Effective Citizen Participation in Transportation Planning

COMMUNITY INVOLVEMENT PROCESSES

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
WASHINGTON, D.C. 20590
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EFFECTIVE CITIZEN PARTICIPATION IN TRANSPORTATION PLANNING

VOLUME I
COMMUNITY INVOLVEMENT PROCESSES

1976 FINAL REPORT

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## Abstract

This report is a guide for those actively engaged in organizing or monitoring citizen participation in transportation planning. It identifies and describes 37 major techniques for citizen participation and relates them to the appropriate steps in the transportation planning process, which is divided into 19 sequential steps beginning with the initial inventory and concluding with the evaluation of the completed facility. Among others, the techniques include: Advocacy Planning, Charrette, Citizen Advisory Committees, Hotlines, Surveys, and Workshops. The techniques are presented alphabetically in a standard format: description, positive features, negative features, potential for resolving issues, program utilization, costs, and bibliography. Some techniques are from areas other than transportation planning, some have been used only experimentally, and some have been formulated only theoretically.

The techniques have been classified by function as Information Dissemination, Information Collection, Initiative Planning, Reactive Planning, Decision-making, and Participation Process Support. Eight case studies either illustrate use of combinations of techniques on the regional, corridor, and design level or focus on individual techniques. The research included a literature survey of 11 functional planning areas, such as model cities or water resources, and visits to each case study site.

### Key Words
- citizen, participation, public, community, transportation, highway, planning, involvement, hearing, attitude, opinion, survey

### Distribution Statement
- No restrictions.
# TABLE OF CONTENTS

## VOLUME I. COMMUNITY INVOLVEMENT PROCESSES

**INTRODUCTION** ................................................................. 1  

**PART A. CITIZEN PARTICIPATION AND THE PLANNING PROCESS**  

**SECTION 1: THE DEVELOPMENT OF CITIZEN PARTICIPATION PROGRAMS** .. 6  

**SECTION 2: A REVIEW OF TRANSPORTATION PLANNING** ................. 11  

**SECTION 3: SUMMARY OF COMMUNITY PARTICIPATION TECHNIQUES** ... 18  

**SECTION 4: GUIDELINES FOR PARTICIPATORY PLANNING** ............... 24  

**SECTION 5: CONCLUSIONS** .................................................. 57  

**PART B. CASE STUDIES**  

**SECTION 1: TRANSPORTATION PLANNING AT THE REGIONAL SYSTEMS LEVEL** ................................................... 60  

**SECTION 2: MULTI-MODAL CORRIDOR STUDY**  

**SECTION 3: PROJECT PLANNING STUDY**  

**SECTION 4: CITIZENS' ADVISORY COMMITTEE FOR IN-TOWN SECTIONAL PLANNING** .................................................. 92  

**SECTION 5: MEDIATION IN FLOOD CONTROL FACILITY PLANNING** .... 101  

**SECTION 6: POLICY CAPTURING IN COMMUNITY GOALS ASSESSMENT** .. 109  

**SECTION 7: GAME SIMULATION AS TRAINING FOR PARTICIPATION** .... 119  

**SECTION 8: MEDIA BASED BALLOTTING TO IDENTIFYING CITIZENS' HOUSING PREFERENCES** ........................................ 124  

## VOLUME II. A CATALOG OF TECHNIQUES

**INTRODUCTION** ................................................................. 1  

**PART C. DIRECT PARTICIPATORY TECHNIQUES**  

**SECTION 1: ADVOCACY PLANNING** .......................................... 4
<table>
<thead>
<tr>
<th>SECTION</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>ARBITRATIVE AND MEDIATIVE PLANNING</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>CHARRETTE</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>CITIZENS' ADVISORY COMMITTEE</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>CITIZEN EMPLOYMENT</td>
<td>26</td>
</tr>
<tr>
<td>6</td>
<td>CITIZEN HONORARIA</td>
<td>30</td>
</tr>
<tr>
<td>7</td>
<td>CITIZEN REFERENDUM</td>
<td>34</td>
</tr>
<tr>
<td>8</td>
<td>CITIZEN REPRESENTATIVES ON PUBLIC POLICY-MAKING</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>BODIES</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>CITIZEN REVIEW BOARD</td>
<td>43</td>
</tr>
<tr>
<td>10</td>
<td>CITIZEN TRAINING</td>
<td>48</td>
</tr>
<tr>
<td>11</td>
<td>COMMUNITY PLANNING CENTER</td>
<td>54</td>
</tr>
<tr>
<td>12</td>
<td>COMMUNITY TECHNICAL ASSISTANCE</td>
<td>59</td>
</tr>
<tr>
<td>13</td>
<td>COMPUTER-BASED TECHNIQUES</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Teleconferencing</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Polling</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Games</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Interactive Graphics</td>
<td>68</td>
</tr>
<tr>
<td>14</td>
<td>COORDINATOR OR COORDINATOR-CATALYST</td>
<td>74</td>
</tr>
<tr>
<td>15</td>
<td>DESIGN-IN AND COLOR MAPPING</td>
<td>79</td>
</tr>
<tr>
<td>16</td>
<td>DROP-IN CENTERS</td>
<td>86</td>
</tr>
<tr>
<td>17</td>
<td>FISHBOWL PLANNING</td>
<td>91</td>
</tr>
<tr>
<td>18</td>
<td>GAME SIMULATION</td>
<td>97</td>
</tr>
<tr>
<td>19</td>
<td>GROUP DYNAMICS</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>Conflict Utilization Opinionnaire</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>Empathy</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>Feedback</td>
<td>106</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS (continued)

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relations Diagramming</td>
<td>106</td>
<td></td>
</tr>
<tr>
<td>Video-Taped Group Interview</td>
<td>106</td>
<td></td>
</tr>
<tr>
<td>Brainstorming</td>
<td>107</td>
<td></td>
</tr>
<tr>
<td>Force Field Analysis</td>
<td>107</td>
<td></td>
</tr>
<tr>
<td>Nominal Group Process</td>
<td>107</td>
<td></td>
</tr>
<tr>
<td>Role Play</td>
<td>108</td>
<td></td>
</tr>
<tr>
<td>Synetics</td>
<td>109</td>
<td></td>
</tr>
<tr>
<td>Thrust Problem Analysis</td>
<td>109</td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 20:</strong> HOTLINE</td>
<td>113</td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 21:</strong> INTERACTIVE CABLE TV-BASED PARTICIPATION</td>
<td>116</td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 22:</strong> MEDIA-BASED ISSUE BALLOTING</td>
<td>122</td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 23:</strong> MEETINGS - COMMUNITY-SPONSORED</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 24:</strong> MEETINGS - NEIGHBORHOOD</td>
<td>133</td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 25:</strong> MEETINGS - OPEN INFORMATION</td>
<td>139</td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 26:</strong> NEIGHBORHOOD PLANNING COUNCIL</td>
<td>143</td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 27:</strong> OMBUDSMAN</td>
<td>148</td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 28:</strong> PLURAL PLANNING</td>
<td>153</td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 29:</strong> POLICY CAPTURING</td>
<td>157</td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 30:</strong> PUBLIC HEARING</td>
<td>163</td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 31:</strong> PUBLIC INFORMATION PROGRAMS</td>
<td>167</td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 32:</strong> TASK FORCE</td>
<td>171</td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 33:</strong> VALUE ANALYSIS</td>
<td>176</td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 34:</strong> WORKSHOPS</td>
<td>183</td>
<td></td>
</tr>
<tr>
<td><strong>PART D:</strong> INDIRECT PARTICIPATORY TECHNIQUES</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 1:</strong> DELPHI</td>
<td>188</td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 2:</strong> FOCUSED GROUP DISCUSSIONS</td>
<td>213</td>
<td></td>
</tr>
<tr>
<td><strong>SECTION 3:</strong> SURVEY OF CITIZENS' ATTITUDES AND OPINIONS</td>
<td>240</td>
<td></td>
</tr>
<tr>
<td>Appendix A. Description of the X² Test</td>
<td>280</td>
<td></td>
</tr>
<tr>
<td>Appendix B. The T Test</td>
<td>286</td>
<td></td>
</tr>
<tr>
<td><strong>INDEX</strong></td>
<td>291</td>
<td></td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOLUME I</td>
<td></td>
</tr>
<tr>
<td>1 STEPS IN HIGHWAY PLANNING</td>
<td>16</td>
</tr>
<tr>
<td>2 PARTICIPATION TECHNIQUES CLASSIFIED BY FUNCTION</td>
<td>19</td>
</tr>
<tr>
<td>3 CITIZEN PARTICIPATION IN THE HIGHWAY PLANNING PROCESS</td>
<td>25</td>
</tr>
<tr>
<td>4 TRANSPORTATION PROJECT PLANNING PROCESS</td>
<td>77</td>
</tr>
<tr>
<td>5 SAMPLE PROFILE OF A COMMUNITY AS USED IN POLICY CAPTURING</td>
<td>112</td>
</tr>
<tr>
<td>6 AVERAGE RELATIVE WEIGHTS ASSIGNED BY CITIZENS</td>
<td>114</td>
</tr>
<tr>
<td>7 EXTREME RELATIVE WEIGHTS ASSIGNED BY CITIZENS</td>
<td>115</td>
</tr>
<tr>
<td>8 AVERAGE RELATIVE WEIGHTS COMPARED TO TWO POLICY ALTERNATIVES</td>
<td>117</td>
</tr>
<tr>
<td>VOLUME II</td>
<td></td>
</tr>
<tr>
<td>1 SCHEMATIC COMPARISON OF THE ROLE OF COORDINATOR AND COORDINATOR-CATALYST</td>
<td>75</td>
</tr>
<tr>
<td>2 ROUTE LOCATION PROCEDURE TO INCORPORATE CITIZEN CITIZEN PARTICIPATION</td>
<td>179</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VOLUME I</strong></td>
<td></td>
</tr>
<tr>
<td>1 CITIZEN PARTICIPATION REQUIREMENTS</td>
<td>7</td>
</tr>
<tr>
<td><strong>VOLUME II</strong></td>
<td></td>
</tr>
<tr>
<td>1 SELECTED ILLUSTRATIONS OF THE APPLICATION OF ATTITUDE SAMPLES IN HIGHWAY PLANNING AND RESEARCH</td>
<td>275</td>
</tr>
<tr>
<td>2 CONTINGENCY TABLE SHOWING AGE VERSUS OPPOSITION</td>
<td>281</td>
</tr>
<tr>
<td>3 CALCULATION OF TEST STATISTIC FOR STATISTICAL INDEPENDENCE</td>
<td>282</td>
</tr>
<tr>
<td>4 THE $X^2$ DISTRIBUTION</td>
<td>284</td>
</tr>
<tr>
<td>5 KNOWLEDGE SCALE VALUES FOR EACH PERSON</td>
<td>287</td>
</tr>
<tr>
<td>6 $t$-TABLE AT 5 PERCENT RISK</td>
<td>289</td>
</tr>
</tbody>
</table>
INTRODUCTION
AND
GUIDE TO THE REPORT

Transportation officials and citizens have been discussing the pros and cons of citizen participation in transportation planning for a long time. Today, people seldom ask if citizens should be involved. Now they ask how citizens can be involved most effectively. What are the alternative techniques that can be employed to involve citizens in all stages of the transportation process? Which techniques are most effective in raising and resolving equitably the public policy issues in transportation planning?

This shift in focus is probably attributable to several factors: litigation which has stalled or defeated projects, support from elected officials, demands from concerned citizens, and a growing history of regulatory and legislative mandates including the requirement that each State transportation agency develop an Action Plan which includes citizens in the Environmental Impact Statement (EIS) process.

This report is intended to provide guidance on how citizens can most effectively be involved in transportation planning. It identifies, describes, and places in the context of the planning process 37 major techniques for citizen participation in transportation planning. Some of these techniques have been used only experimentally and some have been formulated theoretically but not tried in the field. The report is addressed both to the practicing transportation professional in need of usable and accessible information for an actual citizen participation process and to the research worker interested in descriptions of techniques and bibliographies as a bases for more detailed research.
Volume I, Part A, "Citizen Participation and the Planning Process" serves as a summary of the entire report and may be read separately. It reviews participation in relation to the transportation planning process, classifies participation techniques by function, and indicates which techniques have been found most effective at each specific step in the planning process. The case studies in Volume I, Part B, either illustrate actual use of combinations of some of the techniques at the systems, corridor and project level in transportation planning (Sections 1-3), or focus on an individual technique such as media based balloting employed in either a transportation or non-transportation setting, depending on whether it was possible to locate suitable instances in transportation planning (Sections 4-8).

Volume II, "A Catalog of Techniques," is divided into two parts: Part C, "Direct Participation Techniques," describes in alphabetical order 34 techniques by which citizens are brought into the planning process and Part D, "Indirect Participatory Techniques," describes 3 techniques used to identify and measure attitudes, values, and opinions of citizens as information for planners. All techniques are described in a standard format: description, positive features, negative features, potential for resolving issues, program utilization, costs, and bibliography. As needed, techniques appearing in Volume I in all capital letters can be found in Volume II where they are arranged in alphabetical order. In Volume II the name of each technique appears in the upper right-hand corner of the pages on which it is discussed. This volume also contains the index to the report.

The research which is the basis of this report was performed for the Federal Highway Administration (FHWA) over an 18-month period by two
consulting firms: A. D. Little, Inc., and J. G. A. The literature search covered 11 functional planning areas, including transportation, model cities, water resources, and regional and metropolitan planning. In addition, eight case study sites were visited and at least 15 in-depth interviews per site were conducted with citizens, planners, and university researchers familiar with the case.
PART A

CITIZEN PARTICIPATION
AND THE
PLANNING PROCESS
SECTION 1: THE DEVELOPMENT OF CITIZEN PARTICIPATION PROGRAMS

The purpose of citizen participation is to see that the decisions of government reflect the preferences of the people. The basic intention of citizen participation is to insure the responsiveness and accountability of government to the citizens. Secondary reasons for citizen participation are: it helps create better plans, it increases the likelihood of implementing the plan, and it generates support for the agency. In the final analysis, however, its contribution to the democratic process is the significant factor.

Citizen participation is an evolutionary outgrowth of the traditions of limited governmental discretion and formal public accountability. Since America rejected the unresponsive English rule, its government has gone through three evolutionary stages. From the Revolution to the 1850's the changes revolved around universal white male suffrage and the long ballot. From the Civil War to the 1920's the principal developments involved suffrage for women and the reform of corrupt legislatures and local government. From the 1930's to the present the evolution has been in the areas of increased suffrage for minority groups and efforts of citizens' groups to control the huge administrative bureaucracies. This last adaptation has generated the "Sunshine Laws," citizen participation and extensive reform through litigation.¹

Litigation has a twofold role in relation to citizen participation. First, it has generated some of the pressure for citizen participation. Second, it is a check on all governmental decisionmaking processes including those involving citizen participation. Although citizen participation in public decisionmaking does decrease the likelihood that a decision will be challenged in court, it

does not eliminate that possibility. Litigation is the final appeal process in the American democratic system.

The principal Federal laws and regulations pertaining to citizen participation in transportation planning are presented in Table 1.

Table 1
CITIZEN PARTICIPATION REQUIREMENTS

<table>
<thead>
<tr>
<th>Legislative:</th>
<th>Administrative:</th>
</tr>
</thead>
<tbody>
<tr>
<td>23 USC 109h</td>
<td>14 CFR 151.65</td>
</tr>
<tr>
<td>23 USC 128</td>
<td>14 CFR 152.73</td>
</tr>
<tr>
<td>49 USC 1602d</td>
<td>23 CFR 450.120</td>
</tr>
<tr>
<td>49 USC 1604i</td>
<td>23 CFR 771</td>
</tr>
<tr>
<td>49 USC 1716d</td>
<td>23 CFR 790</td>
</tr>
<tr>
<td>23 CFR 795</td>
<td>23 CFR 790</td>
</tr>
<tr>
<td>49 CFR 613</td>
<td>49 CFR 613</td>
</tr>
</tbody>
</table>

Participation in the assessment of the environmental impacts of highways
Hearings on highway plans
Hearings on transit plans
Hearings on transit plans
Hearings to determine the impacts of an airport development project
Hearings on the location of airport development projects
Hearings to determine the impacts of airport development projects
Participation in the joint urban transportation planning process
Participation in the assessment of the impacts of highway projects
Hearings on highway plans
Participation in the development of environmental action plans and as part of those plans
Companion to 23 CFR 450

UMTA External Operating Procedures Manual pp. IIb-11, 12
Hearings on transit plans
The Department of Transportation's Consumer Representation Plan also spells out requirements for citizen participation in transportation planning.*

The most basic lesson that can be drawn from the experience of citizen participation in transportation planning—the experience reviewed in the case studies described later, as well as the accumulated experience described in the literature and the practical experience of the authors—is that the fundamental ingredient of success is an open process. That has become almost a cliche in discussions of participation in planning, but it is also the most common root problem generating controversy and confrontation in practice, as well as less dramatic failures of the planning process to meet people's needs.

There is no formula for an open planning process, but its characteristics are easy to identify. Openness means that the purpose and the content of the process, as well as the schedule for doing it, are described as clearly and concretely as possible—the decisions that have to be made, the information that will be used to make them, the choices which are and are not open for consideration and why, and the time when different steps are necessary or desirable. It means the "ground rules" are clearly laid out, especially about who makes decisions and on what basis. Openness means that planning is done publicly, to the maximum extent possible—

*Some of these regulations can also be found in the Federal Highway Program Manual (FHPM)

23 CFR 450 — — FHPM 4-4-2
23 CFR 771 — — FHPM 7-7-2
23 CFR 790 — — FHPM 7-7-5
23 CFR 795 — — FHPM 7-7-1
because the decisions that are to be made are public business. It means that any individual or group who feels they have a useful contribution to make to the process has an opportunity to do that. And it means that written information generated during the planning process is made available to interested participants. That kind of openness does not guarantee that there will be trust or agreement between planners and the public, but it does help to insure that what conflict does take place will be over the real issues that have to be resolved, rather than over the question of whether an honest intent to resolve them is the real objective of the process.

It is essential that flexibility be maintained in the structure of the participation process, because the participants themselves should be directly involved in defining that process including whether or not it should take place. That should be an explicit part of preparing and revising each State's Action Plan under 23 CFR 795. Although that may sound like adding another layer of "process" to an already complex area--saying we need citizen participation about how to do citizen participation--it is in reality fairly straightforward and pragmatic.

