GOAL-RESPONSIVE COMMUNITY PARTICIPATION: AN IMPERATIVE FOR INTEGRATED SOCIAL-ECONOMIC-ENVIRONMENTAL ANALYSES

Charles D. Bigelow, Bigelow and Associates

This paper describes a practical, tested approach to involve the overall community in the planning and decision-making process so that a consensus for action can be reached. The concept of the approach is discussed, and its successful application to one of a series of projects is described to demonstrate that it is not an academic, untested proposal. A 5-phase procedure is described that involves everyone affected by the planning. The application of the process results in the development of an understanding throughout the community of the implications of having chosen specific goals and of alternative, practical ways of attaining those goals. Thus, the community is drawn into an active participation from the outset of the planning effort. In addition, the process incorporates techniques for deriving realistic goals, for managing multidisciplinary specialist teams, and for conducting truly integrated economic-social-environmental analyses. The project chosen to exemplify the approach was sponsored by the New York State Department of Transportation. This project dealt with transportation at an urban and regional (systems planning) level. The participation programs for the New York and other projects have been different in that each was adapted to the special conditions of that project. Thus, no one of the applications followed exactly the process described here. However, each application did follow the general outline, scope, and intent of the goal-responsive approach.

•CONGRESS is continuing to legislate more and more requirements for an awareness of human values by all federal departments and agencies. Furthermore, the President has reiterated the need "to return power to the people and put the individual 'self' back in the idea of self-government" (2). These concerns are strongly reflected in the Federal Highway Administration's program and in its development of process guidelines (3). Thus, the stage is being set for a significant change in the way in which the public is involved in planning, from federal down to municipal and neighborhood levels.

The idea of citizen participation and involvement in community planning is not new. It was one of the basic principles on which our system of participatory democracy was originally founded, even though our planning processes may have strayed somewhat from this principle. Viewed in this light, the new legislation requiring participation by affected citizens is strengthening a basic precept of our form of government—a precept whose importance, in the eyes of legislators, is as strong now as when our governmental processes were first organized. It is already clear that this redirection can offer significant advantages to planners if they realize that the community involvement requirement is not just another obstacle in the path of their programs. In fact, "public participation is an exceedingly valuable tool in transportation planning, programming, and implementation. If properly used, it is as valuable as any of the more technical or professional activities . . ." (8). An understanding of the terms and meanings of the community involvement process is important to understanding the application of the principle.

First, involvement of the community applies to all levels of governmental planning

and decision-making for all public activities including transportation, land use, water resource use, and waste disposal. However, since governments also must provide support for private investments, the involvement process may affect the planning of privately financed projects. Recent court cases, particularly in California (Friends of Mammouth Versus Mono County, 8 Cal., 3rd, 1), have mandated a governmental involvement with private development projects that significantly affect the larger community or environment.

Second, the community, in this paper, refers to the larger community affected by planning. For the example presented later, the community included federal, state, and local government officials (whether elected or appointed), residents of the study region and adjacent regions, and special interest groups including environmentalists, chambers of commerce, real estate agencies, and social and educational groups. This community of decision-makers also included those who, armed with existing legislation, threatened to file suit to stop or delay the project.

Finally, the involvement of citizens is required by a growing body of legislation and guidelines. As early as 1962, the U.S. Department of Housing and Urban Development required citizen participation in the community planning process. Later, the Federal-Aid Highway Act of 1968 initiated the involvement requirement for highway planning. Now, the Federal Highway Administration, for example, requires community involvement from the outset of project planning and at the system, location, and design stages (3). Although these guidelines may have been developed belatedly for highway planning purposes, they offer much more hope for successful integration into the highway planning process than do similar guidelines for housing and community development. Furthermore, the process guideline (which specifies a series of planning actions rather than a step-by-step technical analysis) appears to be an approach that will be able to withstand changes over time, i.e., changes in people and in institutions.

Given the legislation and guidelines for community participation throughout the planning process, a major question remains. How, in a participatory democracy, can individuals and collections of individuals most effectively participate in the process?

