1 corridor in a rather degraded position, the governor decided that the US-1 corridor was in fact a prudent and feasible alternative to a route through the Lynn Woods. The US-1 alignment was therefore upgraded, and we discontinued further study on Saugus Marsh and the Lynn Woods.

We then turned our attention to some of the other areas. One of the issues we will not dwell on here was the one in the northwest that brought Mass-2, a major state highway, to the confluence of Alewife Brook, a large wetland area in the midst of an urbanized industrial site that was used quite heavily by the local residents as a wildlife-recreation area. This area is still under study, and there is some concern as to how the issues will be resolved. There are definitely Section 4(f) and environmental issues involved.

The major consideration, however, was in the southwest and concerned a major corridor from Mass-128 through Needham, Dedham, Milton, and West Roxbury, into the heart of Boston, and then on up to the North Shore. At the focal point of the entire issue was Fowl Meadow, a 600-acre wildlife reservation run by the Metropolitan District Commission and used as a classroom by the schools of the greater Boston area. It has resources other than aesthetics, including various species of vegetation and wildlife that were in fact unique to the area; 2 endangered species; a river, which was proposed for relocation; and beneath it a valuable aquifer, which was discovered as a result of

the analysis made. Any highway planner will agree that that is a formidable set of obstacles to overcome.

We felt that the southwest was indeed a key area because construction of the Southwest Expressway was based on the fact that I-95 would come from the south, head through the southwest corridor, and proceed through the center of Boston to the northwest. If the Southwest Expressway were not built, the upgrading of Mass-128 obviously would become a possibility, and the center of the city and the core area would not be subject to a highway corridor. Thus, there was strong polarization among various factions—political, economic, and environmental—as to what kind of answers could be resolved and what type of trade-offs could be made in resolving the Fowl Meadow issue.

We began our analysis of the southwest corridors with a number of meetings with environmental groups. Not only transportation people but also professional environmentalists sometimes find that nonprofessional environmentalists in many cases perceive issues that are in fact not issues. In any case, the only way these issues can be resolved, either positively or negatively, is to find out the facts related to the issues. It is no longer acceptable to simply write off issues, such as fog or water pollution or runoff from the road or the problems that one might have with air and noise or filling and dredging as being insignificant because the National Environmental Policy Act requires that these issues be addressed in considerable detail so that we can resolve conflicts related to the original planning of the highway, the environmental interests, and the future needs.

Our goal was, therefore, to identify, if possible, all the real issues that existed. If the group had an issue that was not a problem, it was incumbent on us as the professionals to undertake enough study so that we could indicate that. If they disagreed, they could get their own consultant and contest our finding. That put us in a relatively objective position, and that was the position that was quite successful.

The other problem we had was one that occurs in any analysis, whether transportation or ecology or economics, and that is that problems not heretofore perceived will be uncovered. That did occur, particularly in the southwest corridor. In the process of the analysis and in response to the public participation, we were able to uncover other aspects of the Fowl Meadow area that were either positive or negative. In documenting those, we were able to come up with recommendations that allowed us to carry a road through the Fowl Meadow, if the governor decided to do that, or, from the opposite point, to preserve that area as a valuable wildlife and water resource.

The analysis that we did was part of the normal analysis that environmentalists do before they make decisions and make reports. It had been our experience in preparing other impact statements to simply be given the charge of what to do, go off in a corner, make our studies, draw up a report, and submit it. In the BTPR, this was not the case. There was no corner to hide in with 56 different environmental groups to deal with. We were in the process right along with the engineers, the planners, and the people who were involved in the transportation analysis from the very beginning to the very end. We learned a lot from them, I might add, and I hope they learned something from us.

We first documented, once again in response to the public's need for knowledge about the area, the surface water features of the Fowl Meadow area. The Neponset River, we found out, was of much better quality than anticipated, and in fact much of the work done by the Massachusetts Department of Natural Resources in cleaning up the watershed was beginning to show in increased water quality and improved fisheries through the area. All of the standing-water wetland and drainage areas were documented.

Then we made a complete analysis of the vegetation to answer the questions, What species are there? Why are they valuable? Some people had thought there were more species than really existed; some of them could never have existed there because none of the vegetation, landform, food, or reproduction requirements were present. Thus, an analysis is made both to prove and to disprove things.

Then an analysis was made of the various soil types because they indicate to a great degree the bearing capacity of the road and the subsequent effect of drainage and runoff. We determined the K factor in terms of erosion and runoff so that we could know, if we disrupted or changed the natural movement of water that came from the Great Blue Hills, a short distance away, and rushed through this area down to the Neponset River,

what effect that would have on subsequent water quality downstream as well as on vegetation and wildlife in this area.

Another analysis of surficial geology was extremely important because it began to give us a key as to what type of road construction we could have. For example, in one area there was a great depth to bedrock, on top of that sands and gravels, and over that a cap of peat. By knowing what the surficial conditions were, we were able to determine what type of structure we could build that would neither interrupt the natural flow nor puncture the peat layer on top of the aquifer.

As a result of our analysis, we found that the entire central area of the Fowl Meadow was one huge aquifer that was being tapped by only a small well, and no one had any idea how extensive it was. We wanted to preserve this because it could be a valuable source of water for an area where water is becoming rapidly depleted. Thus, we had a definite environmental concern here that had not been identified before. We determined that there was a surplus of 13 billion gallons of water available. We had to work very closely, almost on a day-to-day basis, with the engineers so that we could resolve the types of structures that could be placed in this area without serious environmental impact.