Early involvement of the public in the planning is also important. If too much time elapses between the beginning of the process and the beginning of public involvement, several problems may develop: It may be difficult to still be flexible, rumors may have spread misinformation, local leaders may feel ignored and become distrusting. Early involvement saves time and agony for the planner.
A useful scenario was presented by Robert J. Datel, when he was State Highway Engineer for the California Division of Highways:

"Let's say we have decided that it is appropriate to make some kind of system-level transportation study, . . . I think the first thing to do is to identify the appropriate local elected official . . . Go to him and say, we want to find out how you want to be involved in this. It is up to you what your participation is, do you just want to be kept informed or do you want to actively participate? . . . We want your participation to the extent you want. But one thing we want you to do right now is to identify for us the leaders in the community we are studying . . . And by that, I don't mean just the Establishment leaders, but the community leaders in every facet, minority group leaders, religious, et cetera! . . . Once we have identified and talked to these people on an individual basis . . . they will have felt, "'Gee, those guys really want my ideas, they brought me into it, now I am a part of it, and I have had opportunity to involve myself or not, but at least I know what is going on . . .' We let them express their aggressions about what they thought about the highway program. Our stated objective was not to sell our program, but to listen and fully understand what their feelings about our program were. After a day or so, it becomes a two-way conversation . . . It may be the community feels that transportation really isn't an important issue."2

What Datel has described is not only an open process, but is also open minded. The planner must remember that he is a public servant whose job it is to reflect the public's values in his technical decisions.

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SECTION 2: A REVIEW OF TRANSPORTATION PLANNING

Transportation planning is undergoing two fundamental changes. First, the plans themselves are being seen in a new light. Rather than as blueprints subject to review only in the event of major obstacles or controversy, plans are increasingly seen as expressions of regional and local needs and priorities, to be changed when these change. Plans are becoming dynamic rather than static. This means planning can no longer be a discrete task whose product is a plan, but must be continuous to keep the plan up to date with changing needs and priorities. Planners accustomed to the old approach may well ask what good is a plan that is changing all the time? The answer is the function of planning is less to prescribe actions to be taken than to make clear the long-range consequences of actions, so that whatever actions are taken are best for the long term. In reality, if the plan is a good one—that is, if it is an accurate expression of needs and priorities—adjustments from year to year will be minor. But even if the adjustments are major, one cannot argue convincingly that they should not be made, or that the need for them should not be known.

The second fundamental change is that planning is no longer the exclusive province of professional planners. Transportation is now a controversial subject, and plans formulated without the participation of interest groups and the public at large have little chance of being implemented. This change is due mainly to, first, rapid shifts in values, and second, shortcomings (or limitations) in conventional planning methodology. The shift in values results from a growing awareness of the social, economic, and environmental costs that accompany transportation systems and facilities. Environmental impact statements have become lightning rods for controversy rooted in different perceptions of value. The shortcomings in
methodology can result from optimizing regional systems at the expense of local social, economic, and environmental conditions or from reliance on abstract mathematical models in which critical issues become undebated assumptions. Thus planners who pursue their own concept of the ideal system without consulting diverse segments of the community risk seeing their plans wrecked when the community refuses to sacrifice green space, or permit a runway extension, or allow the demolition of a neighborhood.

Speaking in January 1973 Marvin L. Manheim said:

"We have recognized that at the project level the issues are basically political . . . If we adopted at the system stage the philosophy we have been talking about for the project level--that we need to get interest groups involved by bringing out the issues--I think we would see several major things we would want to do to restructure the whole system planning process . . . We have to tie short-run implementing actions to long-run facilities plans . . . We need a continuous process in which decisions would be made about the mix of products to be offered over the next two years, and a tentative commitment for the products to be offered further in the future."\(^3\)

Since Dr. Manheim's talk, three steps have been taken in the direction he outlined. The first is a change in the emphasis of system planning, from long term forecasting to shorter term monitoring and programming of transportation improvements; the second is a shift in system planning from the regional level to the sub-area level, where political and social issues can be resolved in a more effective manner; the third is the requirement for public involvement in environmental impact assessment.

The Federal Highway Program Manual (FHPM 7-7-1 also 23 CFR 795) in its requirement for an Action Plan responds to the need for monitoring on a current and regular basis the performance of the transportation system and the environment with which it interacts. This includes reviews of technical and policy assumptions, studies of new problems and needs, and proposals for short term projects. The Action Plan shifts the first "action" decision—whether or not a facility or service improvement is needed—from the long term, regional level to a periodically-reviewed program. The underlying objective is to make planning more tangible, not only to policy-makers and the public, but to planners as well.

The sections of the Federal Highway Planning Manual (FHPM 7-7-1 also 23 CFR 795) dealing with "Interrelationship of System and Project Decisions" and "Levels of Action by Project Category" underscore the need for more active community participation during system planning, and the need to restructure the planning process itself to make both the technical work and resolution of public policy issues feasible.

In some regions the metropolitan area has been broken down into smaller planning units called sub-areas ranging in size from neighborhoods to counties. In some cases, the entire metropolitan area is subdivided into smaller areas for system planning purposes; in other cases only areas where there is either rapid growth, high priority transportation needs, or a high level of controversy are broken out for intensive study. The basic idea has been to link long-range regional planning and specific project decisions by focusing on a smaller area with a shorter time frame so that there can be a more detailed consideration of issues and alternatives at the earliest possible stage of planning. Thus, regional planning is tied
more closely to local needs and priorities, constituencies are more readily defined, and interests more clearly perceived.

Before a project is proposed, environmental impact assessment requires that enough detailed planning be done (a) to make a preliminary determination of its feasibility, not only in cost terms, but in terms of its anticipated impact, and (b) to make a decision as to what tasks need to be included at subsequent stages of the planning process.

Since project design can proceed only after preparation and public review of an environmental impact statement, location planning must result in a detailed enough description of the impacts of the proposed project to form the basis of a credible impact analysis. In practice, that has meant that projects must be substantially designed at that stage, since impacts are determined by such factors as location of interchanges, the elevation of the proposed facility, and its functional relationship to the existing road and street system.

Thus, planning at the location stage must cover a much wider range of issues than simply the alignment of a proposed facility, and the techniques used to accomplish effective community participation must be adequate to deal with the full range of decisions to be made at that point.

At present FHWA's regulations allow transportation agencies to combine location and design formal hearings, as long as the agency's other public involvement procedures are adequate. There has been increasing pressure on FHWA from some highway planners to eliminate any requirement for a second hearing. The argument is made that because detailed project design must be done at the earlier stages to satisfy environmental impact assessment requirements, the later design hearing is repetitious and superfluous for both planners and public participants. On the other hand,
some planners and community representatives, including the authors of this study, argue that the public hearing is the formal record of the issues and the procedures followed during the planning and that the second hearing is an essential protection for the participation process during the latter stages of the planning.

The combined effect of these major changes in highway planning is to blur the distinctions between the three conventional stages: system planning (establishing need for the facility, mode, and performance characteristics), location planning and project planning. Figure 1 is a detailed representation of the transportation planning process, from the first inventory to the evaluation of the operating facility.

System planning--identifying the need for a facility and examining the alternative modes of program actions that might meet the need--is no longer a neat sequential process, but rather a continuous process which monitors development trends and resulting transportation needs and problems to guide shorter-range "action programs." Steps 1, "Inventory and Analysis of Current Conditions," through 4, "Forecast of Travel Demand," are really on-going work. Steps 5, "Definition of Transportation Needs and Objectives," through 9, "Selection of Program Package," are discrete, but they need to be done every 1-3 years to meet the requirements of the joint planning process as specified in Title 23 Code of Federal Regulations Section 450. Since the product is an action program, setting forth commitments and defining priorities and staffing assignments, these steps should be done at least every 4 years to accommodate changes in elective offices. Even where State administrations continue from one term to another, an updating of the mid-range programs at that time interval is useful. More frequent review and replanning may be required in sub-areas or metropolitan areas where there is rapid growth or a high level of controversy over desirable actions.
Step 10, "Making Level of Action Decisions," is essentially a one-time decision for each facility which continues into location and project planning. It will be reviewed periodically, however, since it relates directly back to Step 8, "Establishing Regional or Sub-area Priorities," which themselves are routinely reviewed and updated—and forward to Step 11, "Establishing an Annual or Biennial Action Program," which defines staff assignments and decision-making schedules.

Steps 18 and 19, "Implementation and Construction," and "Operation and Evaluation," while not part of the planning process, are included to complete the conceptual sequence which concludes with evaluation of both the performance of the facility itself and of the success of the planning/participatory process. The results of that evaluation feed back into system planning.
SECTION 3: SUMMARY OF COMMUNITY PARTICIPATION TECHNIQUES

Citizen participation techniques may be classified on the basis of their function into the following:

1. Information Dissemination
2. Information Collection
3. Initiative Planning
4. Reactive Planning
5. Decisionmaking
6. Participation Process Support

The functional classes and the techniques which belong in the classes are listed in Figure 2. A given technique may have more than one function. The classification is based on the primary use of each technique; secondary uses may be important in choosing among them. For example, DROP-IN CENTERS* where residents of an area may conveniently discuss a project with agency personnel can serve to collect information as well as to disseminate information, which is their primary purpose.

The functional class, Information Dissemination, contains techniques which inform the public of any steps the agency is taking, any opportunities the public has to make input to the process, and any proposed plans that have been brought forward. Information Dissemination is more than public relations; it goes beyond trying to build a good agency image.

Different types of information may be needed for different purposes. Thus, varying Information Collection techniques may be needed. To identify the attitudes of a community on an issue may require surveying a large number of people; while to identify the major issues in a community may only require an in-depth discussion with a small number of people.

*Techniques appearing in all capital letters in the text may be found in Volume II as described on pages 2-3 above.
FIGURE 2

PARTICIPATION TECHNIQUES CLASSIFIED BY FUNCTION

1. Information Dissemination
   - PUBLIC INFORMATION PROGRAMS
   - DROP-IN CENTERS
   - HOT LINES
   - MEETINGS - OPEN INFORMATION

2. Information Collection
   - SURVEYS
   - FOCUSED GROUP DISCUSSIONS
   - DELPHI
   - COMMUNITY-SPONSORED MEETINGS
   - PUBLIC HEARINGS
   - OMBUDSMAN

3. Initiative Planning
   - ADVOCACY PLANNING
   - CHARRETTES
   - COMMUNITY PLANNING CENTERS
   - COMPUTER-BASED TECHNIQUES
   - DESIGN-IN AND COLOR MAPPING
   - PLURAL PLANNING
   - TASK FORCE
   - WORKSHOPS

4. Reactive Planning
   - CITIZENS' ADVISORY COMMITTEES
   - CITIZEN REPRESENTATIVES ON POLICY-MAKING BOARDS
   - FISHBOWL PLANNING
   - INTERACTIVE CABLE TV-BASED PARTICIPATION
   - MEETINGS - NEIGHBORHOOD
   - NEIGHBORHOOD PLANNING COUNCILS
   - POLICY CAPTURING
   - VALUE ANALYSIS

5. Decisionmaking
   - ARBITRATIVE AND MEDIATIVE PLANNING
   - CITIZEN REFERENDUM
   - CITIZEN REVIEW BOARD
   - MEDIA-BASED ISSUE BALLOTSING

6. Participation Process Support
   - CITIZEN EMPLOYMENT
   - CITIZEN HONORIA
   - CITIZEN TRAINING
   - COMMUNITY TECHNICAL ASSISTANCE
   - COORDINATOR OR COORDINATOR/CATALYST
   - GAME SIMULATION
   - GROUP DYNAMICS
The OMBUDSMAN is an Information Collection Technique that lacks a direct link to the planning process. In this way OMBUDSMAN is like the Participation Process Support Techniques which also are not closely related to specific steps of the planning process. The function of an OMBUDSMAN is to receive and act on complaints from participants, and thus he or she may be made aware the process is not working as well as is being generally assumed. Generally, the OMBUDSMAN does not participate in the technical work or in the routine conduct of the participatory process. The OMBUDSMAN must be knowledgeable about what is going on so that he can react intelligently and effectively to problems and complaints, but must preserve his position of neutrality and objectivity. Most highway projects are not likely to be able to afford an OMBUDSMAN, whose costs are high, and who is after all there in the hope that he will not be needed. More likely, the State government should consider whether that function is a desirable part of its overall operations, and make oversight of the transportation planning effort a responsibility of the State OMBUDSMAN.

The difference between Initiative Planning and Reactive Planning is important. In Initiative Planning, responsibility for producing proposals and structuring options is assigned to community representatives, while the agency supplies information and technical assistance. In Reactive Planning, responsibility for producing proposals rests with the planning agency, and community participants react to those proposals. Agency proposals are expected to be modified, and the community participants may take an active role in shaping those modifications. Reactive Planning and Information Collection are closely allied and use many of the same techniques.
The purpose of the techniques classified as Decisionmaking is to help a community develop a consensus on an issue. Decisionmaking techniques are not intended as replacements for the responsibilities of elected and appointed officials, nor are decisions made with these techniques final. Although considerable attention has been devoted to whether participation should be "advisory" or "decisionmaking," most transportation implementation decisions are legally delegated to elected or appointed officials. Also, officials do not really shape transportation planning decisions since they depend on work done at the staff level and choose a decision from alternatives structured for them by their staff. Citizen participation can influence this staff work and thus help shape the choices offered to the decisionmakers. In the unusual case in which a transportation decision appears on a ballot as a REFERENDUM, the citizens do make the decision, but they still do not shape the alternatives. This is done by the individuals who place the issue on the ballot. Finally, citizens who are drastically aggrieved may still challenge decisions formally through the courts and informally through the political process. Thus these decisions are not completely final.

Participation Process Support techniques serve to make the other types of techniques more effective. They cut across all of the other categories and are not directly related to planning functions. Thus their uses are discussed here rather than in the next section where the other techniques are correlated with the planning process. CITIZEN HONORARIA, either as compensation for expenses incurred or for time invested by citizens, may be necessary to support many techniques, depending upon the time citizens are expected to commit, and whether pay would make it possible to have access to participants whose involvement is important and would
otherwise be precluded. Employing community people may create a positive attitude toward the agency; experience with surveys and interviewing programs indicates that respondents are more willing to talk to people with whom they can identify. On the other hand, some respondents are unwilling to reveal information or attitudes to neighbors or acquaintances with whom they may have a whole series of other relationships and associations. CITIZEN EMPLOYMENT should never be used as a means for trying to get substantive input to planning, or to get a reliable "feeling" for community values and attitudes through the casual relationships among agency staff members.

Increasingly CITIZEN TRAINING and COMMUNITY TECHNICAL ASSISTANCE are seen as essential elements in a participatory strategy. Through CITIZEN TRAINING, individual citizens are taught planning or leadership skills. In contrast, COMMUNITY TECHNICAL ASSISTANCE provides groups of citizen with the services of technical experts. The decision as to whether training and technical assistance are desirable should be made by the community participants; the agency should indicate its willingness to provide it directly if it has the capacity, and should honestly indicate the constraints of time and capability to do that, or budgetary constraints on arranging for other forms of assistance. If there is honest opposition to agency proposals, training and technical assistance can enable disagreements to be over substantive issues, rather than around the issue of whether the agency is trying to stifle controversy.

GAME SIMULATION and GROUP DYNAMICS are basically techniques for teaching participants and improving their ability to take part in the planning or decisionmaking process. In GAME SIMULATION, a person learns by playing a role in a game that models an aspect of planning. In GROUP
DYNAMICS a person is taught group interaction skills. Such skills may also be valuable for agency staff who are not experienced in interactive ways of looking at issues. GAME SIMULATIONS such as the one discussed in the case study on page 119 of Part B are often so complex and time consuming that they are perceived to be only indirectly related to the actual decisions to be made; many of the people who might benefit from them see them as diverting their attention rather than focusing it. Also, GROUP DYNAMICS, to many people, carries the stigma of psychiatric therapy, in which they may be extremely reluctant to be involved.

The COORDINATOR'S primary function is to administer and facilitate the participation program, and whether or not a COORDINATOR is needed depends upon the content and schedule of the program. A COORDINATOR within the agency is not a replacement for other participatory techniques.
SECTION 4: GUIDELINES FOR PARTICIPATORY PLANNING

The guidelines in this section are intended to show when and how the various techniques should be applied, but the choice ultimately depends on the planner's assessment of all aspects of the situation. Although there is no single procedure or formula that will insure effective citizen participation in planning, generally citizen participation should be started as early in the process as possible. One way to approach the beginning of this process is to:

1. Meet with the official in whose purview transportation falls; discuss the need for planning and for community participation. Solicit his views on who should be involved and the roles they should play.

2. Invite local leaders (identified in the above meetings) to a conference with the agency, at which they will give their views on highway planning. Agency representatives will mostly listen and learn. The purpose of the conference is not to debate issues, but to give planners a chance to learn about the community, and to give local people a chance to let off steam.

3. As development issues emerge, identify the controversial ones and try to engage opposing sides in discussion and debate.

4. Look for points of consensus, and use them as the basis for public information programs. Establish means for receiving feedback.

5. Decide whether initiative or reactive planning is more appropriate. Begin assigning responsibilities.

From this point on, community participation should begin to generate its own momentum. It will be the responsibility of the planner to choose the most effective techniques. Figure 3 shows the applicability of participation techniques to planning steps. Participation Process Support techniques do not appear on Figure 3 since they are not directly related to planning tasks.
### Citizen Participation in the Transportation Planning Process

#### Planning Steps

1. Inventory and Analyze Current Conditions, Trends, and Problems
2. Generate preliminary definitions of development issues and policies
3. Forecast population and employment, based on policies
4. Forecast travel demand, based on forecasted employment and population
5. Define transportation needs and objectives
6. Develop alternative transportation plans and programs
7. Make preliminary evaluation of alternatives
8. Establish regional or subarea priorities
9. Select a program package
10. Make level of action decisions
11. Establish annual (or biannual) action program

#### For All Facilities: Regional or Sub-area

- Figure 3: shows the planning process steps with indicators for information dissemination, information collection, initiative planning, reactive planning, and decision making.

#### For Each Facility: Project & Corridor

- Figures 4 and 5: provide a detailed matrix for each step, indicating which techniques may be useful at that step.

