

# Community Attitudes Toward Freeway Planning: A Study of California's Planning Procedures

BRUCE BISHOP, CLARKSON H. OGLESBY, and GENE E. WILLEKE,  
Department of Civil Engineering, Stanford University

This paper examines the present methods of the California Division of Highways for planning freeway locations. A mail survey of the attitudes of local government officials and citizens was conducted. The results indicated that the Division's procedures need some improvements, although they are generally accepted. A number of planning approaches were examined in a search for ways in which procedures might be altered. The survey was used to evaluate possible modification of the present procedures. A coordinator-catalyst approach seemed most appropriate. The findings of the survey show that the decision-making process can be improved by getting local communities involved early in the planning process. To be effective, this approach must accomplish 3 major objectives: (a) have the communities participate in establishing planning procedures; (b) get the communities to define their goals; and (c) develop freeway plans that will augment other efforts to reach community goals. This approach can be expedited by maintaining continuous contact with communities in order to foresee when freeways are needed and, when a freeway study is made, doing the socioeconomic study early in the planning process. Development of broader community participation has the following implications for the Division: (a) development of educational and research programs to give personnel a broader view of community problems; (b) development of continuous interchange with local communities; and (c) assignment and education of personnel to carry out the function of the planner as a coordinator and catalyst to develop community consensus.

•THIS PAPER EXAMINES the attitudes of local government officials and citizens toward present methods of the California Division of Highways for planning freeway locations. It also looks to changes that might help the Division get better local involvement in the freeway location process. The paper first outlines the present procedures for freeway planning used by the California Division of Highways. Attitudes of local public officials and citizens toward the Division and its procedures are then evaluated on the basis of a mail survey conducted among samples of local government officials and staff and of citizens in a community where a freeway study was recently completed. A number of alternative planning approaches or strategies are outlined, and modifications to the present planning procedures are suggested. The survey was also used to evaluate local community attitudes toward proposed modifications in the planning procedure. The findings support the proposed changes. Finally, further implications of implementing the proposed changes to the planning process are also discussed.

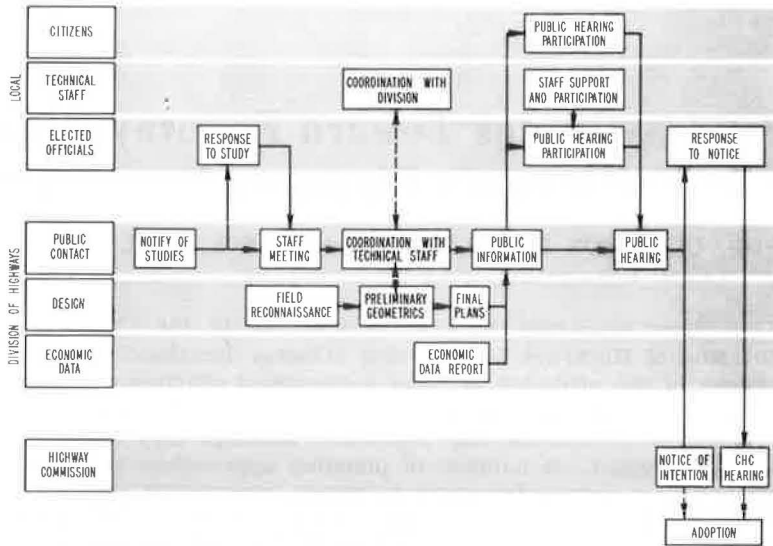


Figure 1. California's present route location planning procedure.

#### PRESENT PROCEDURE FOR FREEWAY PLANNING

The present route location planning procedure of the California Division of Highways is shown in Figure 1. On the ordinate are represented the major participants at the local level, within the Division of Highways, and on the California Highway Commission, composed of 7 members appointed by the governor with the responsibility for making the final route selection. The abscissa represents the development of the procedure through time. Any activity of the Bureau of Public Roads on federal-aid projects is considered to be a Division of Highways function.

At the beginning of the route studies, local legislators, appropriate local governing groups, and affected local, state, and federal departments are given written notice of the studies. Following this, local officials and their technical staffs are invited to a preliminary meeting to receive information about the studies and to offer comments and information to the Division of Highways. During the planning study, the Division of Highways holds frequent meetings with local groups to coordinate and exchange information, correlate freeway route planning with local planning, and resolve possible points of conflict. The route location alternatives that have been developed are presented to the public through displays and informational meetings in the local communities at the conclusion of the studies. Public hearings are then conducted by the state and on request by the California Highway Commission, after which the Highway Commission makes a final decision.