We had public land; we had access through the area; we had what was originally going to be an embankment that would have blocked access unless we had tunnels of some kind. But there would be major environmental impacts: recreational opportunities; Paul's Bridge, which was both an aesthetic and historical site and also served as a flood control device for flooding the area when the Neponset River overflowed; and the relocation of the Neponset River. There were also fog as a traffic safety problem, noise and air pollution resulting from the location of the facility within the wildlife refuge, runoff, and ramps and intersections that would have to be constructed in the midst of another aquifer and wildlife area.

An alternative across Fowl Meadow at the shortest possible point was developed both by the environmental and the engineering staff in a very short period of time, and this resolved many but not all of the serious issues that would have arisen had we done this without public participation.

I have given not a technical discussion but just a description of how public participation and the various interdisciplinary activities of the staff made it possible to resolve something that might not have been resolved had we not gone through this process. The engineers developed the various options. These were taken to meetings and discussed with the various environmental groups. We outlined what we thought the problems were, and they came back and told us what they thought the problems were. We were able to put these in a form for evaluating the trade-off factors of cost; residential, business, and environmental impact related to human use; and ecological impact related to natural systems and areas covered by Section 4(f).

# TECHNICAL ASSISTANCE AND COMMUNITY LIAISON

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This report covers 3 major subjects: structure of the participation, the techniques used, and 6 major lessons learned.

## STRUCTURE OF PARTICIPATORY PROCESS

In the Boston region, there are 6 major highway corridors, all radiating from the city center. The Boston Transportation Planning Review (BTPR) was designed to examine the highway controversies that had developed in 3 of those corridors where the radial highways had not been completed and where there was a question as to whether they should be built.

The focus of the BTPR, therefore, was not on the region as a whole. The controversies had existed for a long time. The original plan that formed the basis for the highways was actually adopted shortly after World War II, about 1948. Thus, proposals for radial highways and an inner-belt highway connecting all the radials and skirting the edge of the core areas of Boston and Cambridge had been on the agenda for 20 years. Three of the 6 highways had been constructed, and it was in part a reaction to the impact of the facilities already built that brought about the BTPR. In two of the remaining corridors, highway construction had already begun. Land had already been cleared, property had been taken, and construction work had been started in some areas.

Thus, we were dealing with a situation where a moratorium was declared on a program that was actually well under way, having been committed for some time. Inasmuch as the participatory process in Boston resulted from those factors, one may well ask whether the Boston participatory process is applicable in another metropolitan region where the transportation plan is not fully committed, designed, and under construction. I think in general it can be but, of course, will have to be adapted to a different set of factors. For example, we never had the problem of trying to generate interest. The interest and controversy had been there for years. Many people were violently opposed to the highways. As the highways were built in some corridors, pressure mounted against the construction in the remaining corridors.

Because the structure of the participatory process was tailored around the specific situation in each of the 3 corridors, we really had 3 separate participatory processes in addition to the general regional process. About 60 to 70 percent of the participatory process centered on the dynamics in each of the 3 corridors, each of which had completely different sets of issues and different clienteles.

One of the important characteristics of the structure of participation in Boston was that formal committees were not the most important feature of the process. Most of us who were involved with defining a participatory process at the beginning of the BTPR assumed that the first step in any participatory process is to set up a committee on which there was someone on one side of the controversy, another from the opposing side, and so on. That did not happen for very good reasons. The formal committee that we did have—the Working Committee, which met every Tuesday at lunch to review the work program and the general events of the week and oversee the whole process—was a major component in the region, but was not the major component of the participatory process in the corridors. There, the process centered on the specific technical work and the local issues and the nature, habits, and strengths of the actors in that particular corridor.

As a result, we had completely different participatory experiences in each corridor. In the southwest corridor, which ran primarily through the city of Boston for most of its length, we had probably the highest input from ad hoc and permanent community groups. Local groups from the inner-city neighborhoods of Roxbury, Jamaica Plain, and South Boston and groups involved with the environmental issues in Dedham and Milton were the principal actors. In addition, the city of Boston's administration provided leadership and initiative for framing the basic issues and much of the technical work undertaken by the BTPR. The combination of the city administration and active well-organized community groups both in the city and in the other towns provided the major impetus for what we did.

In the North Shore, on the other hand, we had quite a different pattern. The governing bodies and chief executives of the towns and some of the interest groups were the key clientele. However, we had to deal with each town separately because their interests were so diverse. In the northwest corridor, 3 jurisdictions, the cities of Cambridge and Somerville and the town of Arlington, shared some interests, but community organizations were not so active as in the other corridors. As a result, we had to adapt and develop different mechanisms around the different substantive issues. The process involved in working out our relations in these 3 corridors turned out to be the essence of the participatory process.

## TECHNIQUES

We had to invent some of our techniques because there were no applicable precedents for running this kind of participatory process. I directed Study Element II Staff, which was a group set up independently of the prime contract to provide liaison and assistance to the municipalities and the community groups interested in the BTPR. It was composed of locally recruited people with experience in community work in the community itself. The group reported directly to the study manager. We had the problem of trying to define exactly what role we were to play and how we were going to respond to the variety of pressures and interests that were involved in each of the 3 corridors. Our particular role was unique in that we had no contractual responsibility for producing any technical work. Our responsibilities were oriented toward helping manage the participatory process. One of our major functions was to make sure that there was communication going freely and appropriately among the various parties of interest in both the technical staff and the community groups. For example, we spent a great deal of time dealing with 2 groups that were in the same neighborhood and had completely different views of the Southwest Expressway. We had to develop mechanisms that were responsive to a variety of different situations and different kinds of people who had quite a wide variety of styles, knowledge, and interests.