Our concepts for involvement have been far too narrow in the past (4, 5). Also, the question above is particularly hard to answer when we know that each individual (and groups of individuals) will have his or her own goals and objectives and that these goals and objectives will change over time. At the same time, legislation and court findings are making it increasingly clear that the responsibility for ensuring a meaningful community involvement lies with those agencies that have the planning responsibilities. Thus, planners are caught in a dilemma between difficulties and demands. In addition, to be effective in having their recommendations accepted, planners must be able to obtain consensus for one of the alternatives and community commitment to support and vote for those political organizations or financing methods or both that are required to ensure the success of that alternative.

This paper describes one approach that might be employed by various government agencies in a goal-responsive, community participation process. It also shows not only that "community involvement cannot be separated from the assessment of economic, social, and environmental impacts" (6), but that these should be included as integral elements of the planning process rather than as impacts after the basic planning work is complete.

This paper discusses one of several experiences with the approach. Although the New York project is used as an example, each application of the process has been unique to the situation. Thus, no one of the projects has been an exact application of the process. Consequently, the philosophy and concepts on which the approach is based are discussed first, and then an application of the process to the project for New York State is described.

CONCEPTS AND DIRECTIONS

> The time for change is now, for there is developing within our cities and our country a crisis of major proportions: a crisis which stems from the inability of governmental structures to deal with the complex problems of contemporary society. This crisis is multifaceted. It involves the age-old question of economics [and] the need to perfect our democratic process (9).

These comments made in 1967 are no less true now than then. They provide a number of indications for the form and directions that participatory processes might take. These concepts and directions are, in fact, already partly reflected in the FHWA process guidelines, in guidelines by the U.S. Corps of Engineers, in the National Environmental Policy Act, and in U.S. Department of Housing and Urban Development guidelines. Also, past failures in community involvement programs provide indications of forms and directions to avoid (10). The positive and negative characteristics are both reflected in the following summary of concepts. The concepts are neither all-inclusive nor necessarily fixed, for social groups vary tremendously in their willingness to participate actively. Different groups will respond to different approaches and techniques. In this connection, it is important to note that the case study that follows in a later section must be viewed as unique to that community and to that point in time. However, the general approach and process have been successfully employed elsewhere with quite different social groups.

Concepts Concerning Goals

1. A goal-defining process must be established, for no one can list desirable goals without understanding the implications or consequences of adopting those goals.
2. Goals change over time, so the goal-defining processes must be flexible to accommodate repeated changes in objectives.
3. All those involved with the planning and decision-making process must understand the relations among goals.
4. Advocacy positions by planners and their consultants must be avoided during the processes of identifying goals and of selecting alternative programs for meeting those goals.

Concepts Concerning the Community Involved

1. All members of the subject community and neighboring communities affected by the planning must be sought out and encouraged to participate.
2. The affected community includes all those whose interests are sufficiently strong to result in their using legal means to interfere with the implementation of proposed projects.
3. The community representation must be such that all interests, and particularly those of the opposing groups, are represented equitably.
4. The community must be involved from the outset of the planning process and in such a way that many people and groups are encouraged to participate. The earlier lack of a meaningful involvement has discouraged many from participating.
5. The understanding of goal implications and goal relations must be sufficiently detailed to permit the development of a community consensus.

Concepts Concerning Techniques and Analyses

1. To ensure meeting the intent of current and pending legislation, primary attention must be given to the overall involvement process. The courts look to processes rather than techniques, as evidenced by the fact that many judgments on environmental questions have been based on the adequacy or inadequacy of planning procedures and not on the adequacy or inadequacy of techniques.
2. The choices must be clear to the community, and the community must be involved in selecting alternatives that the consultants and specialists investigate in detail. A null option must be included to permit an adequate technical analysis and to meet guideline requirements.
3. Consultant and specialist involvements must be multidisciplinary, and they must be "integrated" to permit an analysis of relations between social and economic goals, between economic and environmental goals, and so forth.
4. Presentations to the community by consultants or specialists should avoid highly structured and mathematical models, highly technical analyses, and overly simplistic scoring or evaluation techniques. Instead, analytical tools should be used to identify

goal relations and the implications of a particular set of goals. These relations and implications should be the focus of presentations to the community.