<table>
<thead>
<tr>
<th>Technique</th>
<th>Information Dissemination</th>
<th>Information Collection</th>
<th>Initiative Planning</th>
<th>Reactive Planning</th>
<th>Decision Making</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus Group</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Public Hearing</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Online Survey</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

*Indicates a technique that may be useful at that step.*
Several different forms of participation may be helpful at any stage in the planning process depending upon the function to be performed and the kind of participation desired. Some techniques require specialized hardware or specialist personnel, and the planner should make sure this is accessible. Differences in local customs and experiences might make one technique more or less effective. Flexibility is a key ingredient to success. Each of the techniques listed in Figure 3 is discussed in detail in Volume II of this report. Also the techniques appearing in all capital letters throughout this part of the report are among those discussed in Volume II.

The rest of this section of the report is devoted to discussing the steps in the planning process and the citizen participation techniques relevant to them. The discussion proceeds according to the sequence of planning steps found in Figure 1, "A Representation of the Steps in Transportation Planning," found on page 16. In some cases, planning steps such as Step 13, "Detailed Environmental Impact and Engineering Feasibility Analysis," through Step 15, "Writing of Final Environmental Impact Statement," which are closely related in terms of applicable citizen participation techniques, have been grouped. Each step or group of steps is preceded by a copy of Figure 1 in which the steps or group of steps being discussed has been shaded.
Step One: Inventory and Analyze Current Conditions, Development Trends and Transportation Problems

<table>
<thead>
<tr>
<th>Inventory of Trends &amp; Conditions</th>
<th>Development Issues and Policies</th>
<th>Forecast Population &amp; Employment</th>
<th>Forecast Travel Demand</th>
<th>Transportation Needs and Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative Plans and Programs</td>
<td>Preliminary Evaluation of Alternatives</td>
<td>Regional &amp; Subarea Priorities</td>
<td>Selection of Program &quot;Package&quot;</td>
<td></td>
</tr>
<tr>
<td>Level of Action Decisions</td>
<td>Annual Action Program</td>
<td>Refine Location and Design Alternatives</td>
<td>Detailed Environmental &amp; Feasibility Analysis</td>
<td></td>
</tr>
<tr>
<td>Final Environmental Impact Statement</td>
<td>Decision to Build Facility</td>
<td>Prepare Final Design &amp; Cost Estimates</td>
<td>Implement &amp; Construct</td>
<td></td>
</tr>
<tr>
<td>Operating &amp; Evaluate</td>
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</tbody>
</table>

This activity includes:

1. the inventory studies of development patterns, and the existing transportation system, which are typically the data base for regional systems planning;

2. more detailed inventories, principally of development trends and of socioeconomic and environmental conditions at the sub-area (or metropolitan) level, which are the basis of preliminary impact analysis and shorter-range program planning; and

3. continuous monitoring of conditions to detect changes in needs and short-range problems.

At this stage, the main point of citizen participation is to obtain information from the public. For gathering socioeconomic, demographic, and travel-pattern information, basic tools are SURVEYS based on random samples of individual citizens which permit projection of the results to the whole population through various statistical techniques, and FOCUSED GROUP INTERVIEWS which are discussions by small groups of people led by a moderator who keeps the group's attention "focused" on an issue. In longer-range, regional
system planning DELPHI may be useful for testing attitudes. DELPHI is essentially an iterative questioning process which develops a consensus among a specified group.

At this stage, some elements of a PUBLIC INFORMATION PROGRAM should be used to give the general public a basic understanding of the purpose of the study, the use that will be made of it, and the timetable for doing it. The SURVEY materials themselves should provide much of that basic information. However, individuals not directly involved in the SURVEY will also need to be informed.

One element of the information program should be some arrangement for responding to questions from the public about the inventory, but such inquiries will not generally be frequent enough to justify a HOTLINE or DROP-IN CENTERS. An arrangement simply to have staff members in the agencies responsible for inventory studies available to respond to inquiries should be adequate. The components of a complete PUBLIC INFORMATION PROGRAM are discussed in Part C of this report beginning on page 167.

At the regional level, the inventory is a fairly mechanistic equation between travel demand and the capacity of the system to absorb it. At the sub-area level, the inventory is focused on specific local conditions and needs and is more subjective. Therefore, effective community participation is essential at the inventory stage. Some kind of representative body, such as a CITIZENS' ADVISORY COMMITTEE, will usually be appropriate. Representation should include local government, public agencies responsible for planning and operations in the sub-area, communities in the sub-area (probably neighborhoods), special-interest groups such as minority communities and environmental groups, and the planning agency itself. The advisory committee should review methodologies proposed by the planning agency to insure that the information base to be assembled will be adequate to address all of the issues and problems that will have to be decided later.
Whether the committee should be a one-time, ad hoc arrangement or a more permanent, continuing entity will depend principally (in addition to local politics and the expectations of the community) upon how long the inventory will take. It may be difficult to maintain the committee's interest over a long period if its only function is to monitor an information inventory in progress. This report's case study of systems planning shows that if citizens are not involved early in the process, problems can arise later in the process.

MEETINGS sponsored by community groups or organized by the agency for a neighborhood and NEIGHBORHOOD PLANNING COUNCILS, which serve as advisory bodies to the agency, might be helpful as part of the inventory, although it may be difficult to limit the output of those kinds of techniques to simply getting information; participants may want to move quickly to making proposals or indicating priorities. If that happens, they will expect some response from the planners, and the planners clearly will not be ready at that point to make one. In any case, structures as formal as NEIGHBORHOOD PLANNING COUNCILS should not be established at the inventory stage unless it is clear that they are desirable as a continuing element of the participatory program. Again, an important criteria in that decision is how long the inventory itself will take.

It may be appropriate to involve community participants in actually doing some of the required studies, not as individual employees but as organized groups, with COMMUNITY TECHNICAL ASSISTANCE provided by the planning agency. This approach could improve the quality of the information assembled and speed up the inventory. On the other hand, local issues could cause problems in assigning studies.

How much and what form of participation will be productive at the inventory stage depends mainly upon how much new inventorying needs to be done. If the existing information base is adequate, the task is only to
assemble it in a coherent form and review it with interest groups to be sure their particular concerns can be addressed in subsequent planning.

This stage is specifically focused on development issues and policies, rather than transportation policies, so that there will be a basis for forecasting the volume and distribution of activities which generate demand for transportation services and thus the demand itself.

At the regional level, development policies have traditionally taken the form of land use control policies, which influence the density and location of trip-generating activities. At the sub-area level, there are not likely to be any land use policies; in fact, one of the motivations behind sub-area planning has been to deal with that problem, to make policy-setting a serious activity. How successful this will be remains to be seen, since experience with the sub-area concept is limited. The first
case study in Part B of this report discusses a situation where the sub-area concept was used to focus interest on local needs and values.

One of the key issues is whether a substantial amount of change is expected in the development pattern, which might affect demand for transportation services. Where growth or shifts in land use are not expected, the problem might be obsolescence or deterioration of the transportation system.

The PUBLIC INFORMATION PROGRAM and NEIGHBORHOOD or COMMUNITY MEETINGS are useful for presenting relevant information from the inventory and for getting feedback from the public. NEIGHBORHOOD PLANNING COUNCILS, if they are to be built in as a permanent fixture of the participatory strategy, are useful means of giving input from the public to the official policy-makers. DELPHI techniques may be useful, depending upon the receptivity of local officials and community participants. MEDIA-BASED ISSUE BALOTING could be used to get a broader level of public involvement, if it is possible to define issues for presentation via radio, television, or newspapers so that respondents know what choices they have to make, and the implications of their choices as they return their ballots. MEDIA-BASED ISSUE BALOTING probably has to be supported by other elements of the PUBLIC INFORMATION PROGRAM to be effective. This is born out in the case study of MEDIA-BASED BALOTING on page 124 of Part B. In that situation only a small percentage of the public participated in the balloting.

Zoning and other development policies are the prerogative of municipal and State governments, and the highway planning agency must be careful about how it affects public participation in this area. If highway planners ignore the policy-making role of local government, the result is likely to be public controversy, or worse. The highway agency is often an intermediary between the public and local officials, and not a disinterested party, but
one with a need to establish a productive working relationship with both kinds of participants. The highway agency will be in a sensitive position. On the one hand, local officials who make policy will predictably have their own established practices and attitudes toward community participation, and may not welcome help from the agency. Also, there may be conflicts among local officials, and between local and State officials. On the other hand, the highway agency has a clear and legitimate interest in making sure the participation is effective, because any issues that are not resolved at the policy level will inevitably come back to haunt the planners and the public later in the process.

Step Three: Forecast Amount and Spatial Pattern of Population and Employment Based on Development Policies

Step Four: Forecast Volume and Spatial Pattern of Travel Demand Based on Forecast Employment and Population

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>INVENTORY OF TRENDS &amp; CONDITIONS</td>
</tr>
<tr>
<td>2</td>
<td>DEVELOPMENT ISSUES AND POLICIES</td>
</tr>
<tr>
<td>3</td>
<td>FORECAST POPULATION &amp; EMPLOYMENT</td>
</tr>
<tr>
<td>4</td>
<td>IMPACT NEEDS AND OBJECTIVES</td>
</tr>
<tr>
<td>5</td>
<td>ALTERNATIVE PLANS AND PROGRAMS</td>
</tr>
<tr>
<td>6</td>
<td>PRELIMINARY EVALUATION OF ALTERNATIVES</td>
</tr>
<tr>
<td>7</td>
<td>REGIONAL &amp; SUBAREA PRIORITIES</td>
</tr>
<tr>
<td>8</td>
<td>SELECTION OF PROGRAM &quot;PACKAGE&quot;</td>
</tr>
<tr>
<td>9</td>
<td>LEVEL OF ACTION DECISIONS</td>
</tr>
<tr>
<td>10</td>
<td>ANNUAL ACTION PROGRAM</td>
</tr>
<tr>
<td>11</td>
<td>DETAILED ENVIRONMENTAL IMPACT STATEMENT</td>
</tr>
<tr>
<td>12</td>
<td>REFINE LOCATION AND DESIGN ALTERNATIVES</td>
</tr>
<tr>
<td>13</td>
<td>ENVIRONMENTAL IMPACT STATEMENT</td>
</tr>
<tr>
<td>14</td>
<td>DRAFT ENVIRONMENTAL IMPACT STATEMENT</td>
</tr>
<tr>
<td>15</td>
<td>FINAL ENVIRONMENTAL IMPACT STATEMENT</td>
</tr>
<tr>
<td>16</td>
<td>DECISION TO BUILD FACILITY</td>
</tr>
<tr>
<td>17</td>
<td>PREPARE FINAL DESIGN &amp; COST ESTIMATES</td>
</tr>
<tr>
<td>18</td>
<td>IMPLEMENT &amp; CONSTRUCT</td>
</tr>
<tr>
<td>19</td>
<td>OPERATE &amp; EVALUATE</td>
</tr>
</tbody>
</table>

Little citizen participation should be expected in the forecasting steps, and it is questionable whether there is any reason to encourage it. Some major highway planning controversies have centered at least partly on
the forecasting methodologies used by planning agencies, but usually after the fact when specific facility proposals have been made. Generally, disputes have arisen over the qualitative assumptions built into the forecasts, rather than the quantitative mechanics of volume and allocation models. The only feasible way to structure any kind of in-process participation during forecasting is to designate a formally organized group (CITIZENS' ADVISORY COMMITTEE, CITIZEN REVIEW BOARD, a body with full authority to approve or disapprove a plan, or CITIZEN REPRESENTATIVES ON PUBLIC POLICY-MAKING BODIES) as having monitoring responsibilities during the forecasting process; such an arrangement would certainly require independent technical assistance. That arrangement may be necessary in situations where past controversies involving the highway agency have raised questions as to its forecasting methodologies. The same kind of review committee or board with COMMUNITY TECHNICAL ASSISTANCE could be used if questions are raised after forecasting has been done.

Unless there is a specific request from the public for this sort of interaction, there is little probable usefulness to more broadly describing forecasting methodologies or results to the general public, either as a way to insure more effective community participation later or to improve the technical quality of the planning.
Step Five: Define Transportation Needs and Objectives

At some point, a transportation demand—that is, the desire of people to go from A to B—becomes a transportation need, which is to say a decision is made to meet the demand at public expense. Establishing the criteria for transportation needs requires citizen participation. The community must answer such questions as: When is traffic "too heavy"? When is a wait at a stoplight "too long"? How long should a trip take, and how direct should the route be? What will drivers do if they are dissatisfied with an existing road? On whom will the consequences of their actions fall? What can be done to modify this behavior, short of building a road to meet that demand?

The decision as to which participation techniques are most useful depends partly on how formal the role of the participants is intended to be. Because the same standards and criteria should be applied throughout the entire system, a regional CITIZENS' ADVISORY COMMITTEE or CITIZEN REPRESENTATIVES ON PUBLIC POLICY-MAKING BODIES is most appropriate. If there
are already sub-area committees or boards, they might take up the question of standards and criteria separately, with an understanding that some system-wide agreement will have to be negotiated among them. The case study of systems planning presented in Part B discusses the effective use of sub-area groups.

The technical staff of the agency would take the responsibility for defining issues around which criteria had to be established, and for proposing some for consideration. The participants might need COMMUNITY TECHNICAL ASSISTANCE to evaluate and formulate their response, depending upon how formal the process is.

Several techniques are available to the agency or to community organizations. These include MEDIA-BASED ISSUE BALLOTTING, MEETINGS, or even SURVEYS. If a need for SURVEYS is expected, the interview format should be broad enough to be cost-effective, in view of the cost, time required, and logistical complexity of interview programs. Because most people are only casually aware of the planning and do not understand the significance of "criteria and standards" for defining needs, participation may be difficult to achieve. Any invitation or request for input less directed than a SURVEY is likely to have only marginally useful results.

All of the above presumes that the agency is prepared to open the question of the "performance standards" for the transportation system. It may be that some standards relate so directly to governmental responsibility to insure safety, or even efficiency, that they cannot really be negotiated through community participation.

When needs and objectives have been defined, public reporting of work to date and decisions reached is required. That reporting may take
several different forms: news media, documents published by the agency, and public meetings.

Step Six: Develop Alternative Transportation Plans and Program

At this stage, the agency must choose between initiative and reactive participation. The choice depends upon how active a role the community wishes to assume, how organized the participants are, how broad-based the interest groups are, and the agency's own sense of how it can function most effectively.

Because initiative planning puts the greater burden of responsibility on community participants, adequate training and technical assistance must be provided by the agency. If this assistance is inadequate, citizens may feel that their ability to respond is constrained, and that their participation is only a token. This inevitably leads to antagonism. Thus, initiative techniques should be used only when the agency is in a position to follow through with all the assistance this participation requires.
The difficulties of providing COMMUNITY TECHNICAL ASSISTANCE are discussed on page 59 of Part C of this report.

Initiative planning may be ADVOCACY PLANNING in which a citizens group engages independent technical assistance, PLURAL PLANNING in which each party provides its own alternative plan, or consensus planning. The intention of advocacy is not to reconcile differences, but to develop alternatives which express the needs of interest groups. Negotiation and reconciliation will come later. Consensus planning, on the other hand, assumes that some consensus plan can be generated for the geographical area under study. A COMMUNITY PLANNING CENTER, in which a planning team is employed on a continuing basis by a community group, might be used to produce a single alternative which the community feels best reflects its interests, or to produce a number of alternatives. They might produce an initial plan for discussion, to which other parties (the highway agency, other community groups, the public-at-large) respond in order to generate additional alternatives for consideration. A CHARRETTE, intensive interactive meetings for the purpose of producing a complete plan, may be used in consensus planning.

Advocacy and consensus planning are not mutually exclusive. A COMMUNITY PLANNING CENTER may decide to use CHARRETTES as a technique for developing plan alternatives. Depending on the relationships among interest groups within a particular community or sub-area, alternatives developed in ADVOCACY PLANNING may be negotiated among the different community interests before they are presented to the planning agency.

The alternatives could be statements of criteria the plan should meet, with the responsibility left to the highway agency to translate those criteria into specific facility and service proposals. The initiative plans may take the form of "sketch" physical plans of facilities, as is usually the case with CHARRETTES, or they may be refined plan proposals,
carried by the community-based sponsor up to the point at which preliminary environmental impact and engineering feasibility evaluations may be made.

TASK FORCES, groups of citizens actively engaged in achieving a specific goal, and WORKSHOPS, structured sessions in which a topic is thoroughly discussed by a limited number of people, are generally used to study or make proposals in response to a particular problem or element of the plan alternatives, rather than to produce complete plan proposals. They may be used in combination with another initiative technique, such as a COMMUNITY PLANNING CENTER. They may also be employed when the basic mode is reactive planning, with the agency generally initiating proposals to deal with problems of particular concern to community interests. COMPUTER-BASED TECHNIQUES which use a computer to facilitate communication, or DESIGN-IN AND COLOR MAPPING which use models, maps, picture, or other visual tools to allow citizens to develop their own alternatives can be used in combination with many of the other techniques. DESIGN-INS AND COLOR MAPPING clearly are appropriate mainly to developing "sketch" plans, not more detailed proposals.

Of the reactive planning techniques, CITIZEN'S ADVISORY COMMITTEES, CITIZEN REPRESENTATIVES ON PUBLIC POLICY-MAKING BODIES, MEETINGS, and NEIGHBORHOOD PLANNING COUNCILS are useful when the contact between the planning agency and the community participants is intermittent—when the agency prepares either complete alternatives or parts of them, and then reviews them with the community. The feedback from the participants may come both before and after the completion of each sub-part of the technical work of producing alternatives. The agency says, to a board or committee or council, "Here's what we're going to do now, and how we're going to do it; here's the form of the product we're going to bring back to you to review." The participants reply, "Okay, we agree with your approach" or "We think you should do this instead—come back when you've done it." The product is done by the agency, reviewed and modified by the community participants, and then work
progresses to the next step. The decision as to how many steps there are in that sequence of technical work-reaction depends upon the complexity of the plan alternatives to be developed, and the working relationships defined between the agency and the participants.

FISHBOWL PLANNING and INTERACTIVE CABLE-TV-BASED PARTICIPATION provide concentrated interaction. The technical work is done "in public," and response is invited and encouraged at that moment. These techniques can clearly be used in combination with advisory committees, boards and councils. They might, in fact, be sponsored by a committee or council as a way of generating broader-based feedback.