We found that open public information meetings were more desired than any structure of formal committees. The key feature of our participatory process was a continual series of meetings. Thus, one of our main functions was to try to design the appropriate kinds of meetings at the appropriate time in the appropriate place for the appropriate people and to develop the relations between the technical staff and the community groups that were working on and concerned with the same substantive issues.

We needed to rely on the press and on other communication mechanisms to announce and publicize the meetings and to inform people about what was coming up and what some of the issues were. We developed a series of newsletters and had excellent cooperation from both the regional and local press (even to getting a notice of a scheduled meeting in the paper on the same day). Without the help of Abe Plotkin of the Boston Globe, I think we probably would have been in trouble a number of times when we had to set up meetings on very short notices.

A feature of the meetings that is very important is that the technical staff had to listen as much as they had to talk. They had to hear the concerns of community groups, come back from the meeting and reformulate their ideas and concepts, and within a week or so go back to the same group with their findings. This particular strategy was the core of the whole participatory process, and it was not the liaison staff so much as the technical staff that actually had to do this work and develop the procedures and techniques for carrying it out.

## MAJOR LESSONS LEARNED

1. Do not underestimate or put down the community people. Do not assume that the technician must educate or otherwise enlighten the people about what the story is. In Boston, the people in the community (when I say community I mean both the municipal officials and various kinds of both ad hoc and permanently established groups) knew as much if not more about the issues than a lot of the technicians did. The people had lived with the issues longer, and the issues were affecting their lives very directly. It was a great tribute to the way the BTPR was conducted that we never dealt with people in a way of putting them down or assuming that they did not know what they were talking about. I think that this is the key to any participatory process, even though there may be a number of wild meetings, kooky ideas, quite a bit of yelling and screaming, and a lot of people telling you to your face that they neither trust you nor think you are so smart. This was a part of the game that we had to learn to play, and it is a very important feature of this process.

2. Present a rationale that is acceptable, reasonable, and well documented. Part of the problem in Boston stemmed from the reasons that had been given to the people in the communities for building the proposed highway facilities. They were told that the facilities were needed so that people could get from Maine to Florida on an Interstate highway or so that people could get into the downtown area, and so on. The highway plans in Boston were developed quite a long time before many of the studies of need were made, and part of the problem in the process was that the need studies often were used to rationalize already existing plans. What happened as a result is that there was a real credibility gap in terms of the purposes for which the highway plans were being developed and sold. There is now a new burden on all of us involved in technical processes to rethink with people the rationale for particular facilities and proposals. Another thing that was a credit to the staff was that we really backed away hard from any phony arguments or any arguments that people in the communities would see as arguments that had no support and no real analytical or any other basis.

3. Understand that procedures are as important as the technical work. What I mean by a procedure is a process for systematically presenting information to and getting feedback from people, who are, after all, the clientele and beneficiaries of particular programs. The finest technical work in the world can lose its effectiveness unless there is a procedure for getting it to the people and getting feedback from them. In the past, agency officials and technicians have sat in their offices and worked out the problems in their own heads and then rushed out at the last minute and announced, "This is

what we're going to do!" That will no longer work, and we learned this when we were dealing with the community groups. When people sensed that we were wrestling with their problems—doing the technical work around issues that they were concerned about—we were able to develop quite a good ability to communicate, especially with various people who were very hostile before and who came along to the point where they were willing if not to agree with the conclusions then at least to accept the analysis. Then we could begin to develop some debate and discussion on what some of the real issues were.

4. Relate transportation studies to the communities and view transportation problems as the communities perceive them rather than as long-range abstractions. Some of the models of long-range future travel demand have led to the rationale for a lot of facilities, but are really quite remote from the concerns of the people in those communities where the facilities will be constructed. We must recognize that the data and the kind of research that is done—and there is a lot of research needed—must be redirected.

5. Find out how people who actually use facilities and services and who need to get around perceive transportation, and design a continuing process that will address those problems. In our technical assistance program, about 60 or 70 percent of our work had very little if nothing to do with the expressways that were being studied. People would come to us with concerns like rerouting a bus route more conveniently or handling a local street problem by providing a new routing or by-pass. In our position, we would have to say, "Yes, that is a good idea but, of course, we are not studying that." They would ask, "Who is studying that?" We would say, "Well, we do not know." We did honestly try to address some of those concerns, but I think the focus of our work was such that we were not able to do them justice. The continuing process for regional transportation planning must address this level and this kind of concern, and I think that part of the participatory process has to be designed to do that.

6. Exercise caution about the participatory process. If the participatory process just becomes the new banner for the transportation planning of the future and all we do is tout the participatory process as the big new wave of the 70s, that is not going to wash. What is important is to have a much more sensitive way of dealing with some of the things that were supposed to be dealt with in the original transportation planning process as it was set up in the early 1960s, namely, a careful assessment of what is needed in the community. We got off on the wrong track because we were probably measuring the wrong things. In Boston, a lot of people felt we had a bad plan. The plan called for great expressways in radial corridors to the inner belt, while at the same time in those same corridors the rail services were drying up. Many people questioned the rationale: Why are you supplanting rail services that have been in operation but are now dying with great big new expressways, which are expensive, are disruptive, and are not going to work when you put them all together? These people were not doing sophisticated analyses but were looking at what was happening with some of the other highways that were built and in operation, particularly the Southeast Expressway, and were raising some good and important questions.