The major points in these planning procedures to note are (a) the study usually generates several alternative locations from which the Highway Commission must select one; (b) the contacts of the Division of Highways are largely with the technical staffs of the community until public information meetings and public hearings are held; (c) the economic data report, or community impact report, is generally completed very late in the planning process; and (d) no formal commitments or agreements are made with the community until after the route adoption.

#### AN EVALUATION OF THE PRESENT PROCEDURES

##### A Survey of Community Officials and Citizens

The findings of a mail survey were used to evaluate attitudes toward the Division of Highways and its present planning methods and to assess the direction of possible changes

TABLE 1  
RESPONSE OF COMMUNITY GROUPS REGARDING THEIR PARTICIPATION  
IN FREEWAY PLANNING ACTIVITIES

Community Group	Number	Response (percent)			
		Signed Petitions	Attended Public Hearings	Attended Com- munity Meetings	Attended Division of Highways Meetings
Community officials and staff	164	0	68	40	79
Citizens	147	22	19	7	6
Affected by adopted route	56	20	20	9	5
Affected by proposed route	45	36	36	13	13
Not affected by route	46	13	2	0	0

in the present procedures and community acceptance of them. The survey was conducted in 2 parts during April, May, and July, 1969. The first included a sample of 164 community officials and professional staff including mayors, city councilmen, city managers, directors of public works or city engineers, and planning directors or city planners. The sample included all the communities in the 2 major urban areas of California—San Francisco-Oakland and Los Angeles-Orange County—where freeway studies were currently being or had been conducted in the 3 years from 1965 to 1968. The second part included a sample of 147 citizens from 4 communities in an area of southern California where a freeway study was recently completed and a route selected. The sample included 3 groups of citizens: (a) those living within  $\frac{1}{4}$  mile on either side of the adopted route, (b) those living within  $\frac{1}{4}$  mile on either side of other proposed routes, and (c) those living over 1 mile from any routes and therefore not directly affected.

#### Knowledge of and Participation in Planning Studies

Of the respondents, 97 percent of the community officials and 86 percent of the citizens were aware that freeway studies were being or had been made in their communities. Among the community officials, 71 percent knew of the studies because of their positions of responsibility in the communities, and 54 percent of them had been contacted or notified by the Division of Highways. Only 15 percent indicated that they learned of the studies through other means, such as the news media or word of mouth. On the other hand, 82 percent of the citizens who knew of the studies became aware of them through the news media, and 43 percent indicated that they had heard by word of mouth. One respondent indicated he had been contacted by the Division of Highways.

Although a very high percentage of the respondents were aware of the freeway planning studies, a much smaller number of them actually participated in the activities associated with the studies (Table 1). Apparently, those citizens whose properties are directly affected by the proposed freeway are much more likely to take an active part in planning activities than those whose properties are not affected. Fewer organized and active homeowner groups were along the adopted route than on the proposed route. This is reflected by the higher levels of participation among those on proposed routes. Practically all of the citizen activity took place during the period of public hearings, and virtually none of it occurred during the study period.

#### Attitudes Toward the Division of Highways and Present Planning Methods

The attitudes of community officials and citizens toward the Division of Highways and its present planning procedure are not as negative as many might assume on the basis of the publicized controversies over freeway location. A majority of all groups of respondents believe the Division has the capability to adequately study and plan

TABLE 2  
RESPONSE OF COMMUNITY GROUPS REGARDING DIVISION OF HIGHWAYS  
CAPABILITY TO ADEQUATELY STUDY AND PLAN FREEWAY LOCATIONS

Community Group	Number	Response (percent)		
		Has Capability	Does Not Have Capability	No Response
Community officials and staff				
Mayors and councilmen	49	76	22	2
City managers	32	78	19	3
City engineers	47	83	13	4
City planners	27	63	37	0
Citizens				
Affected by adopted route	56	50	46	4
Affected by proposed routes	45	71	27	2
Not affected by routes	46	72	24	4

freeway locations (Table 2). In fact, over 70 percent of all groups except the city planners, 63 percent, and citizens affected by the adopted route, 50 percent, thought the Division to be capable. The response of planners may be partly attributable to professional bias, and that of the citizens, to having been adversely affected by the final decision.

Just as important as attitudes toward the capability of the Division are the feelings of community officials and citizens as to whether or not the Division considers their viewpoints and is responsible to suggestions and criticism. Of community officials and staff who under present procedures are most frequently in touch with the Division during the planning period, 78 percent find the Division considerate of community viewpoint and 82 percent find it responsive to their suggestions and comments (Tables 3 and 4). Citizens affected by proposed routes not selected or by no route also shared this view, although by a somewhat smaller percentage. On the other hand, the predominant feeling among those citizens affected by the adopted route was the opposite. They indicated that the Division was neither considerate of their views nor responsive to their suggestions.