POLICY CAPTURING and VALUE ANALYSIS are most useful for: (1) enabling the community participants to interact among themselves, to decide what their reaction to the agency's proposals should be; or (2) for the agency and community participants to interact with each other, to resolve differences of judgment arising over the agency's proposals and the community's reaction. These techniques attempt to trace the relationship between reactions to specific elements of a plan, and the underlying values that generate those responses. In POLICY CAPTURING citizens indicate preferences among the issues involved in a problem, this information is analyzed using multiple linear regression for the variable underlying the preferences. VALUE ANALYSIS uses panels, citizens, surveys, and studies to discover community goals which can be used to evaluate transportation alternatives. These two techniques can be useful to identify differences between the values held by participants at this stage and the policies or definitions of needs and objectives defined earlier in the process which are the basis of the proposals. The case study of POLICY CAPTURING presented in Part B of this report shows how useful POLICY CAPTURING can be for reporting the judgements of diverse groups.
The participants may feel the plan proposals do not conform to the agreed-upon policies and objectives; this situation can be resolved through debate and negotiation. A more troublesome situation arises when participants do not agree with those earlier judgements or may have changed their minds about them. Unless value decisions are open to reconsideration, these techniques for probing reactions should be used only with participants who have been involved earlier, such as CITIZENS' ADVISORY COMMITTEES or CITIZEN REPRESENTATIVES ON PUBLIC POLICY-MAKING BOARDS or NEIGHBORHOOD PLANNING COUNCILS which have some formal role throughout the planning process.

If used successfully, POLICY CAPTURING and VALUE ANALYSIS can clarify what participants really disagree about, and with whom they disagree. However, these techniques are sophisticated and require considerable time and effort, and the results may not justify the investment. They are most likely to be worth the investment when there is already a conflict which threatens the ability to proceed with planning using more conventional formats for participation.

Other techniques, in the categories of "disseminating information" or "information collection" can certainly be useful during the generating of plan alternatives, whether the planning is initiative or reactive. SURVEYS may be necessary to collect supplementary information, or desirable as ways to get broader-based feedback on proposed alternatives. The agency's PUBLIC INFORMATION PROGRAM should acquaint the general public with the alternatives being considered. DROP-IN CENTERS are a useful technique at this stage, when the issues being considered are more tangible to the general public. Some uses of MEDIA-BASED ISSUE BALOTTING may be appropriate, not to make a selection between alternatives, since that would be premature at this point, before preliminary impact and feasibility analysis, but to get a general indication of issues that should receive special attention.
during subsequent phases of the planning. A HOTLINE, which the public can use to get information and clarification about specific facilities and service improvements being considered, could be effective at this stage.

The design of the participatory strategy during the generation of alternative plans and programs must be carefully structured. The agency and the community participants must avoid creating the impression that decisions are being "set up"—that facilities are being selected rather than proposed. Thus agency must also pay particular attention to clarifying the relationships among different groups and kinds of public participants, and the roles each has in this part of the process.

Step Seven: Make Preliminary Evaluation of Alternatives Based on (a) Social, Economic, and Environmental Impacts, and (b) Cost and Other Feasibility Factors

The feasibility analysis of alternatives is primarily an agency staff task, to be monitored by a CITIZENS' ADVISORY COMMITTEE or CITIZEN REPRESENTATIVES ON PUBLIC POLICY-MAKING BODIES if such a structure has been formally built into the participation program. Community participants will pay particular attention to the agency's analysis of the feasibility of using other modes or non-facility options as alternatives to new roads or road improvements.
The evaluation of comparative social, economic and environmental impacts of alternative plans and programs—even at this preliminary level—should stimulate substantial community participation. It must be made very clear that the purpose of this analysis is not to select facilities and plan components for implementation, but to determine which alternatives should continue to be examined. Several alternatives may continue to be evaluated in more detail beyond this stage of the planning. Even if one alternative does emerge as apparently most desirable, this does not represent a commitment to implement it. In the evaluation, the agency has to be extremely clear about the limits of its authority and responsibility and about the procedures for getting decisions and commitments for non-highway elements of a transportation plan.

Responsibility for analyzing alternatives should be assigned in light of the process used to generate them. Objectivity—and the appearance of objectivity—will require that the analysis be done by agency staff or persons not committed to an alternative. Some highway agencies may have a separate staff section responsible for evaluation, which may be perceived as independent enough to take the central responsibility, with community review through the same techniques as for reactive planning for generating alternatives. In other cases, the techniques classified under initiative planning—which place greater responsibility in the community participants themselves to do technical work (with adequate technical assistance), will be appropriate for preliminary impact analysis, especially if the agency has played the central role in proposing alternatives, or when there are particular interest groups on whom impacts are anticipated to fall directly.

A major factor in deciding who proposes and who evaluates must be the view the community has of its own role and priorities, and a similar judg-
ment on the part of the highway agency. Different community groups—whether special purpose ad hoc organizations or formally structured representative bodies, geographically-based or interest-defined—have different ways of operating. Some may want the highway agency to produce alternative plans, because they see that step as mainly a technical process or because it is the most expedient way to get proposals "on the table" for discussion. They may feel they can better protect community interests by screening the alternatives after the fact, that making plans is not their responsibility.

Roles and responsibilities should be negotiated between the agency and community participants and clearly stated at the outset of this step. The PUBLIC INFORMATION PROGRAM should describe the process of evaluation, and tell who will be responsible for it and what criteria will be used. At the conclusion of the evaluation of alternatives, public reporting of progress to date may be appropriate.

Step Eight: Establish Regional or Sub-area Priorities
Step Nine: Select Program Package
Because of limits on available resources, not all elements of a desirable plan will be implemented, and the elements which are implemented will be phased. Some desirable actions may have to be postponed until decisions are reached about the ability to implement alternative modes or operating policies.

Priorities are developed in response to such questions as: What are the most pressing needs? What are the consequences if they are not met? How long will it take to bring facilities or services "on line"? Answering these questions requires a complicated, time-consuming analysis, and it is questionable whether broad-based citizen participation is feasible. Moreover, the decisions that will be made extend outside the region, to the State's chief executive, who has ultimate responsibility for State transportation planning, and it is questionable whether he will want to open that process totally.

This does not mean that the participatory process is set aside at this point. The credibility of the entire process could be destroyed if decisions about what will be done and when, are now handed down.

In most cases, interaction should begin with the highway agency proposing a set of priority decisions and consequent program packages for review by the State's policy-makers. After that review, the package would be presented to whatever community participation structure has been formally built into the planning process—probably a CITIZENS' ADVISORY COMMITTEE, CITIZEN REPRESENTATIVES ON PUBLIC POLICY-MAKING BODIES, or NEIGHBORHOOD (or community) PLANNING COUNCILS. How much back-and-forth negotiations takes place from that point on depends on the extent of disagreement between the community and the State, and how much flexibility there is in the State's position. The use of these types of groups to reach a community
consensus is illustrated in the case study of a CITIZENS’ ADVISORY COMMITTEE on page 92 in Part B.

The agency should have raised the matter of funding or other constraints before this stage is reached. Some order-of-magnitude estimates of available construction funds should have been provided by the agency during the development of alternative plans.

Step Ten: Make Level of Action Decisions
Step Eleven: Establish an Annual (or Biennial) Action Program

The agency will make a "level of action" decision for each component in the program package, and will assign staff to implement those decisions. The criteria for a "level of action" decision are defined by each highway agency in its Action Plan, as mandated by 23 CFR 795 (FHPM 7-7-1), which describes the procedures that will be followed for project planning as each specific facility moves from the system or sub-area level into implementation. Factors in the decision include: the magnitude of the anticipated
impact of the project, and whether the impact is adverse or beneficial; the extent of the geographic area within which impacts are expected to be felt; the duration of the impacts; and whether there are alternatives to the project under consideration when the "level of action" decision is made.

While these decisions are internal within the highway agency, they do have important policy and logistical implications for the community participation process, and they should be open for review by the public. The agency and whatever community interests have been involved in planning should discuss arrangements for continuing participation during the corridor and design phases of planning.

The "level of action" classification of each project, and the agency's work program and staff assignments for the next phase of project development should be reviewed through the participatory structure as well, and modifications made as appropriate. This review will provide a basis for periodic monitoring of the Action Plan itself in the light of experience to date.

Generally, as each project moves into the corridor and design phases, public interest will become geographically concentrated in the affected areas, although this is not always the case. Some special interest groups—e.g., environmental protection organizations, or minority group associations—often have a metropolitan- or community-wide base. If NEIGHBORHOOD PLANNING COUNCILS have been built into the sub-area program planning phase, they may want to continue to be involved as the project progresses. The most effective community participation strategy at the design level is as much a matter of the dynamics and relationships among different sets of public interests as it is one of the nature of the planning decisions to be made. The highway agency should be prepared to negotiate flexibly with the organized interests.
which have already been involved in earlier phases of planning. In some cases, there may be a formal committee responsible for monitoring the planning of each facility; sometimes such committees will be ad hoc TASK FORCES, created for that purpose, and sometimes subcommittees of established sub-area-wide committees. Part of the basis for that decision will be whether the different interest groups affected by a single facility feel their interests are compatible or not. The structure for participation will undoubtedly be different for a project entirely within a single community than for one affecting several communities. No single "best" format for participation can be prescribed. Most highway agencies would presumably prefer to establish a relationship with a single entity, representing a cross-section of interests, but that may not be practical. Case studies of corridor and project planning are presented in Part B of this report.

Ongoing community participation will require coordination within the highway agency, since typically the staff members responsible for project planning are not those involved in system or sub-area planning. In fact, large parts of the responsibility for planning up to the location and design phase may have been delegated to other public agencies. A COORDINATOR in the highway agency can make sure the participation process continues smoothly during the transition.
Planning is now focused on a specific highway facility; and its specific relationship to land use, the existing street system, and other local conditions can be specified in much greater detail. At this stage, the community's primary interest is to insure that all design alternatives are identified and considered.

The agency must choose between initiative planning and reactive planning. Because highway design must conform to engineering standards, community participants may see this task as appropriately the responsibility of the highway agency, with community review of proposals in a reactive mode. However, in some major transportation controversies and restudies the responsibility for identifying location and design alternatives has been assigned to community participants with technical assistance from the agency.

In initiative planning, WORKSHOPS and CHARRETTS can be used to generate location and design alternatives for further study. However, these techniques do not produce detailed proposals for impact and feasibility analyses.
To provide the information and detail for these analyses, COMPUTER-BASED TECHNIQUES are particularly useful. ADVOCACY PLANNING techniques can be used if a lack of consensus requires statements of the needs of particular interest groups.

Most of the reactive planning techniques are applicable at this stage. POLICY CAPTURING and VALUE ANALYSIS will probably be less useful, because basic value decisions are, by this time, so deeply imbedded in the program that re-examining them could easily lead to a breakdown in planning and participatory relationships.

PUBLIC INFORMATION PROGRAMS should be used to keep the public at large informed of alternatives being considered to make sure that all alternatives and their consequences are identified. DROP-IN CENTERS and HOTLINES are particularly useful. Meetings with NEIGHBORHOOD PLANNING COUNCILS to present and review alternatives in progress can be useful, but this must be carefully coordinated to avoid the impression that the agency is attempting to use one set of community interests to undercut the position of another. Reconciling this coordination with an open process and reflecting the desire to be sure all community interests, individuals and groups have access to the decision-making is not an easy job. The issue should be discussed frankly with the community participants who are involved with the agency in designing the planning process for the location and design phases, and the ground rules should be communicated clearly to all the participants as they enter the process.
Step Thirteen: Make Detailed Environmental Impact and Engineering Feasibility Analysis
Step Fourteen: Write Draft Environmental Impact Statement
Step Fifteen: Write Final Environmental Impact Statement

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<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Inventory of Trends &amp; Conditions</td>
</tr>
<tr>
<td>2</td>
<td>Development Issues and Policies</td>
</tr>
<tr>
<td>3</td>
<td>Forecast Population &amp; Employment</td>
</tr>
<tr>
<td>4</td>
<td>Forecast Travel Demand</td>
</tr>
<tr>
<td>5</td>
<td>Transportation Needs and Objectives</td>
</tr>
<tr>
<td>6</td>
<td>Alternative Plans and Programs</td>
</tr>
<tr>
<td>7</td>
<td>Preliminary Evaluation of Alternatives</td>
</tr>
<tr>
<td>8</td>
<td>Regional &amp; Subarea Priorities</td>
</tr>
<tr>
<td>9</td>
<td>Selection of Program &quot;Package&quot;</td>
</tr>
<tr>
<td>10</td>
<td>Level of Action Decisions</td>
</tr>
<tr>
<td>11</td>
<td>Annual Action Program</td>
</tr>
<tr>
<td>12</td>
<td>Refine Location and Design Alternatives</td>
</tr>
<tr>
<td>13</td>
<td>Environmental Impact Statement</td>
</tr>
<tr>
<td>14</td>
<td>Draft Environmental Impact Analysis</td>
</tr>
<tr>
<td>15</td>
<td>Decision to Build Facility</td>
</tr>
<tr>
<td>16</td>
<td>Prepare Final Design &amp; Cost Estimates</td>
</tr>
<tr>
<td>17</td>
<td>Implement &amp; Construct</td>
</tr>
<tr>
<td>18</td>
<td>Operate &amp; Evaluate</td>
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The procedures that the highway agency must follow at this stage are defined in the Federal Highway Program Manual. These procedures focus on the content and scope of the impact analysis, and on the opportunity for public review of findings, and, as the manual points out, are not intended to limit the extent or form of community participation. In view of the legal responsibility of the agency for preparing the EIS and the extent of technical work required, the participatory relationship is most likely to be one in which community participants monitor, review, and respond to materials produced by the agency. An effective monitoring arrangement will provide for frequent review and the possibility of modifications in methodology while the work is in progress, rather than after-the-fact critiques of what has already been done. The public reporting requirements
in the regulations do not in themselves answer the need for an effective public information program by the agency. DROP-IN CENTERS and HOTLINES will be as useful for clarifying the process of evaluating location and design impacts as they were for identifying the alternatives in the first place.

Moreover, the regulations do not preclude arrangements in which the agency might contract with community-based organizations to undertake studies with COMMUNITY TECHNICAL ASSISTANCE. Such arrangements may be especially appropriate with respect to social and economic impacts which the community may believe it understands better than the agency. Such responsibilities might be assigned to a COMMUNITY PLANNING CENTER or to special-purpose TASK FORCES.

Step Sixteen: Make Decision to Build or Not Build Facility

ARBITRATION and MEDIATION, CITIZEN REFERENDA, CITIZEN REVIEW BOARDS, and MEDIA-BASED BALLOTING may be applicable at this step, depending upon
the events and procedures leading up to this point. ARBITRATION AND MEDIATION which uses a skilled third party to negotiate among interest groups and a CITIZEN REVIEW BOARD both assume involvement in the decision by a fairly small number of participants, who have been closely involved in the planning process throughout. However, as is pointed out in the case study of MEDIATION on page 101 in Part B, this small number of participants may truly represent the whole community. CITIZEN REFERENDA, in which the electorate formally votes on the issue, and MEDIA-BASED BALLOTING, in which citizens informally vote on the issue, open the decision-making to a broader base of involvement, but are more limited in their ability to insure that the decision reflects the complexity of the issues involved.

A key issue is the degree to which the agency, the community, and elected officials agree to be bound by the results. How useful the participation is depends upon the effectiveness of the PUBLIC INFORMATION PROGRAM in preparing the participants to make a decision.


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<th>Description</th>
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<tr>
<td>1</td>
<td>INVENTORY OF TRENDS &amp; CONDITIONS</td>
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<tr>
<td>2</td>
<td>DEVELOPMENT ISSUES AND POLICIES</td>
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<tr>
<td>3</td>
<td>FORECAST POPULATION &amp; EMPLOYMENT</td>
</tr>
<tr>
<td>4</td>
<td>FORECAST TRAVEL DEMAND</td>
</tr>
<tr>
<td>5</td>
<td>TRANSPORTATION NEEDS AND OBJECTIVES</td>
</tr>
<tr>
<td>6</td>
<td>ALTERNATIVE PLANS AND PROGRAMS</td>
</tr>
<tr>
<td>7</td>
<td>PRELIMINARY EVALUATION OF ALTERNATIVES</td>
</tr>
<tr>
<td>8</td>
<td>REGIONAL &amp; SUBAREA PRIORITIES</td>
</tr>
<tr>
<td>9</td>
<td>SELECTION OF PROGRAM &quot;PACKAGE&quot;</td>
</tr>
<tr>
<td>10</td>
<td>LEVEL OF ACTION DECISIONS</td>
</tr>
<tr>
<td>11</td>
<td>ANNUAL ACTION PROGRAM</td>
</tr>
<tr>
<td>12</td>
<td>REFINE LOCATION AND DESIGN ALTERNATIVES</td>
</tr>
<tr>
<td>13</td>
<td>DETAILED ENVIRONMENTAL &amp; FEASIBILITY ANALYSIS</td>
</tr>
<tr>
<td>14</td>
<td>DRAFT ENVIRONMENTAL IMPACT STATEMENT</td>
</tr>
<tr>
<td>15</td>
<td>FINAL ENVIRONMENTAL IMPACT STATEMENT</td>
</tr>
<tr>
<td>16</td>
<td>DECISION TO BUILD FACILITY</td>
</tr>
<tr>
<td>17</td>
<td>PREPARE FINAL DESIGN &amp; COST ESTIMATES</td>
</tr>
<tr>
<td>18</td>
<td>IMPLEMENT &amp; CONSTRUCT</td>
</tr>
<tr>
<td>19</td>
<td>OPERATE &amp; EVALUATE</td>
</tr>
</tbody>
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Community participation should not end with the decision to build; there still may be design alternatives at this point which require study, and participants who will be most directly affected by the physical characteristics of the facility may want to be involved in that process. Problems may have been identified during the impact analysis, such as rehousing of displaced families and businesses, replacing community facilities, or ameliorating unavoidable environmental impacts. Resolving these will require development of proposals and ways to implement them financially and administratively, and the agency must choose between initiative and reactive planning.

Resolution of any remaining problems likely will require sensitive negotiating of responsibilities, since the highway agency will now see its primary responsibility as building the facility; and while it may recognize the need to solve related problems, it may be unclear about its responsibility to be involved in that or to support those activities financially. Such responsibilities may have been negotiated during the preparation of environmental impact statements, but this is not always true.