I think that participation has to be one of the key tools in the process. But the end of the process still has to be the delivery of transportation services that are appropriate to the particular clientele in the particular area. And I think we must learn from our experiences of the 1960s that led the move for participation. We may have become overly dogmatic about planning a big shiny new facility and ignored the kind of process that involves looking at the real needs of people, figuring out what we should plan as a result, and then having a much more flexible and open way of providing better transportation to citizens.

# INFORMAL DISCUSSION OF THE BOSTON TRANSPORTATION PLANNING REVIEW

**QUESTION:** How much was paid for the BTPR, and who paid for it?

**ANSWER:** The total budget for the study was about \$3.8 million, which came from state transit and highway funds, the Federal Highway Administration, and the Urban Mass Transportation Administration. One of the important aspects was that these funds were jointly pooled: There was no requirement to spend transit funds for transit or highway funds for only highways, but there was an agreement on the pooling of both federal and state funds to accomplish the overall objective of the study. That was critical to the way the study was conducted. And if we cannot get implementing funds to be used with discretion on transit or highways, I surely hope we get a unified planning fund very quickly for urban area studies.

**QUESTION:** We have assumed that citizen involvement will result in some kind of a positive action or results. Is that in fact true?

**ANSWER:** We are convinced that our product is better because of citizen participation.

**QUESTION:** Is it because there will be less opposition to what is being executed or implemented, or is it because what is to be implemented meets the needs of the community on a more progressive level?

**ANSWER:** I do not think that the intensity of the feelings that people have about what should happen is in any way lessened by this kind of a process. Indeed, I would say it is increased and made more dramatic by this kind of a process. But in the course of the process, those feelings are expressed in a more understandable way, and the technicians are on the spot to respond. In that sense, we made some progress toward developing alternatives that really did reflect their views. But in no way was the intensity lessened; it was expressed differently because there were alternatives. I think the worst situation is one in which there are no concrete proposals that respond to those views.

**QUESTION:** What is there on the negative side of this process? In other words, is it possible that a lot of dissension was produced by having too many cooks in the kitchen?



Was the main organization not effective enough in selecting alternatives so that somebody had to tell it what the best solution is? Should not we look at both sides so that we do not get into a situation where this becomes a disease rather than a blessing?

ANSWER: That is a very difficult question to answer. Let me take two approaches to it. First of all, there were not that many cooks in the kitchen. There was one cook—the governor. We brought him lettuce, we brought him meat, we brought him a lot of things; he selected the menu. It is impossible to spend too much money to get an informed decision in a democratic process. Concerning spending money and wasting time, the Inner Belt, which was one of the facilities we were studying, has been studied 4 times by the traditional process. It has resulted in 20 years of controversy. There had been nearly \$7 million spent on preliminary engineering for that facility before our study. The Southwest Expressway has been under controversy for 20 years; in fact, that controversy has held up a public transportation improvement for almost as long. The total amount spent on preliminary engineering for that facility prior to our study was approximately \$12 million. Our aim was not so much efficiency as response to what are obviously emerging issues in our urban areas. Not to respond to those issues is inefficient and, as Boston proves, terribly expensive.

ANSWER: For the \$3.5 million or so spent on the BTPR, \$1 billion is being considered for highway improvements and almost the same amount for transit. In terms of total expenditure, therefore, it is a very efficient process. Moreover, the review was completed in 18 months, which is not very long considering the breadth of issues under concern. That was due primarily to structuring this process so that a very broad consideration and generation of alternatives was combined with a very focused and time-staged decision-making process. I agree that otherwise there is a danger that you can talk for years without making a decision.

ANSWER: The question of efficiency depends on whether the process occurs before or after hearings on the environmental impact statements. Traditionally, we have submerged most of the controversy and then tried to handle it as it came up in the public hearings. Our process did quite the opposite. We addressed issues prior to the public hearings. We sought solutions with many different interest groups. Otherwise, we might still be in the process of reviewing or re-opening the study and be far from a decision. By opening and exposing the lesions that had existed for many, many years under the old process and then by healing them by letting people speak produced greater efficiency because it decreases the time between the hearings and the actual implementation of the plan. That is important in view of rising construction costs.

QUESTION: How are you planning to phase this process into an ongoing participatory process for continuing urban transportation planning in the Boston area?

ANSWER: We are doing that now and have been arranging it for the past 6 months or so in a cooperative agreement between our regional planning council and the 3 principal state and regional agencies: the highway department, the transit authority, and the secretary of transportation. We will also be bringing into that agreement, we expect, the airport authority. That process is going to operate with the same kind of open ground rules that the present one has. The secretary of transportation has appointed to a new region-wide policy advisory committee on transportation the principal representatives of private groups who have been involved in the BTPR's working committee, so there will be continuity on that front. Exactly what kind of consultant staff is to be made available to that committee is not yet clear, and I think there will be discontinuity with the technical team that has been assembled in the current process. We have basically agreed that the BTPR should be one bureaucratic entity that did in fact fold its tents and steal away and did not have as its main reason for being the perpetuation of its existence. In that sense we all applaud the fact that we are concluding and disappearing as a separate study within 18 or 19 months of our starting point.

QUESTION: When staff members were asked for their individual judgments and recommendations (if you were the governor, what would you do?), were there differences in the opinions given, or were they somewhat consistent with the action taken by the governor?

ANSWER: There were, I believe, 11 staff members who were asked to make 5-minute presentations of their recommendations. The range of alternatives in that meeting was equivalent to the widest range of feelings. We could have almost set up a little congress and represented Boston. There were those who would build everything, and there were those who would build nothing. There was almost every combination you could think of in between. There was no unanimity on any single facility. Different people suggested different things for different reasons. Again I think that that was one of the high points of the study because it was an indication that the staff even right up to the end had not developed a unified position, which, in fact, no matter how hard we would have tried to keep from it, would have appeared in our publications.