5. Planners' communications with the community must be 2-way and must avoid a simple solicitation of views or presentation of results. Instead, a presentation-response format should be used to ensure a clear understanding of choices and a meaningful involvement in the selection of alternatives.

NEW YORK CASE STUDY

The study centered on a proposed 250-mile highway improvement in upstate New York (7). The north-south highway would have followed a corridor of 10 counties from the Delaware River at the southern border to the St. Lawrence River on the northern border. These 10 counties are essentially an extension of the 13-state Appalachian region and have similar problems of poverty, unemployment, population, and business out-migration. It was to solve these interrelated problems that the Delaware-St. Lawrence highway was first proposed.

The objective of the study, according to the study contract, was "to place before decision-makers as much information as possible . . . concerning the feasibility of the project . . . within the context of alternatives for improving the economic, social, and physical condition of the state's population." On June 18, 1972, the New York Times stated correctly that "this is the first time that a consultant was called in after a definite decision was made that a road was not needed. . . . It was not (merely) a transportation problem. . . . That's why we called in a consultant with knowledge in sociology, economics, and ecology."

As a result, the study included interrelated social and environmental as well as highway and economic objectives. In addition, the study included an identification of community values and goals for development. Both the understanding of social-economic-environmental relations and the identification of community values require an extensive, effective, community participation. It is for this reason that community participation is viewed as an imperative for truly integrated social-economic-environmental analyses.

The involvement program was not so clearly organized in this project as in some of our other projects. Instead, the program was structured around legal requirements for formal hearings and by the project schedule. Even so, the community was involved in the key phases of the program described below.

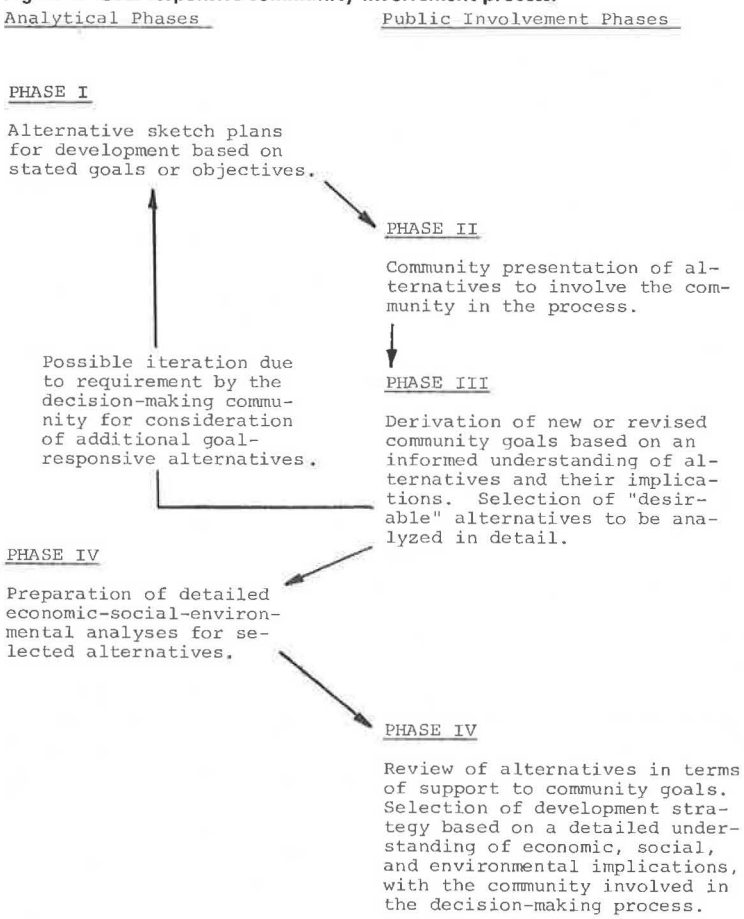
Based, first, on concepts for the goal-responsive, community involvement program listed earlier, second, on the legal requirements for public hearings, and, third, on the unique "community" in the 10-county New York region, the involvement process followed a 5-phase program (Fig. 1).