In any event, it is essential that the schedule for facility construction take into account the resolution of community problems. Scheduling should involve direct discussion and interactive planning with agencies and community groups involved in solving those problems. TASK FORCES and WORKSHOPS are often helpful at this stage. Alternative solutions to problems can be discussed and the most desirable one identified this way.
A mechanism is needed for identifying problems created by work in progress. In most cases, there will be informal feedback which need not be channelled through a formal participatory structure. However, the agency should make clear in its PUBLIC INFORMATION PROGRAM what part of the agency has responsibility for construction and related actions, and where information about schedules for work in progress can be obtained. A HOTLINE may be useful, depending upon the scale and duration of activity created by construction of the facility. The PUBLIC INFORMATION PROGRAM also should communicate the construction schedule, especially to parts of the community most directly affected by construction activities. Negative reaction to highway development can be created simply because people are taken by surprise by construction activities.
If there has been significant controversy over environmental impacts, and the decision to build the facility has been accompanied by guarantees that the agency will take steps to minimize or reduce those impacts, some formal arrangement for community-based monitoring of implementation may be required. This may best be accomplished through a CITIZEN REVIEW BOARD, a TASK FORCE receiving periodic reports by the agency, or some other arrangement. Monitoring may involve the State agency responsible for compliance with environmental protection standards.

**Step Nineteen: Operate and Evaluate**

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<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Inventory of Trends &amp; Conditions</td>
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<tr>
<td>2</td>
<td>Development of Issues and Policies</td>
</tr>
<tr>
<td>3</td>
<td>Forecast Population &amp; Employment</td>
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<tr>
<td>4</td>
<td>Forecast Travel Demand</td>
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<tr>
<td>5</td>
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<td>6</td>
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<td>7</td>
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<td>8</td>
<td>Regional &amp; Subarea Priorities</td>
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<td>9</td>
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<td>15</td>
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<tr>
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<td>19</td>
<td>Operate &amp; Evaluate</td>
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The monitoring of the operation of a new facility feeds back into the beginning of the planning process, to provide for evaluating the performance of the overall system. If there have been significant problems during planning and development of the facility, either in terms of the adequacy of the community participation process or the technical conduct of the work program, a formal post-audit evaluation may be necessary.
This is a difficult job to do, given the time elapsed in the planning process and the number of actors and events and specific decisions involved, and should be undertaken only in exceptional circumstances.

It is important to keep the lines of communication that have been established with the public open. In this way new problems can be swiftly identified and rectified. The lines may be kept open by holding annual PUBLIC HEARINGS or simple informal conversations. Either way, it is important to keep PUBLIC INFORMATION PROGRAMS going to let the public know what the agency is doing. PUBLIC INFORMATION PROGRAMS are discussed in detail on page 167 in Part C of this report.
CONCLUSIONS

In summary, citizen participation techniques are tools, not for meeting the minimum requirements of the Federal Highway Program Manual, but for making plans which express the public's desires. Rather than adjuncts to conventional planning, they are important elements in a more comprehensive planning methodology designed to incorporate more fully social, economic, and environmental factors into planning. At nearly every step in the planning process, this report suggests suitable techniques whereby citizen participation may be given substance as an integral part of planning.

Step 6, Alternative Plans and Programs, is probably the key step in the planning process for citizen participation. At this point, as alternatives are formulated and their impacts become apparent at least in outline to citizens, reaction by the public—whether approving or disapproving—will appear and any deep seated opposition will surely require or evoke new alternatives with citizen input whether in the initiative or reactive mode. Steps 6 through 9 are closely related and in a controversial situation may be reiterated several times in conjunction with the particular participatory techniques used.

Citizen participation is not a simple or casual matter as the case studies in the second part of this volume document. Citizen participation must be as well planned as any other element of the highway agency's operation. Every agency knows from experience how difficult it can be just to manage the technical elements of transportation planning—to make sure jobs are done well, done on time, and to adjust when they are not. If anything, citizen participation activities are more complex because they are
done in public and involve a wider range of individuals and working relationships. Technical work done poorly is an expensive loss but mistakes can usually be undone given time and money. Citizen participation done poorly can prevent the work from ever being done again and undo all the good technical work that went along with it as well.
PART B

CASE STUDIES
SECTION 1: TRANSPORTATION PLANNING AT REGIONAL SYSTEMS LEVEL

Overview

This case study examined a long-range transportation systems planning effort designed to serve a six-county area of 4,500 square miles. Located inland in a mountainous area, the region encompasses a major city and the six surrounding counties and has a total population of 2.4 million people.

Transportation planning for the region has usually been delegated by the State Department of Transportation (DOT) to the Regional Planning Commission (RPC). In the early 1970's, a regionwide comprehensive land-use and transportation planning program was established by the RPC, with joint funding from the State DOT, the Federal Highway Administration (FHWA), and the Department of Housing and Urban Development (HUD). The transportation planning component was designed to produce the official transportation planning document for the region to the year 2000, for both highway and transit systems.

Preparation of the long-range comprehensive plan was based on a process of testing and evaluation, which relied heavily on forecasts of population, employment and travel demand for the year 2000. This planning process involved two cycles. Using an amalgam of all previously proposed transportation facilities as input, the Cycle I process forecast future land-use, population and employment and then developed travel forecasts to obtain the year 2000 trips. The resulting plan was then tested and evaluated by the RPC technical staff and two
Technical Committees, which advised it.

A revised, or Cycle II, transportation network was developed by 1973 for a second iteration of the planning process. In this cycle, the need for greater citizen participation was recognized, and a serious effort was undertaken by the RPC to develop a Citizen Involvement Program.

Cycle II was a response to a variety of needs and pressures. First, the Cycle I plan had ignored the tremendous social and environmental impacts that a transportation system designed for a high level of traffic service would have on the region. Though not well-publicized, the Cycle I plan engendered strong negative reactions from many individuals and groups, who testified at a public meeting called by the RPC. Second, recent environmental legislation mandated a new approach to those impacts. Environmental studies in accordance with the requirements of the National Environmental Policy Act had to be conducted, and a strategy to improve air quality by reducing vehicle miles of travel was being developed by the State and Federal air pollution control agencies.

Finally, it became apparent during this second cycle that Federal highway funds, the seemingly inexhaustible source of money for new facilities, would in the future be limited, particularly as they were diverted to transit system improvements. Informed that the dollar total available for use in future years would be significantly reduced, the RPC was forced to reduce its comprehensive transportation plan.

Thus, Cycle II regional systems transportation plan was prepared for adoption by mid-1974. Field studies were made of its Citizen Involvement Program to analyze its successes and failures in the hopes of deriving principles applicable to the overall study.
Critical Issues

Since this planning effort encompassed a large regional system, the issues which arose were numerous and diverse. However, the following issues were critical to the citizen involvement program:

- The lack of Citizen Participation in Cycle I. Adoption of the Cycle I plan by the RPC with little prior publicity surprised and angered many individuals and groups which demanded participation in the Cycle II planning process.

- The proposed inclusion of a series of controversial facilities, which aroused local neighborhood opposition; these included:
  1. an Inner Beltway for circumferential traffic;
  2. a new cross-town expressway;
  3. several by-pass projects, which impacted working-class neighborhoods;
  4. insufficient attention to transit alternatives but support for a particular "new technology" alternative which was of doubtful feasibility.

- The lack of technical response to citizen-recommended alternatives.
Critical Actors

The following comprise the "critical actors" who were central to the Cycle II planning process and its citizen involvement effort:

- The State Department of Transportation - a progressive, supportive agency, which attended RPC transportation meetings, sat on its committees and encouraged active citizen participation through its Action Plan.

- The Regional Planning Commission (RPC) - the agency officially designated to prepare long-range development and transportation plans for the six-county region; membership includes representatives from the six counties, the major city, and a number of State and Federal agencies including the State DOT, U.S. DOT, and U.S. HUD. It is a traditional RPC to which a significant amount of power has been delegated by State and Federal agencies. Currently it is becoming heavily involved in Section 208, Water Resources Planning, in addition to its economic development and transportation planning functions.

- The Transportation Advisory Committee (TAC) - A group of fourteen representatives of local and county planning bodies, a local university and the State DOT and the U.S. DOT; significantly, no citizen representatives were included.

- The Community Involvement Team (C.I. Team) of the RPC - three members including the COORDINATOR, who was a community organizer; a transportation planning engineer; and a comprehensive planner.
• Local Councils of Government (COG's) - several local
COG's exist in the metropolitan area; these provide sub-area
planning and consultative services to the municipalities
involved. Eleven suburbs were members of the most active
COG.
• Local Community Groups - these included an alliance of 65
neighborhood groups from the city, a separate Transportation
Task Force organized and funded under the alliance, in-
dividual civic associations from areas impacted by proposed
facilities, a group promoting transit, and a county-wide
environmental group.

Participatory Process

The participatory approach examined here is that of the RPC,
since it was the agency to which long-range transportation planning respon-
sibility was given. In its Cycle I planning effort, three categories of
participants were utilized. First, two technical committees were organized,
one for highways and one for transit. Their members were technical pro-
fessionals from operational agencies such as the State DOT and the local
Transit Authority or from local universities and other local agencies.
Second, a group of "influential decision-makers" in private and government
sectors were identified and regularly advised of progress on the plan via
a newsletter. Third, in response to HUD participation, a group of low-
income and minority citizens formed a CITIZENS ADVISORY COMMITTEE. This
group was shown the plan elements and asked to react to them; however, its
major interests were in the areas of employment, housing and other social
issues.
For the Cycle II effort, a wider and more representative range of public and private interests was given access to the planning process so that the ultimate decisions could be influenced by their inputs. The TAC continued the role of the Technical Committees, overseeing the staff work, receiving inputs from the C.I. Team, and ultimately recommending a plan to the RPC for adoption.

To involve a wider range of local residents, highway users, elected officials and community organizations, the RPC developed a C.I. Team of three members. Its duties were to publicize the Cycle II proposed plan at local meetings, explaining the technical basis for the proposals and answering questions about it. It also received suggestions from the groups and individuals who attended these meetings and relayed them back to the RPC technical staff for testing and evaluation.

Since the six-county region was divided in its opinion on transportation problems and solutions, the major effort of the C.I. Team was focused in the metropolitan county, which had the major share of proposed facilities and where new highway facilities were generally opposed and transit improvements favored. In the remaining rural counties, highway construction was generally favored and only occasional issues of location or timing arose, so here communication was maintained through local elected officials with a meeting held if requested.

The target county was initially approached on four functional sub-levels: sector, core area, community and neighborhood. A comprehensive approach was deemed necessary in order to develop support for the final plan from each municipality; otherwise, opposition would occur at the project implementation phase.
Three geographical sectors were defined for purposes of program development. Communication via councils representing such large areas proved impractical, however, so the C.I. Team decided to elicit directly the opinions and attitudes of smaller sub-area groups, which focused on local needs and values.

Core areas were groups of adjacent municipalities with common ties, who were represented by COG's and/or Joint Planning Commissions. At the local community level, contact was maintained with elected officials where interest was shown (normally where facilities were proposed).

The neighborhoods were within the city and were already highly organized. The C.I. Team spent a large proportion of its time and energy organizing meetings with these groups, preparing technical information and graphics for these meetings, and taking community recommendations back to the technical staff at the RFC for evaluation.

In theory, recommendations from the neighborhood meetings, or from any of the other groups, could be plugged into the already established applied technical methodology, tested and evaluated before a final decision was reached. The evaluations of the RFC technical staff would then be explained to the initiators by the C.I. Team, as well as, given to the TAC. When the TAC finally reached a decision about what to recommend to the RPC, a public meeting was scheduled to publicize it, and the RPC voted on the plan shortly thereafter.
Results and Analysis

Overall, the participatory effort examined in this case achieved only limited success, and much of that was transitory. The plan finally produced by the Cycle II process was approved by the RPC in mid-1974. However, at the public hearing just prior to its acceptance, 38 of 43 speakers opposed significant elements of the plan. Even representatives of the State DOT recommended that two major proposed expressway projects be dropped from the plan because of local opposition, but that recommendation was ignored. Several city and neighborhood organizations organized a Highway Action Coalition to fight implementation of the plan. And the citizen-based Transportation Task Force vowed to fight the plan through appeals to the State DOT on legal grounds.

One year after the Cycle II plan adoption, the RPC held its legally-required annual review of the plan and also discussed a shorter-range 6-year transportation plan. The RPC meeting was not well-publicized or organized, for a citizen's "counter hearing" resulted, which attacked the RPC, the long-range plan and the entire planning process as inadequate.

Despite extensive efforts by the C.I. Team over a 9-month period, more than 50 community meetings, and general acceptance of its integrity and good will in the community, it appears that community opposition to the RPC Cycle II plan is stronger than ever. The proposed 6-year plan should have received support since it involved few new facilities, none of the major controversial issues, and placed emphasis on a new commuter rail service in response to strong demand. However, the C.I. Team ceased to function actively after the initial acceptance of the Cycle II plan, so there was little citizen involvement in the short-range plan.
Clearly, there are several explanations for what has happened in this case. First, the major issues about which opposition formed were all raised before the RFC and the TAC by the C.I. Team community meetings and feedback. However, very little change occurred in the plan as a result of these concerns. Only in cases where a suburban facility was moved somewhat, or a new rural facility added to the plan could successful resolution of issues be claimed.

A second difficulty was in the exclusion, intentionally or not, of certain inner city groups affected by the plan. The period of 9 months did not allow sufficient time for adequate public education to occur. Those elected officials or community groups already organized and interested could avail themselves of the opportunity to participate. Others, apparently, did not understand that opportunity or perhaps did not trust it.

Indeed, a major conclusion drawn from this case is that the community participation effort was largely an adjunct to the normal planning process and not an integral part of the decision-making structure. Too little effort was available for evaluating the community recommendations, which were forwarded to the RFC. And even when there was technical responsiveness, the TAC appeared immune to citizen suggestions, even as it appeared immune to the State DOT suggestions.

Conclusions

Certain principles and cautions can be drawn from this case, which apply to other transportation planning situations. First, it is extremely difficult to insert community participation into an on-going planning process and structure. Unless the actual structure of the planning and decision-making is altered, few benefits will be achieved and great disbenefits will be risked.
Second, as a planning structure is altered to accept a participatory component, technical and policy decisions reached earlier must be re-examined and reaffirmed or altered. Third, sufficient time for developing a community participation structure and accepted process must be allowed.

Fourth, community dialogue, while important for defining issues and educating participants, is insufficient by itself. Citizen expectations to influence planning products and decisions must be satisfied once raised.

Fifth, in diverse regions with many jurisdictions and competing goals and values, a variety of participatory techniques must be used, each adapted to the setting in which it is applied. People in highly organized urban areas may have different expectations about the level of participation than will people in rural areas.

Sixth, in regional systems transportation planning where basic policies of growth and economic development are involved, more than reactive participation may be required. Techniques which allow groups to produce plans on their own initiative should be explored. In this way, a dialogue on regional goals and priorities can be established without the divisiveness which often accompanies community reaction to "official" plans forced on them by government.
SECTION 2: MULTI-MODAL CORRIDOR STUDY

Overview

This is a report on citizen involvement in the planning of transportation facilities in a major corridor located in a large metropolitan area of the United States. The corridor is representative of many corridors found in large cities today. One, it was the main corridor for automobile commuter travel between suburbs northeast of the city and the downtown metropolitan area. Two, the city had a large minority population, while the suburbs were largely white. The city and suburb identities were sharply different. Three, a major six-lane interstate highway ran down the spine of the corridor and terminated at a beltway which ringed the city boundaries. The beltway carried major traffic around the city to destinations north or south of the area. Four, a large State university campus was located in the corridor, as well as growing commercial and residential centers which were served by local two-lane roads running in a predominantly north-south direction along the corridor. Traffic along these roads was particularly congested during rush hour, and the accident rate suggested these facilities need upgrading.

The four-lane beltway which bisected the corridor functioned as a barrier which divided residential and commercial centers. In fact, the beltway divided the population along the corridor. Those inside the beltway related more to the city, and those outside the beltway related more to the suburbs.
For many years, the State had planned to extend the main Interstate highway south below the beltway into the city. The growing thru traffic and commuter traffic justified the extension. However, once plans were presented to the public, considerable opposition began, mounted by citizens who would be dislocated by the highway and city residents who resisted increased traffic which would be funneled into the city streets. After time, the mayor and other municipal officials came out against the highway extension. Environmental groups formed and expressed objections based on the prediction of adverse environmental effects.

The issue was made more complex by the concurrent planning of a major railway transit system for the city. Some opponents of the Interstate extension argued that the transit system would better serve commuters. They also pressed for review of the highway to assure it best met regional metropolitan transportation planning goals.

Critical Issues

The five critical issues are all closely related to each other and required an examination of multi-model alternatives.

- The central issue which dominated the study was the proposed extension of the Interstate highway south of the beltway into the city. From a purely technical side, the proposal was feasible and justifiable by forecasted demand for commuter traffic between the suburbs and the city, as well as through traffic on the Interstate highway.
How to best move people in and out of the downtown area for work and non-work trips was a problem as was how to provide the best movement of people in and out of the university which was located in the corridor and in and out of major retail or commercial centers, as well as employment centers within the corridor area.

The movement of industrial goods to and from industrial centers in the corridor area was an issue.

It was also important to maximize ridership on mass transit, particularly during peak hours in the high-density corridors.

The transportation disadvantaged needed better mobility within the corridor.

**Critical Actors**

- The State - The State Secretary of Transportation was chief decision-maker. His staff directed the planning and coordinated citizen involvement. The State also provided part of the funds for the study.

- The County - The corridor was located in one of the more densely populated suburban counties. County approval and support was required for implementation.

- Council of Governments and Regional Planning - Clearance from these groups was required to demonstrate compliance with the Federal requirement for regional planning.
• Municipal Governments - Three suburban cities were located in the corridor area. Impact of the Interstate highway had to be accurately assessed. They also had local transportation needs which had to be addressed in the corridor planning. The large central city had become a major source of opposition to the highway extension. Coordination with the major municipality was mandatory.

• Environmentalists - Organizations and individuals voiced environmental concerns. The requirement for an Environmental Impact Statement provided a forum for registering these concerns.

• Business Interests - Businesses in the corridor study area ranged from industrial and manufacturing to small retail firms. A group of businessmen retained a representative to voice their interests.