QUESTION: If 11 people from the technical staff could not agree on one final action, would that not be an indication of failure of the total process?

ANSWER: I would say just the opposite. The 11 people represented by and large 11 different disciplines and 11 different value postures as to what was or was not important among the range of issues involved with each alternative. Clearly, I would not expect a biologist to have the same value position as a planner or an engineer or an economist; nor would I want him to because, otherwise, there would be no need for having him on the team. I think the point is that the basic decision is a value decision. There is no single best. Any decision involves a trade-off in which some interests are sacrificed for others. The only system that we have devised for doing this in our society is elected officials in a political structure. I would agree that the preservation of the individual points of view among the disciplines involved in this interdisciplinary process was really a key component. If all we wanted in terms of forming an interdisciplinary team was a bunch of people who agreed with us, it would negate the necessity for such a team in the first place.

QUESTION: Was there unanimity or nonunanimity in the team about the process itself?

ANSWER: I will speak for everyone, which is about 60 or 70 other people. There is unanimity that an open and participatory process is the only way to go. I think all of us found it to be a challenge and also to be frustrating and exhausting in many ways; but we also found it to be very rewarding.

QUESTION: Did you use any survey techniques or any other techniques to quantify what you found from the communities?

ANSWER: We did not have any techniques for polling. We felt that neither the pace of the study nor the particular way of operation seemed to lend itself to that. The major way that we did operate the process was a kind of very intimate give and take among the various interested groups and the technical staff on a weekly basis and on an event basis. In other words, the prime way of doing business was that the technical staff did some work, met with the community (usually with some of the leaders of the key groups that were interested or involved and had been in the process), redid the work, went back to another meeting, redid the work, went back to another meeting, and then held a very large public meeting after a lot of things had been resolved. This was the key type of procedure that we fell into.

We got a kind of a synthesis of a lot of different reactions on a more general basis at the public hearings. We had public hearings in each of the corridors, and they required people to take all the evidence that they had, organize their thoughts, and present their positions publicly. They also provided us with quite an analysis. At the public hearings we had various kinds of mechanisms that we used to record people's views. We handed out response forms to people who did not want to speak; the forms could either be returned at the meeting or mailed. We also solicited and received many letters and other responses from people who were not at the hearings or did not testify. We received 300 or 400 letters and written statements of various kinds and more than 1,000 response forms. We did regard these as a kind of informal polling device although we never did any kind of sampling or anything of that kind.

**QUESTION:** Did you find that many people gave emotional speeches that wasted a lot of time at your meetings?

**ANSWER:** I think that is always the case. We had meetings that were attended by 20 to 400 people. In a crowd of that size, there are always going to be some people who are great actors and actresses and who have very dramatic qualities, others who are very rational, and others who have a different agenda. We found that repetition was probably the key element that helped to work out a lot of the problems and to focus on the issues. We were having not just one meeting but meetings over and over again, quite often to the exhaustion of the staff. The idea was that we had to have a kind of continual process and quite a bit of repetition before we reached the point of getting the issues finally on the table. After a while everything of an emotional nature had been said, and we got down to business. It pays off if you can last that long.

**ANSWER:** I think that our final public hearings were probably just as emotional as any others. But the purpose of our public hearing was not to inform people of the facts but to allow people who were already well-informed of the facts to put forth their case and their choice in any way they could; and it was emotional. There were not, however, wild facts being thrown around. There were statements of values and of how important things are. The facts were well understood by most of the people who came to the public hearings and also by the people who were listening to the discussion from the floor. But we still had emotion.

**QUESTION:** How will this kind of multidisciplinary and interagency process be carried forward, if at all, and how will you keep this kind of process at the project level when project work is not done at the level of intensity in terms of public focus that you had here?

**ANSWER:** It is important to understand that this particular technical team was put together to do this particular job at a time that happened to coincide in our state bureaucracy with a complete reorganization of the state government and the creation for the first time of a state secretary of transportation. The secretary's office was essentially created without staff for the first 2 years. In a way, the BTPR technical staff became a very important arm of the new secretary as, in effect, an intermodal planning staff, focused, of course, only on the particular controversies that we were dealing with. As the state reorganization proceeds now into its next phase, the recommendation has already been made to the legislature that the secretary consolidate the planning activities of the highway and transit bureaucracies into a single planning staff responsive to the secretary. The relation between planning done by that staff and project planning has yet to be worked out, and I agree with you that there is a potential inconsistency between the two. I can only say that we are committed to trying to develop projects in the same kind of multimodal, multidisciplinary, open process that was used in the BTPR. Of course, this review itself was focused on projects, so in that sense the lessons we have learned here will be directly relevant.

**QUESTION:** How do you develop community consciousness and community participation when they do not already exist? If you are confronted with planning in an area with a low level of participation, how far should you go to develop it, and what kinds of techniques really work?

**ANSWER:** Working through the structures of existing organizations to make it known that there is an activity going on that will affect people is a step that is absolutely necessary to provoke interest on the part of people. They will not be interested if it is not clear to them that there is something that will affect their lives in a way that can be demonstrated. If you send some kind of circular to a variety of groups describing a process that is going to make decisions about something that will happen in the year 2000, you are less likely to get a reaction than if you describe a process that will reach conclusions about something that will happen next year. So, the initial communication has to make 2 points. First, it must be clear that there is a role to be played by citizen groups, not necessarily a role in making decisions but certainly a role in developing and evaluating alternatives. Second, the initial context must somehow, without presenting a plan for people to react to, give some examples that there will be some direct

effects between the normal concerns of these people and this process. If those 2 things are established, then participation surfaces on its own. If a decision is to be made that affects people and if it becomes known, then the participatory process is self-generating; you do not have to go out and organize communities. There are, of course, a variety of community organization techniques and strategies that can be used or are transferable from other areas to transportation planning.