Phase 1

The first step in phase 1 was to develop sketch or preliminary plans for several feasible and desirable alternatives. (One of these was a null or "do-nothing" alternative. A null alternative is essential to a technically correct economic comparison of alternatives because it provides a common base against which all other alternatives can be measured or compared.) The evaluations for each plan were, in turn, based on (a) immediately available data and goals, (b) a broad rather than an in-depth set of analyses, and (c) the organization of sets of similar goals. These goals were derived largely from existing state, county, and municipal planning documents. The most important of these documents, by far, were the state-level plans. (In comparison with other states, New York has an extraordinary history of state-level planning.) Preliminary goals were also derived from regional, county, and municipal documents as well as from government personnel, special interest groups, and the general population who attended the formal hearings.

The second step in phase 1 was to evaluate the preliminary planning alternatives (strategies) from an integrated economic, social, environmental standpoint. Thus, the alternatives (including the do-nothing strategy) were subjected to preliminary analyses that stressed an identification of relations between the economic, social, and environ-

Figure 1. Goal-responsive community involvement process.



mental elements. Thereafter, the future implications of each alternative were identified; these implications included projected economic, demographic, land use, environmental, and other changes that might take place with the adoption of one of the strategies. The basic reason for developing the strategy implications was to improve the understanding of all of the decision-makers regarding the probable results of having chosen a particular set of goals or a particular action plan.

In the New York project, 3 strategies were identified that coincided with groups of similar goals. They were (a) a development strategy that involved coordinated state investments in industrial and transportation programs; (b) a greenbelt strategy that was intended to create a buffer zone between the more industrialized region west of the study corridor and the environmentally protected Adirondacks area to the east of the study corridor; and (c) the do-nothing strategy. The development strategy included evaluation of an expressway along the full length of the 10-county region, in spite of the fact that the New York State Department of Transportation had already found the expressway to be economically infeasible. However, because the goals of a significant portion of the community still included the construction of the expressway, it was a major consideration throughout the project.

Phase 2

Phase 2 consisted of presenting the preliminary alternatives to the community so that its various groups would understand goal implications and relations. With such

an understanding, a community can select goals and groups of related goals that are consistent with their willingness to support action plans. Thus, the selection of goals is not an academic exercise, but is based on a knowledge of the political and financial support necessary to support various goals.

In New York, the alternative sketch plans were presented to the decision-makers affected by the proposed developments. These decision-makers included elected and employed government officials who had any jurisdiction over the project, special interest groups, and members of the general population. The decision-making group also included those who might file suits to stop or delay the project.

The 2-way communication included the techniques of (a) information material prepared by New York State Department of Transportation and news releases that appeared in newspapers and on radio and television, (b) transcribed formal hearings with television coverage, (c) surveys on environmental problems and on industrial and recreational development potentials, (d) the use of slides and charts and the preparation and distribution of progress reports, and (e) 100 to 200 meetings with individuals or groups by the team of professionals.

Phase 3

The objective in phase 3 was to use the understandings and information gained from phase 2 to identify the alternatives that were to be studied in detail. In effect, community goals and objectives were solicited from the decision-making group based on their understanding of the economic, social, and environmental implications. At this point, it is much easier for the entire community to state goals that more nearly reflect actual desires and commitments to the programs necessary to attain these goals. Also, new goals are frequently easier to enunciate given this broader understanding of choices. More important, conflicting and changing goals are more easily identified. Changing goals are particularly difficult to determine if collected solely from surveys, from a group of community representatives, or from community hearings. The latter result in the identification of more static types of goals and of goals that are generally impossible to incorporate in a meaningful planning process.

Finally, new alternatives are frequently identified as a result of this approach. Furthermore, the citizens are actually involved in the identification of alternatives to be studied in detail. As a consequence of this feeling of involvement, many who might be against the project are much more likely to become involved on a positive basis in the development of a community consensus. This is another point during the planning process where those who might otherwise decide to take legal action can be heard and given a real opportunity to suggest alternatives for detailed study. Thereafter, the agency carrying out the study can organize dynamic goals, desirable development alternatives, and evaluation criteria into a coordinated format for detailed study. As shown in Figure 1, it is also possible that a new set of alternatives might require a preliminary analysis, particularly if goals change as a result of the improved understanding of implications.