• Civic and Neighborhood Organizations - Several civic and neighborhood groups came forward to voice their concern about potential adverse impact upon their neighborhoods. Equal emphasis was placed by these groups on improving transportation in their neighborhood areas.

• Unaffiliated Citizens - Property owners, residents, employees of firms in the corridor area, and others, were affected by the proposals being considered.
Participatory Process

In ordering the corridor study, the State Secretary of Transportation emphasized the planning process was to have continuous public involvement. He also requested that the full spectrum of interests and points of view be represented.

The main tool for achieving these objectives was a large advisory committee which served for the entire project. The advisory committee was named the Steering Committee. This was later discovered to be a mistake, because it implied the committee had final decision-making authority. Some members were later disappointed when some recommendations were not accepted by the State Department of Transportation.

The Committee was chaired by the Delegate to the State Legislature from the district in which the corridor was located. The Committee was composed of elected officials, public agency representatives, and private citizens. Many of the private citizens represented interest groups such as the League of Women Voters, neighborhood councils, businessmen, environmentalists, etc. Other members were not affiliated with particular groups. The committee was predictably large -- over 60 members. Because the Committee voted on many issues, groups competed for membership. This, more than any thing else increased the size.

A project staff of five professionals was created by the State. One staff member was given the responsibility for citizen participation. However, the Project Director assumed continuous responsibility for coordinating the Committee work with other planning activities.
A team of consultants was retained by the State to perform the technical planning and to assist the Committee. The consultants were instructed to be responsive to Committee requests for information. However, instructions to consultants were made through the Project Director. This improved the management of consultants' time.

To supplement Committee input, a random SURVEY was conducted of households in the study area. The SURVEY provided information about resident travel needs, demographic information, travel patterns, attitudes toward different transportation alternatives, and other information.

Public meetings were held in the study area to elicit citizen reaction to alternatives which were being considered by the Committee. Special mailers were sent to 130,000 households to notify residents about the upcoming meetings.

Finally, a project office was established in the study area. The location was publicized and citizens were encouraged to drop in and to obtain information or express ideas. The project office also provided an on-the-scene location for consultants, project staff, Committee members, and the public to work.

The planning was performed in two phases. In Phase I, 14 major alternatives were developed by the Steering Committee and project staff. Five alternatives were then selected by the State Secretary of Transportation for indepth study by the Steering Committee in Phase II.
The sequence of planning steps used by the Committee and staff to formulate alternatives is shown in Figure 4. Goals and objectives were formulated by the Committee. Second, land use and travel demands were examined in the development of different alternatives. Third, service impacts and cost profiles were developed for the alternatives. Fourth, the alternatives were evaluated against goals and objectives. These steps were repeated until a satisfactory level of precision was reached.

Results and Analysis

The full Steering Committee met 15 times to produce the 14 alternatives of Phase I. Weekly committee meetings were held for 6 months on five alternatives in Phase II. The entire planning activity took 12 months.

The 14 alternatives produced in Phase I were developed under five categories: null; maximum use of existing and committed facilities; transit emphasis; highway emphasis; mixed mode. Each alternative reflected different emphasis on modal mix and the costs associated with the facility development.

Phase II alternatives reflected the breadth of the categories examined in Phase I. Collectively, Phase II alternatives were compatible transportation improvements.

The proposal to extend the Interstate highway into the core city was dropped by the Committee during Phase I. The Committee examined a range of proposals, which emphasized alternatively highways or mass transit. Phase II alternatives leaned more toward mixed mode options which were in harmony with overall regional plans.
Public reaction to the recommendations was mixed, but mostly favorable. Because the most controversial issue, extension of the Interstate highway, was dropped, the overall reaction was combined relief and satisfaction.

Participants and affected groups felt the Steering Committee was effective, with some exceptions. The Committee was too large to function as a whole. Task forces on goals and objectives, evaluation criteria, and others were created. They made reports to the entire Committee which passed on recommendations. A task force was also established for materials and communication. Timely dissemination of records, information minutes, and notices to the entire group was so difficult that it was assigned to this committee. However, some members continued to complain they were not notified.

The technical nature of the tasks presented problems for some committee members. Participants seemed to find more satisfaction during Phase I, when the work was devoted more to setting goals, identifying needs and other less technical tasks. Some participants complained that, (1) they were rushed in Phase II, (2) that the committee became immersed in technical information, (3) that the project staff ignored citizen recommendations and, (4) that consultants were not sufficiently responsive. All of this revealed the frustration of some laymen in trying to cope with technical material. However, the Project Director reported the capacity of citizens varied significantly. Some had technical backgrounds and not only participated, but made technical contributions. It should also be noted that very few members of the Committee could be considered under-educated or poor.
The composition of the committee had an impact on its operation. Agency representatives and some elected officials were more passive than was expected. When meeting among peers, these members were more open and assertive about preference, opinions, values, and information. However, as a group, they were more passive and occasionally defensive. It was hypothesized by some participants that elected and agency officials may have feared criticism of attempting to dominate decisions. In fact, they sometimes allowed incorrect information and assumptions to prevail.

There was some common agreement among participants that the environmentalists were most forceful. They were sometimes accused of rejecting overall goals in favor of narrow interests.

The least forceful were the businessmen. They retained a paid representative whose viewpoints seemed to be less valued by the group.

Spokesmen for the State reported the process was effective but too expensive to be repeated on a wide scale. The entire budget was over $250,000. Exact expenditures for citizen involvement could not be determined because participation was integrated into the entire planning structure. However, staff time of the State employees was considerable and resources required to implement the citizen involvement strategy were greater than normal. But most significantly, the process produced recommendations which could be implemented. At the same time, it resolved a volatile issue which had split municipalities and citizens.
Conclusions

Multi-modal corridor planning can be performed with significant citizen involvement. This case demonstrates citizens can participate in the development of complex multi-modal corridor planning on a working level, even though some difficulty is involved. The technical nature of transportation can present a barrier to some but most citizens learn quickly and can make an input.

The size and composition of CITIZENS' ADVISORY COMMITTEES affects operations. This case suggests that the larger and more diverse the committee, the greater the likelihood of it becoming less manageable and rewarding. Participants in this project agreed that 60 members is too large to operate at maximum effectiveness. However, there was no clear consensus on what the optimum size should be.

Participants must be given clear instructions on their role and the ultimate use to made of their input. Several participants were led to believe, by the name of the committee and other factors, that the committee had ultimate decision-making power. The ultimate decision-making power must be understood if participants are to perform their role effectively.

Major citizen involvement in corridor transportation planning can be expensive. If citizens are to be involved in formulating objectives, alternatives, and in the evaluation of the alternatives, costs will run greater than for a limited review role. Materials, facilities, and resources for citizen involvement must be provided. Staff time to guide, coordinate and support participants
must also be weighed and provided. Furthermore, time for orientation, learning, explanation, and research tends to run greater if laymen are to participate on an equal level.

Implementable proposals can be formulated with substantial layman participation occurring throughout the project. The project staff emphasized their belief that many of the proposals were developed by laymen and that the proposals could and would be implemented.
SECTION 3: PROJECT PLANNING STUDY

Overview

This case study examines a highway improvement project located in a metropolitan, coastal region. A highway extension has been proposed to meet the demands of travelers passing through the area to a National Seashore district, and to enhance the economic development potential of this isolated area. A four-lane, limited-access highway would connect an improved four-lane facility inland to an existing bridge and a limited-access facility along the seashore.

The proposed extension has been the subject of discussion, proposals and lobbying for many years, with clearly defined interests both for and against the facility. Local businessmen and Chambers of Commerce view the project as a prerequisite for economic development efforts in the area since it would provide a direct connection to major transportation routes in the region. Opposing this growth ethic is a coalition of conservationists, land owners and residents of the recreational areas who feel that a new high speed facility with greater capacity would induce additional traffic in an environmentally fragile area already threatened by too many visitors.

Citizen participation in the planning of this project is the responsibility of the regional planning agency (RPA) which is the official 3C transportation planning agency in the region as designated
under the State Highway Agency's Action Plan. Its role in the process is complicated by the location of the project on the boundary of two adjoining Regional Planning Districts and by the prior history of project level planning and participation in the area. The techniques employed by the RPA in its participatory process were found to have limited effectiveness for a variety of reasons.

Critical Issues

There were basically two critical issues affecting citizen participation. One of which involved unclear relationships between the State and local agencies.

- The way in which power and decision-making are shared by the RPA and the State Highway Agency was not satisfactory to the RPA. The RPA feels that the State Highway Agency does not honor the commitment of the Action Plan, or even the terms of their contractual arrangement, to share information and to provide consistent support for and to participation in the participatory mechanisms established in the region (a Transportation Policy Advisory Group (TPAG) and Task Force). Although the Action Plan gives the RPA a defined role in the planning process, the status of the RPA in practice is unclear and subject to change, according to issue and the particular actors at the State level who are involved. Normally a TASK FORCE organized under the TPAG is recognized by the State Highway Agency as the legitimate planning group at the project level. In some instances, however, particularly at the environmental impact level, the State Highway Agency tends to bypass the Task Force and deal directly with local officials. This uncertainty has placed the RPA's participatory mechanisms in a poorly-defined position which has led to apparent ineffectiveness.
• It was difficult for the RPA to accommodate the strongly-held opposing views toward the project in its consensus-seeking participatory structure. The various parties-at-interest reflected economic conditions of the area, with local municipal officials, business interests, and lower income groups generally favoring highway development to spur economic development and, on the other hand, higher income groups opposed on the basis of environmental concerns. The RPA has favored the improvement of this highway further inland where there exists a solid consensus in favor of it. In this situation, no consensus is likely to be reached, and the RPA must deal with that in determining its position.

Critical Actors

The following actors have played key roles to date:

• The State Department of Transportation and Highway Agency - They have been represented, as in the past, by a district engineer who has not attended most Task Force or Advisory Group meetings.

• Regional Planning Agency (RPA) - One of the first RPA's in the State to participate actively in transportation planning (as well as economic development and water resource planning activities). It is eager to play a stronger role.

• Transportation Policy Advisory Group (TPAG) - An advisory body for the RPA and the State Highway Agency, it is made up of local elected officials, representatives of the RPA Board and advisory council, representatives of the State DOT and Highway Agency,
and other local and State agencies. Established by the State Action Plan, the TPAG and its mechanisms are recognized as the primary means of reaching agreement and resolving differences on all transportation matters within the region.

- Transportation Task Force - An ad hoc group of "blue ribbon" citizens and elected officials; a TASK FORCE is established by the RPA and the TPAG for each major project. The membership is open-ended with the chairmanship typically "arranged" by the RPA. Staff support for the TASK FORCES is provided by RPA staff planners.

- Local business groups - Local Chambers of Commerce and generally town selectmen represent the interests of business to open up the region to economic development.

- Landowners and Conservation Groups - The citizens opposed to the project operate both singly and through a local Audubon Society and an ad hoc committee to save their area. Typically, the persons involved here "can afford to take the long view," as one of them put it.

**Participatory Process**

The stated strategy of the RPA is an open and representative participatory process in which all points of view are represented and decision is made by consensus. This strategy is designed to insure that the interests of the region are brought to bear on and will influence the State decisionmakers, in terms of both
specific highway projects and also other related planning issues in the region. The Executive Director of the RPA appears to be using the participatory process as a means of defining and strengthening the role of the planning agency.

In this state the Action Plan clearly says that the participatory process is advisory only, with the responsibility for final decisions resting with the chief elected and appointed officials accountable under the law for the affairs of the Highway Agency. To that extent, the participatory process is being followed. Other parts of the official planning process, carrying with them a "commitment" by the State agencies, do not appear to be carried out in practice. The responsiveness of the various State officials and State Highway Agency staff varies according to the issue at hand, the degree of freedom the Agency feels it can exercise, and the personalities of the various staff. The commitment to working cooperatively with the RPA, sharing information, responding to recommendations, as well as the commitment to citizen participation seem not to have been institutionalized.

The irrelevance of the State Action Plan in this particular instance is perhaps most apparent on the environmental impact level where the State Highway Agency either ignores or evades the stated process. Neither the RPA nor the TPAC and its TASK FORCE are involved in the EIS preparation. Review of the EIS is accomplished by the public hearings conducted by the State Highway Agency according to regulation.

As noted earlier, the primary participatory structure is the TPAC. This group is arranged by the RPA and the State Highway Agency together and
tends to reflect the position of the RPA and its staff, who provide all
technical assistance. The TASK FORCES have an open-ended membership,
with the chairmanship arranged by the RPA. Participation is actively
coaxed along by RPA. The TPAG receives and acts upon the consensus
opinion of the Task Forces.

The RPA also uses public information as a technique, publishing
a monthly newsletter. In addition, the local press in the area is utilized
to focus attention on issues, with the point of view of the RPA or TPAG
expressed in quoted statements. This participatory process is augmented
by the public hearings held by the State Highway Agency by regulation.
The TPAG is used, in theory, to organize and publicize these public
hearings.

Results and Analysis

The issue of the RPA and TPAG relationship with the State Highway
Agency is currently unresolved. The TPAG in this region shares the
RPA's attitudes of frustration toward the State Highway Agency and "the
government" generally. Members of the TASK FORCE and the TPAG who were in­
terviewed felt that the participatory structure is good. In their view
it is important to have representatives of elected officials participating,
/as they do, and that the real level of involvement in the TASK FORCE makes
sense. The TASK FORCE is familiar with the local issues; they know the
area.

A participant in the adjoining TPAG, however, felt that public
hearings are adequate for public participation and the the State Highway
Agency "bent over backwards" to inform citizens about the project.
Differences in citizen perceptions of the State Highway Agency may reflect differences in how the agency's staff acted in different areas, or they could reflect differences in expectations.

Despite their positive view of the TPAG, members did feel that participation on it was difficult. Members of the TPAG deal with a large region and are not always familiar with the issues, and must rely on the RPA staff to determine the accuracy of the feedback and consensus report from the TASK FORCE. There appears to be a tendency for TPAG members to give priority attention to their own community.

In the TASK FORCE, the issue of the proposed connector was specifically addressed. Although theoretically open-ended, there is a core membership which participates and around which meeting schedules are arranged. Though the TASK FORCE is cited as the central participatory structure at the local level, there are indications that the issues are really worked out and resolved in the local communities in preparation for the TASK FORCE meetings.

In this case, the active opponents of the highway extension did not participate in the TASK FORCE at all. This was due in part to the failure of the RPA staff who serviced the TASK FORCE to insure that all points of view were represented. It was also due to the perception of those opponents that decisions on the highway are made by the State officials. They ignore the official participatory process completely and attempt to bring their point of view to bear through the political process at the State level.
It was apparent also that these opposing groups would bring their environmental arguments against the highway into the formal EIS hearings soon to be held. Like the RPA and TASK FORCE, they too had not had an opportunity to participate in the EIS process prior to the formal hearing. Thus, while everyone involved had the same perception of the EIS process as being "where the action was", the central participatory structures were excluded from it, contrary to the State's own Action Plan. This lack of respect by the State Highway Agency for the RPA and TASK FORCE simply reinforced the perceptions of the non-participants that the action was elsewhere.

A joint design/EIS public hearing was scheduled to be held shortly after the field visits. The RPA and the TASK FORCE were not notified of the hearing by the State Highway Agency but learned of it in a press release in the local newspaper. It is apparent that, while the structure and form for citizen participation is present, it does not have a great deal of substance.

Conclusions

A number of conclusions and lessons can be drawn from the experience studied here. The first is close adherence to the State Action Plan prepared in accordance with 23 CFR 795 (FHPM 7-7-7), is mandatory. Clearly, it will often be difficult to follow for projects already in progress. It is also difficult for existing field personnel to adjust to a
new way of planning and decision-making. Habits and patterns from past experience must be changed, and for this a thorough retraining program should be instituted. Sensitizing field staff, such as district engineers, to the needs and demands of citizen participants must be done before a new structure is put into place. At the same time, once an Action Plan is adopted, the citizen participation process outlined in it must be enforceable. For this a simple and effective grievance mechanism must be established so that excluded or by-passed participants can successfully intrude into and rectify the situation.

Delegation of responsibility for citizen participation to a local RPA (and its associated structures, such as the TPAG in this case) is logical and consistent only if adequate financial support of competent staff is included, and only if there is a fundamental change in the State Highway Agency's decision-making process to allow the RPA and citizen participation to make a difference.

Use of an advisory body made up of key elected officials and other "blue ribbon" citizens (such as the TPAG) helps to assure that local governments will support the plans finally developed by the RPA and recommended to the State Highway Agency. However, lack of separate technical staff for such an advisory body tends to make it a creature of the RPA and its staff. Permanent assignment of staff to such an advisory body could aid it in developing its own positions which could then be supported more fully.
The use of an open-ended TASK FORCE at the local project level appropriately involves those people most directly concerned by a project. However, without a defined membership and regularly scheduled meetings and other deadlines, the open quality can easily disappear. It offers no assurance of continuity and consistency in attendance or membership and therefore limits opportunity to increase the technical knowledge and the planning skills for a defined membership.

If the RPA has consensus as a stated goal, and is prepared to support a consensus decision, it would seem important that the consensus represents an informed decision. This would suggest the need for the availability of technical assistance for the members. It would also suggest that special efforts and techniques be utilized to assure participation from all interest groups, or, if such participation is taking place, that some parity be established among participants unequal in status, technical or political knowledge, or general information.

Finally, each level of participation needs an appeal procedure or mechanism available so that, if it feels excluded or ignored, it can appeal. Otherwise, what assurance or incentive is there for citizens to devote time and energy to local participatory structures, such as TASK FORCES?
Overview

The following is a report on the citizen participation activities used in planning the development of a commercial section in a large metropolitan city. The development section was located in the northwest area of a city whose urbanized area population was over 1.5 million. Located within the city boundaries, the planning area was considered to be a vital up-turn location.

The area straddled the intersection of two major corridors. The corridors had been commercially zoned for many years and the intersection had developed into a retail area which employed approximately 9,000 people. Automobile traffic along the corridors was heavy and congestion at the intersection a common problem. The streets running through the intersection supported both north-south and east-west movement.

While the intersection and corridors were highly commercialized, they were bordered by residential areas. The residential areas were primarily of medium-to-upper-priced single family homes, plus a few garden and low-rise apartments. Primarily comprised of older homes, the area was heavily lined with trees and was considered to be one of the most desirable in-city residential communities.