ANSWER: I think community participation is a little bit like transportation: It is a means to an end. If you do not have an end point, do not start. There is no value in community participation unless a decision is to be made about something. If the community knows that a decision is to be made to do or not to do something and knows that there are numerous ways to do it and still does not indicate a desire to participate, then you probably do not need to do anything else to get citizen participation, for nobody is interested.

QUESTION: Would the BTPR have worked if the governor himself had not committed himself to make the final decision?

ANSWER: I do not think that you must have a governor put his political neck on the line in order to get participation going. It is clear that you have to have something bigger or more influential than a metropolitan planning commission recommending that local governments adopt a plan for the year 2000. That is not likely to get much interest. But a decision by the mayor or the elected representatives of a community to build or not to build, to adopt or not to adopt, will, I think, get the interest of citizens.

ANSWER: That question is difficult to answer. It was, in fact, an important characteristic of the BTPR that the governor was effectively acting like a mayor of metropolitan Boston in connection with these decisions, not only the final ones but also the interim limiting decisions that helped order the process along the way.

QUESTION: When technical information is presented, people are often turned off by the slides and the technician with the arrows. Did you find new ways, new approaches, to visually and dramatically present your argument?

ANSWER: Not really, although we discussed at the beginning things such as closed-circuit TV, video tape, and so on. There was one basic reason why those kinds of techniques proved more or less irrelevant to the process. There was a very fast turnaround time in terms of the way alternatives evolved—literally from day to day—so that if there were a sequence of presentations in a particular geographic area during a period of, say, 2 or 3 weeks on almost a nightly basis, very often every presentation had to be custom tailored to the issues and the area. Not only that, but the custom tailoring had to be done by the person who was making the presentation. That person was a senior professional who had a Magic Marker and a base map and did the best he could, given the time he had to express the particular issues for that particular meeting. There is perhaps a trade-off implicit in our style of operation between the carefully worked-out graphic presentation and the need to be able to do these things on a regular basis with fast turnaround.

ANSWER: One of the problems we had was how to relate rather technical data to a public that wants to know but does not have a technical background. We tried many different ways. The first thing was to determine where the presentation was going to be made. There were times when we came into large halls that had no place to hang graphics and no projection equipment. Other times we came with huge maps and charts and the room was the size of a postage stamp. We had to be rather quick on our feet and have alternative methods of getting the information to the public. We did have handouts, however, in which there were graphics that backed up the material we had on the walls. In our environmental impact statements, the graphics were drawn in a better form and were more acceptable to federal standards. But we found that citizens were so eager to participate and so interested in what was being presented that they really did not care whether the graphics were fancy or not. As a matter of fact, I think the flavor of the public participation process was enhanced by not having slick graphics and a slick approach. "Folksy" might be an appropriate description to our approach.

ANSWER: We did find that, for our particular issues, aerial photographs that had alignments and boundaries of alignments marked on them conveyed the concepts quite clearly. Of all the graphics that we used, I think we consistently found that the general oblique or straight-on aerial photographs with marks and tape on them were the best.

ANSWER: Slides were our least effective means of communication. One of the most effective, depending on the size of the meeting, was the placement of multiple copies of whatever map we were talking from around the room and out in the lobby so that people could get up close to it and see it.

ANSWER: Large meetings were generally not very useful for interactive purposes. They tended to be more useful for presentations. The smaller shirt-sleeve sessions around tables were where the real nitty-gritty agreements were hammered out. That kind of a session requires something that can be put on the table, something that people can draw on and change and so on. Thus, there are many reasons why the quick-to-produce graphics by Magic Markers on base maps or aerial photographs seemed appropriate.

QUESTION: How did the governor relate to local wishes, and was he usurping the role of local governments in assuming the kind of "metropolitan mayor" role?

ANSWER: The Boston area has 79 or 101 (it depends on how you count them) separate cities and towns. Approximately 30 were directly impacted by our facilities. The governor directed that we give special emphasis to listening to public officials and elected local public officials, so he could be well aware of what their views were. One of the final 6 groups that went in to brief the governor was an alliance of local officials representing all but about 3 of the communities directly impacted, and those that did come in spoke with a unanimous voice. That group included the mayor of Boston. In the end, the plan that the governor adopted coincided in most respects with what that group had been seeking. So I do not think that the governor usurped their role because there is no metropolitan government in Boston. In that vacuum he had a key role to play because state legislation gives the state the implementing authority for most of these projects.

# WORKSHOP PARTICIPANTS

The approximately 90 participants, who attended by invitation, were representatives of citizen groups, environmentalists, academicians, consultants, transportation planners for private and governmental agencies, elected and appointed public officials, and representatives of the sponsoring agencies. Their affiliations and the workshops in which they participated are given below. In addition to those, the following persons attended the conference but were not assigned to a specific workshop.