Phase 4

Up to this point, the community had selected goals, broad strategies, and general programs that it desired and was willing to support. In phase 4, specialists analyzed, in detail, the advantages and disadvantages of selected alternatives. The selection of alternatives was frequently a reflection of continuing conflicts over goals within the community.

Phase 4 places the greatest burden on consultants and specialists. Multidisciplinary teams are difficult to manage, and the integration of their analyses is even more difficult to accomplish. Each specialist must be concerned not only with his own professional analysis but also with the relation between his own and other disciplines. It is in these latter efforts that the interdisciplinary team is most likely to break down. But it is also the results of these efforts that are most needed by the community of decision-makers. For example, it is of little use to produce an excellent highway analysis and design without at least an understanding of what that highway means in terms of new

jobs, improved educational and health delivery systems, pollution effects, and the organizational and financial ability of government to ensure that the program is a success.

Many of these difficulties are diminished by the proposed approach. For example, the scope of necessary economic, social, and environmental relations were identified in phase 2 so that the interdisciplinary study team knew in advance what and how much data they would need. Thus, the risks of collecting unnecessary or irrelevant data were practically nil. In addition, the balance between the data collection and the analysis efforts for engineering, economic, and social aspects was much easier to maintain with this approach. This is so because the task leaders had an opportunity to learn about intertask requirements in the preliminary phase 2 work. Finally, this approach had the distinct advantage of considering social and environmental aspects from the outset, rather than after the fact, as impacts resulting from a more narrowly based decision.

The work for New York State resulted in identification of the need for a new development strategy. Doing nothing and adopting a strictly environmental strategy appeared almost equally undesirable, and the industry-expressway strategy was impractical. A new strategy evolved that required interrelated highway, industrial, employment, and educational actions. After the new option was identified, all of the final options were subjected to identical economic, social, and environmental analyses, and the implications of adopting each were identified.

Phase 5

The results of the detailed analyses are also presented to the decision-making community. The central objective is the development of a consensus on one of the alternatives—a consensus that is least likely to be upset by a formerly uninvolved minority. Essentially, this task is an interpretation by the planners or specialists of the detailed analysis. Since this final presentation includes the null alternative as well as quite different alternatives for, say, highway and economic development, the planners are not forced into an advocacy position of either a highway, an economic development, or an environmentally oriented program.

The New York project resulted in the development of a consensus. "It stresses the importance of promoting community economic well-being in our transportation (developments) and not just (the well-being of) those in proximity to a facility.... It offers perhaps a new perspective on the interplay of transportation and economic health. The study results have received general acceptance even by some of the most ardent expressway advocates" (11).

Although most of the publicity on the project assumed that the selected alternative was recommended by the consultant, there were, in fact, no recommendations. Neither was the consultant responsible for the selection. Instead, the process of community involvement (with the consultant acting as a catalyst for decision-making) resulted in what appeared to be a logical choice of alternatives. This was a choice by the majority of the community. No legal actions followed the choice despite the threat of 2 such actions during the phase 2 presentation.

Finally, the project resulted in a course of action that included the construction or reconstruction of highway transportation links, the reordering of state priorities to include investments in rural job training, education, and health, and the strengthening of existing rural transit services. Thus, in spite of a negative finding for an expressway by New York State Department of Transportation, the identification of alternatives by the community resulted in a positive finding for other regional highway improvements.

SELECTED PROBLEMS IN INVOLVEMENT

There are a number of critical elements in any involvement process, the success of which can make the difference between success and failure of the overall planning program. Included in these are (a) the general type of planning being attempted, i.e., the more traditional type of planning versus the integrated planning, plus the identification of planning alternatives and (b) the techniques or procedures used in the involvement program, such as hearings, surveys, or advisory committees.

The earlier sections of this paper dealt with the first element listed above. That is, they emphasized the advantages of performing integrated social-economic-environmental analyses regardless of the central planning focus. [In fact, these earlier sections have implied that the use of an integrated planning approach might have more of an impact on the success of a community involvement program than would the techniques for involvement. It is the repeated experience of the author that this is the case. In addition, it appears that this is also the experience of those who were involved in the transportation planning efforts in Boston and in Compton, California (6)]. Thus, the remaining portion of this paper will deal with the techniques for involvement.