The planning controversy originated with a 1971 rezoning request for one of the corners of the main intersection. The rezoning request was
the first attempt to increase commercial development in the area. This produced widespread discussion which initiated a study of the area by consultants. Shortly thereafter, the City Planning Commission began work on an Uptown Center Sectional Development Plan. When completed in 1972, the Planning Commission sponsored neighborhood meetings in the area to review the plan.

Opposition from local residents was strong. The Planning Commission proposals would permit the construction of 13-story office buildings, apartment buildings and other facilities at the site. It also anticipated the location of a subway station in the area.

Local residents considered this unacceptable because it would increase traffic along the corridors, introduce more spillover traffic along area residential streets, and introduce highrise buildings into the area for the first time. The area had long been one of the prime residential areas of the city primarily because of the park-like setting and proximity to small stores. Many residents feared that the value of their property would be diminished by the new activity which would be triggered by the planned development.

In response to the opposition, the Planning Commission established an Interagency Task Force and Citizens' Advisory Committee to develop an acceptable plan.

Critical Issues
The critical issues before the parties involved how much and what type of development should be allowed in the planning area. Viewpoints varied widely among the parties.

- Intensive commercial development was desired by a coalition of developers who had purchased land in the area with the intention of transforming the area into a major uptown shopping and employment
center. Two major chains planned to locate large stores in the area. A group of developers had plans and drawings completed for 13-to-17-story office and apartment buildings at the site. The city had expressed interest in the location of a hospital in the area. A subway station also was planned. All of this would require upgrading or widening of the main roads along the corridors and at their intersection.

- Little new development or development restricted to buildings and activities similar to those in the area was the goal of a group primarily composed of residents of the area. It was their position that preservation of the existing quality of life was the primary goal of planning. They believed proposals which were given preliminary approval by the commission violated this.

- The role of the City Planning Commission was another issue. Residents noted that the commission had announced preservation of aesthetics and established communities as a major goal. It was argued that the commission itself was not acting in the interest of the community, nor was it abiding by its own guidelines in proposing to make the area an uptown center. The downtown area had long been in a state of decline and restoration of this section should be the major goal of the commission.

- Smaller issues also sprang up during the planning. One garden apartment community in the planning area had been rezoned for highrise buildings by its owners. However, renters formed a coalition which sued the owners to prevent this action. The renters had the support of nearly all residents.
Critical Actors

There were a number of actors that were either involved in the planning or were affected by the planning.

- The City Planning Commission was most important because it had to approve a plan which would govern development in the area for years to come.

- The County Planning Board had an important role because part of the planning area lay within its boundaries. It was generally felt that the suburban county influence was directed toward approving expanded development. This was consistent with the fact that the county had been one of the fastest growing in the nation.

- The City Planning and Management Office was important because of its authority to control funds for planning and development.

- The Zoning Commission was powerful because implementation of plans would require rezoning if any change in activity was to be allowed. The Zoning Commission for the city had remained independent and fairly autonomous.

- The Department of Highways and Traffic was key to construction of transportation facilities which would support development. It was also key to the maintenance of existing roads and to solving existing traffic problems in the area. The Department of Highways and Traffic was caught in the crossfire between those who wanted roads improved to meet growing travel demands in the area and those who wanted traffic re-directed out of the residential streets. The Department argued that all of this was to be predicted because major highway construction in the city, which might have relieved pressure in this area, had been blocked.
• Neighborhood residents were a powerful force in the dispute. Residents were middle-to-upper-middle income. Many were professionals and many held important governmental positions. The educational level was high and many had planning skills. They formed a Neighborhood Coalition which would participate in planning but refused to become part of the planning apparatus. The Coalition preferred to make its impact upon agencies and parties from outside.

• Developers and Businessmen formed the group most interested in change. The area was a prime location for commercial activity because of its location at a major crossway in the city and proximity to high-income residential areas. The location of a subway station in the area would increase accessibility. The developers and business interests were an important alliance of local business interests and capital from outside the community. They argued that the area had always been a site of commercial activity and could be expected to grow with or without the specific developments which they proposed. However, their plan would create an attractive complex of commercial and residential activity which would be beneficial to local residents and the entire city. The development would provide additional employment and city revenues while also providing such amenities to the community as restaurants and recreational facilities.

Participatory Process

The participatory process was designed to place citizens and agency planners together in a TASK FORCE setting to formulate acceptable solutions. The two main mechanisms used were an Interagency TASK FORCE and a CITIZENS' ADVISORY COMMITTEE.
The Interagency Task Force was made up of representatives from the agencies whose approval and support were required. This included the Department of Highways and Traffic; the County Planning Board, the City Planning Commission; the City Office of Planning and Management and the Zoning Commission. The TASK FORCE was given authority to formulate new plans or accept parts of the plans which had already been submitted by the Planning Commission. The TASK FORCE was also to serve as the main mechanism for obtaining the views of all citizens in the study area. This was to be done with the cooperation of the CITIZENS' ADVISORY COMMITTEE.

At a public meeting the TASK FORCE philosophy was summarized in four points which stressed:

(1) That a wide variety of neighborhoods exists, each with a different concern which must be examined;

(2) That citizens should fully understand land use objectives and be allowed to comment on the need to expand or cut back the plans;

(3) That a block-by-block plan was needed; and

(4) That the range of alternatives be determined within a reasonable period of time so that overall approval of the development plan could be obtained.

Volunteers from the neighborhood made up the CITIZENS' ADVISORY COMMITTEE and served on its subcommittees. Officers were elected to their post. The Advisory Committee met and worked with the Interagency TASK FORCE but also conducted its own separate meetings. It was charged with identifying the views of those in the neighborhoods and with assuring that these were aired in meetings with the TASK FORCE. More information on CITIZENS' ADVISORY COMMITTEE may be found on page 20 of Part C.
Results and Analysis

The Interagency TASK FORCE and CITIZENS' ADVISORY COMMITTEE used several techniques to obtain information and make planning recommendations. Public Meetings were held by the joint body every two weeks to review staff work and to work on a specific aspect of the planning. The first such meeting was used to lay the ground rules and set objectives. At this meeting the TASK FORCE agreed to consider the recommendations of the CITIZENS' ADVISORY COMMITTEE and that the committee was not to be a "rubber stamp." In the second joint meeting, zoning and planning definitions were presented along with letters of concern from citizens. The third joint meeting was used to present (1) constraints and potentials of development, (2) area land market values and (3) an assessment of traffic problems. Assumptions were reviewed and discussed with citizens making major input into refining the assumptions and statements of need.

Similar meetings were continued until the alternatives had been fully explored. Critical sessions were held on the following:

- traffic problems and needs; water and sewer facilities in the area; zoning regulations;
- formulation of new objectives based upon citizen concerns;
- workshops to translate objectives into a visual map for better discussion of needs by the Interagency TASK FORCE;
- presentations by the CITIZENS' ADVISORY COMMITTEE of the development they would like to see and the methods for preserving the character of adjacent residential areas;
- formal presentation of preliminary recommendations of the Interagency TASK FORCE;
• presentation of a draft plan to the Neighborhood Coalition;
• presentation of draft plans to property owners;
• revision of planning drafts; and
• presentation of final recommendations to the CITIZENS' ADVISORY COMMITTEE

Materials for upcoming meetings were distributed in advance so that citizens and agency representatives could prepare for meetings.

The CITIZENS' ADVISORY COMMITTEE also conducted a survey of residents to identify attitudes of the residents. Several conclusions were drawn:

• Respondents were generally satisfied with the neighborhood as it was;
• Respondents objected to large commercial structures in the area;
• They preferred commercial structures that would serve the local area;
• Highrise structures greater than six stories were not acceptable under any circumstances;
• Residents did not want the streets widened; and
• Residents preferred small park and play facilities as the main type of park development.

The survey did not produce any new positions but provided factual evidence for what were generally held to be the wishes of local residents. The results of the survey were used in shaping the TASK FORCE recommendations.

The Interagency TASK FORCE and CITIZENS' ADVISORY COMMITTEE were able to develop a revised plan for the area. The revised plan limited the amount and type of development for the area more carefully than was the case in the original Planning Commission Plan. It called for a combination of commercial and residential development in the area which excluded highrise buildings.

The plan proposed was accepted by the City Planning Commission as its official sectional plan for the area. The Neighborhood Coalition endorsed the revised plan.
A public hearing was held by the City Zoning Commission at which it issued a temporary order which downzoned the area to the level proposed in the Interagency TASK FORCE/CITIZEN'S ADVISORY COMMITTEE plan. This prevented commercial development from taking place prior to official adoption of the plan by all the legal bodies.

The general feeling among agency representatives and residents was one of relief and victory. The City Planning Commission justified its changed position on the grounds that citizens' interests had been heard and that development would now be concentrated on the central business district.

Conclusions

This case supports the view that a joint body of agency officials and citizens can reach consensus and develop implementable alternatives. The TASK FORCE/CITIZEN'S ADVISORY COMMITTEE concept was a useful mechanism for negotiating consensus. Citizens recognized that they could not stop all development and were forced to seek the most desirable alternatives. Similarly, the Planning Commission was willing to accept a virtual downgrading of its original proposals.

There was some indication that the planning was successful because the community was comprised of educated and motivated citizens who were quite capable of mastering the technical concepts. In a less sophisticated community, or one where interest was low, the outcome might differ considerably. Specifically, more incentives for participation might be required and the technical material might prove to be a greater barrier than existed in this case.

The foundation for success seems to rest upon the willingness of the agencies to invite citizens into a partnership arrangement and to use their contributions seriously.
SECTION 5: MEDIATION IN FLOOD CONTROL FACILITY PLANNING

Overview

This is a description of how MEDIATION was used as a tool to reach agreement on the construction of a flood control dam on the fork of a major river basin in the northeast region of the United States. The issue of the dam triggered concern among a variety of recreation, farm, environment, and government groups. Outside mediators were able to assist in the identification of plans which could be accepted by the major parties-at-interest and implemented by pertinent government officials.

For several decades, periodic spring flooding along the lower basin of this major river had occurred with some regularity. The farmers along the basin valley and residents in small communities had become accustomed to the spring floods. In more recent years, residential development had begun in the attractive valley. This increased the number of persons affected. In the early 1960's, a major flood again ravaged the valley, destroying important farmlands and many homes in the region. In response to this serious incident, the Army Corps of Engineers was asked by the State to conduct a study and to recommend construction of flood control facilities which would prevent future incidents.

The study was completed by the Corps and public hearings were held on the plans for construction of a permanent dam on the center fork of three major forks which fed the river. The plans, which had been developed with little public input, met unpredicted stiff opposition.
from several quarters. The controversy caused the Governor of the State to ask for a re-study, which would include the viewpoints of various affected or interested parties. This was done. Subsequently the Governor announced that no dam would be built. This was interpreted as a victory by those opposing the dam. However, as time passed, many, including the Governor, realized that this was not an acceptable solution. The next flood promised to destroy farmland as it had done in the past and even more residential property which existed because of the increased development in the valley. For this reason, the Governor invited mediators to find an acceptable flood control strategy, which could be built without the conflict, controversy and political repercussions associated with earlier plans.

Critical Issues

The critical issues related to the problem include:

- the type of flood control facilities which would be allowed (flow-through dam, levies, etc.)
- location of the facility; which fork of the river would be chosen and where
- how much impact upon the river basin was acceptable in environmental terms.

Critical Actors

There were eight critical actors involved.

- The Governor - The Governor was the single most powerful figure. He had the power to veto recommendation or he could commit the State to implement a plan. His position was not clear
to other parties of interest. He had once vetoed a dam but now prepared to consider new proposals which might prevent flooding if it did not trigger political repercussions for him. All parties understood the Governor was the key to getting something done.

• Army Corps of Engineers - Officially, the Corps was a neutral element in the proceedings which provided expert information. The analyses, plans and recommendations made by the Corps had triggered the latest uprisings, but the Corps now indicated it would comment on the technical feasibility of different proposals, and would not back any particular position. However, it was well known that a proposal which the Corps considered technically or economically unacceptable would be difficult to fund with Federal funds.

• Farmers - Small family farms rather than large corporate farms were located in the study area. Their interests were most forcefully articulated by one of their peers who had served as a County Commissioner and possessed political influence which could occasionally be felt State-wide. Their position was simple. They wanted protection from potential flooding but the solution could not place valuable farmlands under the water of a large reservoir.

• Recreationalists - Boating, camping, and fishing enthusiasts formed the main body of recreationalists. They had enjoyed the river for many years and were adamant in their concern about the welfare of the fishing stock and the character of the river whose swift currents were negotiated in canoes and kayaks.
Environmentalists - The distinction between environmentalists and recreationalists was sometimes blurred by their similar concerns. However, the environmentalists tended to have a broader concern for the entire river basin, its natural character and the biological function which the river plays for the basin area. They were vocal, organized and sophisticated in negotiation. Trained and assisted by the Sierra Club, they had demonstrated their strength by forcing the Governor to reject the original dam plan.

Land Developers - The potential for development along the banks of the river had been recognized and exploited early. Expensive vacation and second homes had sprung up in the least dangerous areas. These were primarily the retreats for city residents or retirees, who wanted to enjoy life in the natural beauty which the river basin area afforded. Permanent control of the flooding would theoretically open the door to further building. Many individuals felt the farmers would quickly succumb to the high prices offered for their land if a development boom was launched.

River Basin Residents - Residents of the small towns located in the river basin area had adjusted to the periodic flooding of their streets but welcomed relief. In their ranks were the small businessmen who were supported by the farm and tourist interests. Their concern was primarily one of survival and protection.

Mediators - The mediators were the critical agents for review negotiation, consensus building and decisionmaking. They did not consider themselves to be neutral vehicles for registering the views of different parties. They were involved to mold, fashion and force consensus behind recommendations which could be supported and
and implemented. Two mediators worked on the problem. One had been raised not too far from the area and possessed a working history of the problem as well as feeling for the people involved.

**Participatory Process**

Mediators were called in to do the following:

- help define issues and areas where consensus could be reached;
- serve as communicators between groups, within groups, and to the press and public;
- focus discussion only on promising avenues of discussion that had potential for being implemented;
- facilitate negotiations between parties.

Mediators first established the ground rules for the process and build their acceptability. Mediators got the Governor to agree that he would support the decision reached by the mediating parties. The Governor also agreed to keep close contact with the mediators and to alert them when the recommendations were going in a direction which it would be impossible to support. Next, mediators established their credibility with farmers, environmentalists, recreationalists, developers, etc. Negotiations would have been terminated if the critical actors rejected the service of mediators.

With the preliminary steps completed, the mediators helped organized a TASK FORCE of representatives from critical groups. Each group was polled and asked to nominate one of their peers who commanded enough respect to earn the group's support for a recommendation that had been developed with his help and which he favored. By doing this with each group,
a MEDIATION task force was organized with which mediators worked. It should be noted that the group was a citizen group which did not include government representatives.

Results and Analysis

The MEDIATION produced a plan for construction of a dam on a different fork of the river than was proposed originally by the Corps of Engineers. This recommendation was accepted by the Governor and he appointed an interim committee comprised of members of the MEDIATION task force and appropriate government agency representatives. The plan has retained the support of representative groups involved, even though individual members have expressed dissatisfaction.

The entire MEDIATION process took one year of weekly and monthly meetings, some of which lasted until 2:00 a.m. Participants consistently reported they continued to work only because they thought their work would be implemented and because of a sense of respect and commitment to the MEDIATION group which developed.

Mediators unearthed areas of compromise by forcing the group to reexamine their most crucial positions and identify points for which there could not be a compromise from those for which some compromise was acceptable. Mediators also required TASK FORCE members to meet with their representative group and formulate recommendations which they could accept, rather than continue objecting to recommendations advanced by others. This proved to be a painful experience for some, but it forced deliberations and negotiations onto a positive track. Each time a plateau of tentative agreement was reached on an issue, the TASK FORCE returned to the group which they represented to elicit reaction and to identify new areas for work. TASK FORCE members were encouraged by the
mediators to remain flexible and keep their options open. However, this was not always possible. Early in the deliberations considerable effort was invested by some of the environmentalists in striking any attempt to put a dam on the center fork of the river. This later turned out to be the best place for the structure, but environmentalists were unable to get their groups to accept a change.

The MEDIATION approach revealed much confusion and misconception existed about the positions of various groups, even though the principal actors had been dealing with the issue for many years. For example, environmentalists mistakenly thought that farmers were in favor of development along the area because it would increase the value of their land. The mediations revealed that farmers were equally opposed to development and eagerly accepted initiation of zoning or other methods which would keep the area agricultural.

Several participants indicated their meetings were successful because they were private. By this time, the participants had reached the decision that some flood control structure was imperative. However, they needed a negotiating environment which permitted them to examine the consequences of different positions and concessions. This had not been possible in the PUBLIC HEARING setting because spokesmen guarded their real thoughts and opinions while under the glare of the press lights.

The MEDIATION process raised the major issues. More important, mediators were able to force participants to specify priorities and to communicate real values and needs versus rhetoric. For
example, kayak enthusiasts recognized that the dam was not their central concern. The quality of the river for boating purposes was most important. Once this group was assured a facility could be constructed which would not diminish the character of the river, they were in a position to achieve consensus.

Conclusions

Under proper conditions, MEDIATION can facilitate reaching consensus among opposing citizens groups. All participants felt mediators improved communication, identified potential areas of consensus and facilitated negotiation in a way that would not have been possible without them. However, it should be emphasized that the following favorable conditions existed: (1) major parties were committed to formulating recommendations which could be implemented; (2) the issue had been thoroughly researched and examined by many of the participants before mediation began; (3) participants had strong assurance that their recommendations would be the governing recommendations, and that they would be implemented; (4) participants had faith in the integrity, skill and power of the mediators to deal with the negotiations.

MEDIATION is not the answer to all conflicts and should be used sparingly. The mediators emphasized that part of their effectiveness rested in the fact that participants viewed the MEDIATION as a special, last-resort effort by the Governor to resolve the controversy.
Overview

This is a description of how a community growth agency used POLICY CAPTURING to identify the different values and goals which citizens had about their community. Located in the western part of the nation, the community has a population of about 500,000. The community was known originally as a college town because the major State university campus was located in the heart of the town. However, in the past two decades a major chemical firm had located in the community. Similarly, several high technology and light industries were locating in the community. Located at the base of the Rocky Mountains, the city had been known for its charm, recreational opportunities, picturesque setting, and friendliness. However, growth was changing this. Downtown traffic congestion was serious during commuting hours, and air pollution became a concern. Slow to enact strong zoning, the community was experiencing housing sprawl mixed with retail outlets and light industry. Crime was on the increase. Students were usually involved or blamed, but a deeper examination revealed a transient population drawn by the attractive setting and liberal atmosphere was contributing to the problem.