WILLIAM N. CAREY, JR., Executive Director, Highway Research Board, Washington, D.C.  
KENNETH E. COOK, Transportation Economist, Highway Research Board, Washington, D.C.  
WILLIAM L. MERTZ, Director, Office of Highway Planning, Federal Highway Administration, Washington, D.C.  
HENRY M. PARSONS, Consultant, New York  
PAUL L. SITTON, Special Assistant to the President, National Academy of Sciences, Washington, D.C.  
DAVID H. STEVENS, Commissioner, Maine Department of Transportation, Augusta

## WORKSHOP 1—OVERVIEW ISSUES

SHERRY ARNSTEIN, Arthur D. Little, Inc., Washington, D.C., chairwoman  
E. WILSON CAMPBELL, Acting Assistant Commissioner for Planning and Development, New York State Department of Transportation, Albany  
SALVATOR CARUSO, Urban Planning Division, Federal Highway Administration, Washington, D.C.  
ANN R. HULL, Maryland House of Delegates, Takoma Park  
HAL KASSOF, Project Director, Western Prince Georges County Transportation Alternative Study, College Park, Maryland  
JACK KINSTLINGER, Deputy Secretary for Planning, Pennsylvania Department of Transportation, Harrisburg  
MICHAEL J. McMANUS, Executive Director, Choices for '76, Regional Plan Association, New York  
MILTON B. MEISNER, Chief, Aviation Policy Division, Federal Aviation Administration, Washington, D.C.  
GREEN MILLER, JR., Office of Program Planning, Urban Mass Transportation Administration, Washington, D.C.  
LEON A. RAIDER, Raider Associates, Inc., Philadelphia  
ANN W. SMITH, Office of Consumer Affairs, U.S. Department of Transportation, Washington, D.C.  
ROOSEVELT STEPTOE, Southern University, Baton Rouge

JOHN H. SUHRBIER, Research Associate, Urban Systems Laboratory, Massachusetts Institute of Technology, Cambridge  
 VIRGINIA TAYLOR, Atlanta Coalition on the Transportation Crisis  
 MELVIN M. WEBBER, Professor of City Planning, University of California, Berkeley

## WORKSHOP 2—OVERVIEW ISSUES

GENE E. WILLEKE, Associate Professor, Georgia Institute of Technology, Atlanta, chairman  
 GERARD ANDERSON, G. A. Anderson and Company, Cleveland  
 MARCY BENSTOCK, Air Campaign, New York  
 CHESTER G. BOWERS, Vice President, Landrum and Brown, Inc., Washington, D.C.  
 M. F. BRENAN, Director, Advance Planning Division, West Virginia Department of Highways, Charleston  
 DOUGLAS HAIST, Director, Bureau of Policy Planning, Wisconsin Department of Transportation, Madison  
 CATHY HERMAN, Pratt Institute Center for Community Environmental Development, Brooklyn  
 ARTHUR J. HOLLAND, Mayor of Trenton, New Jersey  
 LEROY E. JOHNSON, Office of Transportation Planning Assistance, U.S. Department of Transportation, Washington, D.C.  
 NORMAN KNOFF, Chairman, Citizens Coordination Committee for Friendship Heights, Washington, D.C.  
 ROSS D. NETHERTON, U.S. Department of the Interior, Washington, D.C.  
 HOWARD SCHWARTZ, Office of Environmental Affairs, U.S. Department of Transportation, Washington, D.C.  
 FLOYD I. THIEL, Chief, Socio-Economic Studies Division, Federal Highway Administration, Washington, D.C.  
 STEPHEN C. WASHBURN, Sharon, Massachusetts  
 ROBERT WATKINS, Chief, Environmental Analysis, California Department of Transportation, Sacramento  
 JAMES WHITE, Chairman, Citizens Advisory Committee, Southwest Pennsylvania Regional Planning Commission, Pittsburgh  
 JULIAN WOLPERT, Department of Regional Science, University of Pennsylvania, Philadelphia

## WORKSHOP 3—SITUATIONAL ISSUES FOR SYSTEMS PLANNING

LOUIS E. KEEFER, Director, Bureau of Advance Planning, Pennsylvania Department of Transportation, Harrisburg, chairman  
 LINDA M. BILLINGS, Sierra Club, Washington, D.C.  
 DAPHNE CHRISTENSEN, Supervisor, Legislation, Grants, and Communications, Chicago Department of Public Works  
 MARY DEEN DAVIS, Atlanta  
 ALBERT A. GRANT, Director, Department of Transportation Planning, Metropolitan Washington Council of Governments, Washington, D.C.  
 BRIAN KETCHAM, Director, Office of Planning and Implementation, New York City Department of Air Resources, Brooklyn  
 RAY G. L'AMOREAUX, Director of Transportation Planning, Florida Department of Transportation, Tallahassee  
 KENT R. LARRABEE, Office of Consumer Affairs, U.S. Department of Transportation, Washington, D.C.  
 CHARLES C. SCHIMPELER, Development Planning Consultant, Louisville  
 ALI F. SEVIN, Chief, Network Evaluation Branch, Federal Highway Administration, Washington, D.C.  
 SIDNEY F. THOMAS, JR., Executive Director, Central Midlands Regional Planning Council, Columbia, South Carolina  
 JOHN M. TORREY, San Francisco  
 JOHN P. WOODS, Senior Policy Analyst, Office of Aviation Policy and Plans, Federal Aviation Administration, Washington, D.C.

## WORKSHOP 4—SITUATIONAL ISSUES FOR SUBAREA PLANNING

STUART HILL, Barton-Aschman Associates, Inc., San Jose, chairman  
 GEORGE BOULINEAU, Georgia Department of Transportation, Atlanta  
 PANKE BRADLEY, Alderman of City of Atlanta  
 DAN C. DEES, Engineer of Systems and Services, Illinois Department of Transportation, Springfield  
 GEORGE DUFFY, Office of Environmental Policy, Federal Highway Administration, Washington, D.C.