Two cautions are worth mentioning before the techniques are discussed. The first is that no technique or set of techniques is likely to be applicable to each different problem and community. Instead, maintenance of a flexibility to the use of surveys, workshops, or committees could be the most important determinant for success. This may be true to the extent that, for the same project, different techniques might be used for the systems level of planning than for the locational or for the design levels of planning.

The second caution is that the 5-phase planning approach described earlier may have diminished the importance of selecting a particular set of techniques. That is, given a strong program for involving the community, techniques other than those actually used might have been equally effective.

Initiation and Maintenance of an Involvement

It was stated earlier that the involved community included both those for whom the planning was being done and those who might be affected by the planning. An emphasis was placed on the inclusion of decision-makers from these 2 groups. Some questions that might arise from this description are, How were the decision-makers identified, and who were they? How were very busy or disinterested decision-makers encouraged to participate from the outset? Through what techniques did they participate? How were they encouraged to maintain an interest during an 18-month study period? The following description will answer most of these questions.

First, the project in upstate New York had been discussed for many years and state-level legislation had also been passed that provided a mandate for it. The project had also been controversial, so there was a base of strong interest in the community. This base was significantly extended by the willingness of the Department of Transportation to consider related economic, social, and environmental factors after it had found that a proposed expressway solution was economically infeasible. This initiative by the department probably was the single largest factor in the community's perception that it could be meaningfully involved in the planning process. Thereafter, the involvement techniques employed by the planning team included the formal hearings, formal group presentations of the preliminary and final results, personal interviews, and specific surveys related to industrial development and environmental problems.

As a consequence of the state's activities, many of the community decision-makers were identified prior to the initiation of the study. These included local and regional business development groups, citizens' groups, and staff and elected officials of municipal, county, state, and federal governments. This identification was continued from the outset by about 12 members of the consultant team during numerous trips to the study region, adjacent regions, neighboring states and Canada, and federal government offices. For example, the biologists and zoologists were responsible for contacts with the environmentalists; the social scientists, for contacts with employment agencies and housing groups; the industrial and agricultural economists, for contacts with business and farmer representatives. In summary, the identification of the community decision-makers was a relatively simple, straightforward effort, an effort that was made easier by positive actions of the New York State Department of Transportation.

There have been speculations in recent literature that a community could not be involved at the system or regional level. And in fact, in New York, there was an initial tendency not to participate. However, this was probably due to the fact that some of those contacted had been discouraged at other hearings where most of the decisions had already been made. A general willingness to participate evolved following the formal

hearings when the need to develop alternative solutions was emphasized and the commitment to integrated planning was explained. This willingness was evidenced by the subsequent submission of opinions and data by members of the community to the planning team. Some very positive and thoughtfully prepared oral and written statements were received by the state and the consultants.

The overall effect of the approach described earlier was to make the public hearing a formal milestone of a more extensive participatory program. Thereafter, individual contacts were continued, and presentations of the preliminary and final results were made to a more limited cross section of the community. As mentioned earlier, the presentation of the sketch analyses resulted in the identification of a new alternative. This new alternative was analyzed and included in the presentation of final results. Thus, the community was involved in the process of identifying alternatives for both the preliminary and final analysis. This type of involvement had the effect not only of encouraging the suggestion of positive alternatives but also of eventually attaining a consensus of the majority of community decision-makers.

Opposing views and controversy were evidenced throughout the study. However, their intensity dropped noticeably after the presentation of the preliminary results. This was probably due to the improved understanding of relations among social, economic, and environmental factors and to the improved understanding of the implications of choosing to do nothing or to follow a strongly developmental or environmentally oriented action plan. Even so, opposing views and controversy persisted after the final results were presented and the report was distributed. However, they were at such a low level that early threats of legal action were not pursued.

Role of the Planner in Community Involvement

The role of the planner is obviously changing significantly. No longer is he expected (or permitted) to remove himself to a professional office for purposes of developing a plan that will be implemented after receiving a stamp of approval from the power structure. For many reasons, he must now work very closely with the community, and increasingly he must work with planners from other disciplines.