For these reasons, a Growth Study Commission was appointed by the city council to examine different community growth alternatives and to recommend appropriate governmental policies which would encourage desired growth. The Commission was instructed to determine and to incorporate the goals and values of citizens into the recommendations.
The Commission retained consultants who formulated different growth scenarios based upon current trends and different assumptions. This provided a body of technical information which could be drawn upon to answer questions about effects of different policies upon the kind of future community.

A questionnaire was printed in the local newspaper asking residents to mail in answers to the questions: "What do you like best about your city now?" and "What would you most like to see changed about the city area?" The results of this SURVEY provided basic information about what citizens valued. The information later proved to be useful in suggesting specific issues which were probed using POLICY CAPTURING.

Critical Issues

Results of SURVEY were analyzed and distilled, resulting in the identification of six key issues important to residents:

- Air, water, visual, and noise pollution.
- Economic conditions including wages, jobs, prices, taxes.
- Congestion in housing, on the streets, in public areas.
- Population diversity in race, income, education, occupation.
- Community development such as cultural, recreational, and educational opportunities; and medical, municipal and social services.
- Sense of community symbolized by small town atmosphere.
Critical Actors

Randomly selected citizens were the most critical actors in this study. Plans were laid to get a cross-section of residents which could be considered representative of the general population.

Participatory Process

POLICY CAPTURING was the tool selected for obtaining citizens' participation and values. The procedure asks individuals to indicate their preferences from among a variety of alternatives through interviews or computer video display terminals. This will be described more fully later. However, the chief advantage it seems to offer over PUBLIC HEARINGS, letters, opinion polls, etc., is the opportunity to examine the relative importance - to different individuals - of competing goals.

Using the critical issues which were specified above, profiles of different communities were developed. Each profile represented a community which had varying amounts of pollution, economic conditions, congestion, population diversity, community development, or sense of community. This was depicted in bar graph illustrations such as the one shown in Figure 5. In other profiles, more congestion, pollution, or population diversity might be depicted through higher bars while the bars indicating economic conditions and sense of community are lowered. A total of 80 different profiles were developed to represent alternative communities.

Two methods were used to elicit reactions to the communities. One group was contacted in their homes and asked to indicate how they would like to live in a community such as the one represented on individual cards which had a community profile printed on them. They were asked to give their response on a scale of 1 to 20; with 1 indicating extremely undesirable and 20 indicating extremely desirable. The first five rankings were warm-up exercises. The last 15 were duplicates of the first 15. This was to check for the reliability of answers.
FIGURE 5

SAMPLE PROFILE OF A COMMUNITY AS USED IN POLICY CAPTURING
The second group of citizens registered their reactions to the profiles on computer display terminals which were located in a shopping center and library. No warm-up exercises were used for this group, and only 30 profiles were presented. The person was shown an immediate display of his response and allowed to modify it to reflect his real feelings.

In addition to reacting to the sample communities, citizens were asked to give their age, occupation, years of residence, homeowner status, marital status, and educational level. They also were asked to list the citizens' groups to which they belonged and other biographical information, such as employment status, profession, etc. More details on this process are presented on pp. 157-162 of Part C.

**Results and Analysis**

Computation and analysis of the answers were made. The average weighted responses made by citizens are shown in Figure 6. This shows they came out strongest against pollution, favored positive economic conditions most strongly, were fairly strongly against congestion, barely in favor of population diversity, and moderately for community development and a sense of community. Perhaps most interesting, the group was not extremely for or against any of the conditions.

Contrasting responses of different individuals were also compared to determine the range of attitudes and priorities which existed among the group. A comparison of two extremes is shown in Figure 7. Differences in attitudes about pollution and economic conditions seemed to characterize the extremes. People on one side were strongly against pollution and attached less importance to economic development. The converse was true for those persons at the other end of the spectrum. In other words, the tradeoff between pollution and economic conditions was the issue that divided the community.
FIGURE 6

AVERAGE RELATIVE WEIGHTS ASSIGNED BY CITIZENS
FIGURE 7

EXTREME RELATIVE WEIGHTS ASSIGNED BY CITIZENS

PERSON 1

PERSON 2
Another important finding was that the conditions which people valued or disliked in their communities were not linked to such factors as age, income, employment status, etc. This suggested that within different groups of people their goals might vary widely, even though they had other similarities.

Information was also obtained with respect to the differing perceptions of the current state of the community versus the desired situation. There was more agreement among the citizens on how the community should be than there was for how it is.

Citizens' values were used as criteria for evaluating alternative policies which were before the Growth Commission. To do this, a panel of planning experts was formed to examine the alternative policies and predict the type of community that would be created if the Commission implemented different sets of policies. The experts were required to make their predictions using the same indicators used by citizens: pollution, economic conditions, congestion, population diversity, community development and sense of community. Specifically, each expert was told to rank varying amounts of these conditions which would be produced for different sets of policies. The ratings made by the experts were analyzed and the averages were used as the best estimate.

The ratings given by experts were then compared with preferences of citizens to see which policies were considered most likely to produce the kind of community desired by the citizens. This is shown in Figure 8. This comparison permitted Commission members to develop some consensus on which policies might come closest to creating a community which had characteristics most valued by citizens.
FIGURE 8
AVERAGE RELATIVE WEIGHTS COMPARED TO TWO POLICY ALTERNATIVES

Citizen Preferences
"No Growth" Policies
"Laissez-Faire" Policies

- .60
- .30
  .36
  .22
  .22

POLLUTION  ECONOMIC CONDITION  CONGESTION  POPULATION DIVERSITY  COMM. DEVLPT.  SENSE OF COMMUNITY
Conclusions

This case demonstrates that, in conditions similar to those in this community, POLICY CAPTURING may be a useful tool for identifying the values of citizens for evaluating different policies. The case also shows that the POLICY CAPTURING technique can be used by a diverse group of individuals to report their values and judgments.

One of the most favorable features of the technique seems to be the simple format used to report values and preferences. The format is also useful because it seems to provide a rather clear, consistent language for examining technical as well as judgmental information.

POLICY CAPTURING must be used by professionals able to diagnose and identify the critical factors about which judgments are to be gathered. A mistake in this area would make all the information useless. Similarly, decision makers must recognize that the technique reports people's feelings but does not predict behavior. One could not be assured that citizens would necessarily support all policies shown to be desirable using this procedure. One could be satisfied that a satisfactory approach had been used to identify how citizens felt and to shape policies accordingly.

The technique seems to have a unique capacity to translate technical information and attitudes into a common language for evaluation. In this example technicians were not required to discuss issues and alternatives with lay persons. Nor were citizens required to master technical concepts in order to determine whether alternatives were consistent with their preferences.

The procedure does seem to require honesty on the part of all participants. Only the citizen can assure his answers are what he personally feels. Similarly, it would be the responsibility of decision-makers to use citizen preferences to make decisions.
SECTION 7: GAME SIMULATION AS TRAINING FOR PARTICIPATION

Overview

This is a report on the use of GAME SIMULATION to train citizens and planners alike for effective participation in urban planning. This case differs from others in this study because the planning effort is simulated, not used. The information reported here is primarily based upon interviews and documents which report the experiences of citizens, planners, and public officials who have participated in the Air Pollution Exercise (APEX) computerized model at the University of Southern California. The model, plus role playing by participants, simulates planning experiences and conditions of a typical urban area. The model, which cost approximately one million dollars to develop, is based upon information collected on Lansing, Michigan, and consequently realistically simulates planning situations for similar cities. While the model was originally developed to train for environmental planning, it has been improved over the years to include all major aspects of urban planning, including transportation.

Critical Issues

The issues vary and are influenced by the strategies selected by the participants in each simulation exercise. Participants must anticipate a 1-year planning period during which a number of issues may rise. For example, industrialists may seek new highways or other transportation service to improve access to their plants. This may trigger concern from the environmentalists about increased congestion and air pollution in the area. Land developers may be drawn into competition with the politicians who have permitted a sewer moratorium designed to control community growth. Because
participants are required to act in their own interest, issues develop for which there are usually opposing sides.

Critical Actors

County and City politicians; Administrative and Planning staffs; an Environmental Quality Agency with Air, Water, and Solid Waste branches; Land Developers; Industrialists; Citizens Pressure Groups representatives and News Media are the critical actors in the game. In reality, these roles can be taken by any of the participants. For example, a person who was, in real life, a Sierra Club representative, became a land developer in the game. This increases the training value of the experience by placing participants in "the other guy's shoes."

Participatory Process

The basic approach requires individuals who have assumed different roles to function accordingly. They attempt to maximize their interests and minimize their disbenefits over time. In so doing, the computer helps portray the consequences of their actions and the impacts of their decisions upon the community. During this process, alliances are made, enemies are made, fortunes are made and lost, city revenues increase and decrease, businesses are created or lost, politicians win or lose elections, city facilities are built or deteriorate, and problems are created and resolved based upon the actions taken by participants.

To act their parts, participants are provided basic information about themselves. For example, the head of an industrial plant would be provided the following information about his business:

• last year's income
• operating costs
• profits and income taxes
• cash in and cash out
• cash available
• overall financial standing
• production information
• sales information
• inventory of physical facilities
• cost factors

Given different developments in the community and different decisions made by him, the above information will change.

Similarly, the head of the League of Women Voters will be provided information about the number of members in her organization, positions taken by the group on past issues, the objectives of the group, residential location of the members and other information.

Actions taken by politicians and participants are reported in a local newspaper which is part of the simulation. Editorials criticizing the location of transportation facilities may appear and the actions of different parties are reported to the public. In some games, local TV shows have been staged where guests appear to persuade the audience toward their position. All feasible steps are taken by those directing the exercise to assure participants experience "real-life" situations.

Results and Analysis

Most participants felt that the experience educated them about the real problems related to planning and implementing projects in the urban setting. One woman who served as a developer during the game, but was in real life a member of an environmentalist organization, felt she had a better understanding of how developers think. She was also made aware of the resources possessed by developers and the limitations to their use.
A city councilman, who played the part of a politician during one exercise, reported he was astounded by how realistic the exercise became. He reported that the same tensions and feelings he experienced in real life were experienced on a lesser scale during the exercise.

Young adults from the Chicano community, who played roles as politicians during the exercise, expressed surprise at how the results during the game resembled what happened in real life. Similarly, a young black militant, who was cast as a politician during the exercise, quickly adopted the views of the establishment and developed concerns about the size of city budget deficits.

The collective experience of participants seems to suggest that the game was useful in illustrating the complexity of planning and the difficulty involved in implementing ideas.

Conclusions

This examination of a very sophisticated game suggests that the simulation exercise has significant value as a tool for preparing people for planning. One barrier to effective participation by lay citizens in the planning process has been lack of knowledge. It would appear that participation in GAME SIMULATION would acquaint lay citizens and others with the complexities and practicalities of planning. Such experience prior to serving on an CITIZENS' ADVISORY COMMITTEE, or before working with planners, would likely reduce learning time and improve capabilities.

While GAME SIMULATION as studied here is useful, it should be considered educational rather than a solution to planning problems. The situations are representative but admittedly contrived. Consequently, the exercise can only be expected to prepare people for participation,
not guarantee any outcomes to the planning process or the effectiveness of the participant.

The exercise may have limited application because it requires 2 to 3 days for completion. This might eliminate mothers, busy professionals and other persons commonly involved as citizen representatives.

Participation in such an exercise may be expected to prepare all parties for a tedious, trying and sometimes lengthy process. The experience usually left participants with a keen sense of what it requires to consider numerous and divergent interests while planning municipal improvements. A more general discussion of GAME SIMULATIONS appears in Part C beginning on page 97.
SECTION 8: MEDIA BASED ISSUE BALLOTING TO IDENTIFY CITIZENS' HOUSING PREFERENCES

Overview

This is a report on how a large metropolitan area used MEDIA-BASED ISSUE BALLOTING to elicit citizens' attitudes toward alternative housing plans. The metropolitan area had a population of over 1 million. While the regional population was growing, most of the growth was occurring in the suburbs. The central city was in a state of gradual decline except for new downtown hotels and convention center development. The racial mix of the population in the area was shifting from about 40 percent black a decade ago to approximately 60 percent at the time of this study.

Reflecting local pressure and Federal requirements, the Regional Planning Commission for the area launched a regional planning process largely financed with HUD funds. In addition to technical studies performed by planning consultants, the Commission established an extensive citizen participation process.

The participatory process was designed to contribute information about citizens in the area and their attitudes toward different growth alternatives. The process was also designed to provide citizen input for major decisions. One of the activities sponsored under this program was a media-based survey. Other activities were: a 2000 individual-household SURVEY, NEIGHBORHOOD MEETINGS, a forum and an advisory group of various interest group representatives.

Critical Issues

- The media-based survey was concerned specifically with housing, which was the one critical issue. The community had accepted, as a goal, increasing
homeownership at all levels. However, rising prices in the area were threatening to prevent this dream for median and lower income families. A local study had shown that only one in every seven young families could afford a house in the area. While building of medium-to-high-priced homes had increased over the past decade, low-and moderate-priced construction had almost ceased in the area. Since the area had become the home for poor couples migrating from rural areas to the city, the population was not affluent. About 65 percent of area residents had reported adjusted annual incomes of $10,000 or less. The critical issue before the Commission and citizens was how to provide adequate housing.

Critical Actors

There were five critical actors.

- The staff of the Regional Planning Commission - a private non-profit foundation charged with implementing the survey. The Regional Planning Commission was the most important element because it was responsible for planning projects and it administered HUD funds. The Commission had directed its staff to emphasize citizen involvement in the formulation of growth goals. This laid the foundation for participation.

- Community Goals Foundation - a non-profit, community-based body funded by the Regional planning Commission to increase credibility and improve the effectiveness of the process. In this instance, a non-profit community-based Goals Foundation was funded to run the media survey and housing goals activities. The Goals Foundation was comprised of civic leaders from various geographic areas of the community. The Goals Foundation expanded its base by organizing a Citizen Review Committee comprised of citizens from the governmental jurisdictions.
• A consultant - retained by the Foundation to develop issue papers which were used to make presentations to the community and to formulate questionnaires. The consultant was knowledgeable in both housing in general and in specific problems of the community.

• Local media companies - TV stations and their staffs contributed time and expertise to the project. The local press also donated space and talent to promote the effort.

• Citizens - the entire effort was designed to reach this group. It was hoped that their views, attitudes and preferences toward providing low-and moderate-income housing could be obtained through this intensive program.

**Participatory Process**

The media-based survey was complex. First, professors at local universities were invited to submit issue papers on housing growth choices. A number were reviewed by the Citizen Review Committee and Goals Foundation. One was selected.

The paper clearly discussed the overall national and local need for low-and moderate-income housing. Simple statistics on available housing were provided. The past pattern of Federal subsidy was described, including its strengths, weaknesses and impact. Past State measures to provide housing were described as well as existing policies and programs in the field. At this point specific policy options were introduced. Different views were presented toward activating a State development authority which would help provide mortgage funds. Next the possibility of having municipalities set up revolving funds to join with private lending institutions to help citizens rehabilitate and purchase housing was described. Third, advantages and disadvantages were told of raising public funds to support specific housing improvements which would be recommended by the neighborhood. Finally, the recommendation of creating
a separate housing court to exclusively deal with housing matters was presented.

Next, local TV stations helped develop a program which would treat each of the above policy alternatives. The format was designed by TV station staff. It included films of deteriorated neighborhoods, local community leaders presenting different sides of the recommendation and concluded with an appeal to viewers to write in their preferences. A ballot and promotions for the shows were to be carried in local newspapers before, during and immediately following the TV programs. Ballots were also made available to families at high schools, colleges and major shopping areas. Students were encouraged to take ballots home and to invite their families to watch the programs.

The issue paper along with the same questions was also disseminated through the same channels to the public. It was hoped that the dual sources of information would increase opportunities for participation.

The design also called for heavy promotion of the program on TV. This included spot announcements and introduction of the program in local news and talk shows. The schedule for the programs and the sources for ballots were emphasized.

Results and Analysis

All of the plans were implemented. Cooperation from local TV stations was good. The newspaper carried the ballots, features on the policy choices and TV program schedules. TV stations alternated the viewing times for programs and ran a few of the programs near news programs or during prime viewing hours.

Despite the effort, response was disappointing. Far less than one percent of the estimated viewing population either turned in ballots to any
of the reception points or mailed them. Those who submitted their choices tended to be highly educated, middle-class and civic oriented. Consequently, the Goals Foundation and Planning Commission did not feel the views of the general community were represented. As a policy guidance tool, the survey was not beneficial.

Many explanations were advanced for the poor results of the surveys. Viewer attention for local community programs is hard to obtain. Despite the publicity given to the programs and despite the importance of housing to all, only the civic-oriented members of the public participated. Some felt the content of the programs was not appealing. While the programs were of the best quality possible, they were no match for the high-budget, entertainment-oriented programming normally found on TV.

Finally, it seems the audience was hard to reach despite the extensive promotion work done by the Foundation. Many persons still complained that they did not know about the programs or forgot the viewing times.

Conclusions

This experience suggests that MEDIA-BASED ISSUE BALLOTING has many limitations which must be overcome if it is to be useful for public participation. Overcoming the general apathy which exists is a key problem. Home SURVEY do not have this problem because the interviewer is in the household getting the respondent's attention.

MEDIA-BASED ISSUE BALLOTING requires the cooperation of many parties. Program content may be done by one group, another group may be required to execute the program, and still others may analyze the results. This increases the costs and adds to the complexity.
There is some indication from this case that the technique limits the issues and contents. Programs had to be short. Therefore, material had to be limited or fragmented over several showings. This may have had some impact on the response to the program. This definitely limited full description of the issues.

Although general viewing audiences are representative of the general population, those viewers predisposed to watch any particular program are likely to be highly selective. Therefore, caution should be exercised in attempting to reach large groups through TV. Other locations that have used media-based balloting are discussed on pages 127 through 128 of Part C.