DAVID L. GRAVEN, Professor of Law, University of Minnesota, Minneapolis  
 JUSTIN GREY, Justin Grey Associates, Cambridge, Massachusetts  
 KATHLEEN STEIN HUDSON, Boston Transportation Planning Review, Somerville, Massachusetts  
 GABOR KISH, Southwest Pennsylvania Regional Planning Commission, Pittsburgh  
 RONALD T. ROLLET, Executive Director, Media for the Urban Environment, Brooklyn  
 HARRY SIEDENTOPF, Planning Grant Branch, Federal Aviation Administration, Washington, D.C.  
 JAMES L. WEAVER, Assistant Treasurer, General Mills, Inc., Minneapolis  
 JOHN S. WINDER, JR., Executive Director, Metropolitan Washington Coalition for Clean Air, Washington, D.C.  
 JAMES A. WISE, Department of Psychology, Ohio State University, Columbus

## WORKSHOP 5—SITUATIONAL ISSUES FOR PROJECT PLANNING AND DESIGN

RAYMOND MAURICE, New York City Department of Air Resources, Brooklyn, chairman  
 ROBERT G. ADAMS, Public Hearing Engineer, Michigan Department of State Highways, Lansing  
 JAN BAILEY, Peoples Involvement Corporation, Washington, D.C.  
 LYDIA CARSON, Harlem River Valley Transportation Association, Millerton, New York  
 JAMES E. CLARK, III, Deputy Assistant Director, Office of Planning and Programming, Department of Highways  
 and Traffic, Washington, D.C.  
 SIDNEY DAVIS, Atlanta University  
 BEVERLY HARPER, Port Folio Associates, Inc., Philadelphia  
 WALTER P. JOHNSON, Executive Director, Delaware Valley Regional Planning Commission, Philadelphia  
 CHARLES H. MOOREFIELD, Planning and Programming Engineer, South Carolina State Highway Department,  
 Columbia  
 ALLAN K. SLOAN, Boston Transportation Planning Review  
 I. L. SOBEL, Programs Manager, Office of Science and Technology, Pennsylvania Department of Commerce,  
 Harrisburg  
 L. ELLIS WALTON, JR., Socio-Economic Section, Virginia Highway Research Council, Charlottesville



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## GROUP 1—TRANSPORTATION SYSTEMS PLANNING AND ADMINISTRATION

Charles V. Wootan, Texas A & M University, chairman

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Irving Hand, Pennsylvania State University, Middletown

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Charles H. Moorefield, South Carolina State Highway Department, Columbia

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Richard Bouchard, Office of the Assistant Secretary for Policy, Plans and International Affairs, U.S. Department of Transportation

Milton B. Meisner, Aviation Policy Division, Federal Aviation Administration, U.S. Department of Transportation

William L. Mertz, Federal Highway Administration, U.S. Department of Transportation

Floyd I. Thiel, Socio-Economic Studies Division, Federal Highway Administration, U.S. Department of Transportation

John P. Woods, Office of Aviation Policy and Plans, Federal Aviation Administration, U.S. Department of Transportation

*highway research board staff representative*

Kenneth E. Cook

**THE National Academy of Sciences** is a private, honorary organization of more than 800 scientists and engineers elected on the basis of outstanding contributions to knowledge. Established by a congressional act of incorporation signed by Abraham Lincoln on March 3, 1863, and supported by private and public funds, the Academy works to further science and its use for the general welfare by bringing together the most qualified individuals to deal with scientific and technological problems of broad significance.

Under the terms of its congressional charter, the Academy is also called upon to act as an official—yet independent—adviser to the federal government in any matter of science and technology. This provision accounts for the close ties that have always existed between the Academy and the government, although the Academy is not a governmental agency and its activities are not limited to those on behalf of the government.

The **National Academy of Engineering** was established on December 5, 1964. On that date the Council of the National Academy of Sciences, under the authority of its act of incorporation, adopted articles of organization bringing the National Academy of Engineering into being, independent and autonomous in its organization and the election of its members, and closely coordinated with the National Academy of Sciences in its advisory activities. The two Academies join in the furtherance of science and engineering and share the responsibility of advising the federal government, upon request, on any subject of science or technology.

The **National Research Council** was organized as an agency of the National Academy of Sciences in 1916, at the request of President Wilson, to provide a broader participation by American scientists and engineers in the work of the Academy in service to science and the nation. Its members, who receive their appointments from the President of the National Academy of Sciences, are drawn from academic, industrial, and government organizations throughout the country. The National Research Council serves both Academies in the discharge of their responsibilities. Supported by private and public contributions, grants, and contracts and by voluntary contributions of time and effort by several thousand of the nation's leading scientists and engineers, the Academies and their Research Council thus work to serve the national interest, to foster the sound development of science and engineering, and to promote their effective application for the benefit of society.

The **Division of Engineering** is one of the eight major divisions into which the National Research Council is organized for the conduct of its work. Its membership includes representatives of the nation's leading technical societies as well as a number of members-at-large. Its Chairman is appointed by the Council of the Academy of Sciences upon nomination by the Council of the Academy of Engineering.

The **Highway Research Board** is an agency of the Division of Engineering. The Board was established November 11, 1920, under the auspices of the National Research Council as a cooperative organization of the highway technologists of America. The purpose of the Board is to advance knowledge of the nature and performance of transportation systems through the stimulation of research and dissemination of information derived therefrom. It is supported in this effort by the state highway departments, the U.S. Department of Transportation, and many other organizations interested in the development of transportation.