One of the basic results of these changes is that the planner, whether an engineer, economist, social scientist, or environmentalist, is being forced into a communicating role. This communications role is not for purposes of being better able to explain, justify, or sell his own plan. Rather it is the role of helping the community to understand relations among our increasingly complex social, economic, and environmental subsystems. Also included in this community are the planning specialists in education, housing, government organization, and law, who must be able to establish the qualitative and quantitative relations needed for effective planning and implementation.

The new requirements being placed on planners mean that they must develop even stronger leadership capabilities for

1. Organizing effective community involvement programs,
2. Identifying new and creative alternatives for improving our living environments,
3. Improving the technical approaches and analyses used in planning, and
4. Acting as a catalyst for community efforts in enunciating goals, understanding relations, and reaching a consensus for progress.

In addition, there are actions that should be avoided. Most important, for an effective community involvement, planners should avoid a position of advocacy. That is, they may be more effective in acting as a catalyst for the community in developing a course of action than as an advocate in promoting a predetermined course of action.

In the role of acting as a catalyst, the planner should avoid trying to communicate analytical techniques unless requested by knowledgeable members of the community. Very few members of the community can or need to understand the intricacies of the technical models and analyses. Instead, planners should be communicating the results of the technical analyses in terms of basic relations (i.e., between transportation and land use) and understandings of the implications of having chosen a particular course of action. This does not mean that the planner need not be prepared to provide specific

information about the details of his models or analyses. This is in fact a critical part of his communication with planners in other disciplines, and it is on the success of these communications that the credibility of truly integrated analyses rests. Unfortunately, the area of interdisciplinary planning is least developed, and yet is one that is most needed to improve the general public's understanding of relations.

On the positive side, planners must take the initiative in organizing the community involvement programs. Far too many citizens have been discouraged by earlier approaches used by governments in dealing with the community at large. Thus, they need to be convinced that times have changed and that there are now meaningful opportunities for involvement.

Planners must also take the lead in helping to identify new and creative alternatives for action, for it is they who have the technical ability to thoroughly understand relations and implications. Furthermore, this leadership may be important to the community's perception that an honest effort is being made to consider all alternatives to their problems.

Third, planners are the principal group with the ability to improve the technical models and analyses necessary to integrated planning. These relations are crucial to the planners' ability to perform effectively as professionals and to the general public's acceptance of their work.

Finally, it is clear that there are multiple advantages to the planner in acting as a catalyst for the planning and decision-making process. Equally clear is the fact that the change from the more traditional role is toward an even more creative, challenging role that most planners should welcome. As such, planners should approach their new role as positively as possible so that their professional stature remains undiminished in this critical activity.

REFERENCES

1. Green, J. W. New Directions in Policies and Programs. Agency for International Development, U.S. Department of State, 1972.
2. The Budget of the U.S. Government—Fiscal Year 1974. U.S. Govt. Printing Office, 1973.
3. Policy and Procedure Memorandum 90-4. Federal Highway Administration, Sept. 21, 1972.
4. Burke, E. M. Citizen Participation Strategies. Jour. of American Institute of Planners, Vol. 34, 1968.
5. Citizen Participation in Transportation Planning. HRB Spec. Rept. 142, 1973.
6. Fielding, G. J. Community Involvement in Highway Planning and Design. Federal Highway Administration, Jan. 1973.
7. Bigelow, C. D., et al. Delaware-St. Lawrence Region—The Role of Transportation in Alternative Strategies for Development. New York State Department of Transportation, March 1972.
8. Andrews, G. H. Proc., Panel Discussion on Community Involvement in Highway Planning and Design. Federal Highway Administration, Jan. 1973.
9. Esser, G. H. New Dimensions in Highway Planning: Rising Expectations for Community Involvement. Research Group, Inc., Atlanta, 1967.
10. Lash, M. Community Conflict and Highway Planning (The Case of the Town That Didn't Want a Freeway). Highway Research Record 69, 1963, pp. 1-17.
11. Memmott, F. W. Delaware-St. Lawrence Corridor Study. Paper presented at HRB 5th Summer Meeting, 1972.