TABLE 3  
RESPONSE OF COMMUNITY GROUPS REGARDING DIVISION OF HIGHWAYS  
CONSIDERATION OF COMMUNITY OR INDIVIDUAL VIEWPOINTS

Community Group	Number	Response (percent)		
		Does Consider	Does Not Consider	No Response
Community officials and staff	164	78	20	2
Citizens				
Affected by adopted route	56	38	61	2
Affected by proposed routes	45	64	33	2
Not affected by routes	46	70	26	4

TABLE 4  
RESPONSE OF COMMUNITY GROUPS REGARDING DIVISION OF HIGHWAYS  
RESPONSIVENESS TO SUGGESTIONS AND CRITICISM

Community Group	Number	Response (percent)		
		Is Responsive	Is Not Responsive	No Opinion
Community officials and staff	164	82	14	2
Citizens				
Affected by adopted route	56	34	43	21
Affected by proposed routes	45	62	20	18
Not affected by routes	46	59	15	26

TABLE 5  
RESPONSE OF COMMUNITY GROUPS REGARDING WHETHER DIVISION OF  
HIGHWAYS SUPPLIES ADEQUATE INFORMATION ON ROUTE STUDIES

Community Group	Number	Response (percent)			
		Too Much	Enough	Not Enough	Do Not Know
Community officials and staff					
Mayors and councilmen	49	0	63	33	4
City managers	32	0	63	31	6
City engineers	47	4	68	21	6
City planners	27	0	52	48	0
Citizens	147	2	23	53	21

Because the attitudes of citizens unaffected by the adopted route agree closely, it seems reasonable to conclude that the attitude of citizens living on the adopted route is primarily a reaction to the adverse effect of the final decision on them as individuals.

Even though these statistics are generally favorable to the Division, a large group, 20 percent of the community officials and 30 to 40 percent of the citizens, hold the opposite view, and this argues for planning approaches allowing greater community involvement. This is also borne out in the responses to questions as to whether the Division supplies enough information about the studies and whether this information reports on community impact. These responses are given in Table 5 and Table 6. About half of the city planners felt that insufficient information was supplied, and about a third of the other community officials and staff agreed. The answers of the various citizen groups did not differ on this point; over half felt that there was not enough information, and nearly an additional fourth did not know. The proportion of community officials who knew of any community impact report varied from the city managers at 78 percent to the planners at 41 percent. Thirty-six percent of the citizens indicated they knew of such reports. These figures suggest that there are gaps in the information from the Division, part of which may be caused by the procedures followed in working with community groups during the planning period.

The question of who should have the primary responsibility for freeway planning was presented from 2 angles, professional responsibility and organizational responsibility. From the standpoint of primary professional responsibility, the engineers and planners strongly support their own professional groups (Table 7). Elected officials and managers support planners by an average of 3 to 2 over engineers, and the citizens are about evenly split between the two.

In terms of organizational responsibility, with the exception of the city planners, more than half of the respondents among all community groups support the Division of Highways (Table 8). The largest support was from engineers (68 percent), followed by elected officials (51 percent), city managers (50 percent), and citizens (46 percent). By comparison 63 percent of the planners and about 30 percent of the elected officials and managers favored city and county control. Of the citizens, 22 percent favored city and county and 27 percent consultants.

TABLE 6  
RESPONSE OF COMMUNITY GROUPS REGARDING WHETHER DIVISION  
OF HIGHWAYS PREPARES A REPORT OF THE  
FREEWAY'S COMMUNITY IMPACT

Community Group	Number	Response (percent)		
		Yes	No	Do Not Know
Community officials and staff				
Mayors and councilmen	49	53	20	27
City managers	32	78	13	9
City engineers	47	66	15	19
City planners	27	41	26	33
Citizens	147	36	3	59

TABLE 7  
RESPONSE OF COMMUNITY GROUPS REGARDING PROFESSION THAT SHOULD HAVE PRIMARY  
RESPONSIBILITY FOR FREEWAY PLANNING

Community Group	Number	Response (percent)					
		Engineers	Planners	Social Scientists, Econo- mists	Architects	Multi- Response	No Response
Community officials and staff							
Mayors and councilmen	49	31	53	0	0	8	8
City managers	32	19	66	0	0	13	3
City engineers	47	68	17	2	0	9	4
City planners	27	11	85	4	0	0	0
Citizens	147	41	41	8	3	3	4

These responses have 2 general implications for the present planning procedures of the Division. First, although the Division is accepted by a majority of the respondents as the best organization to conduct planning studies, local communities have a continuing desire for greater participation and control. Second, the community impact and planning aspects of studies should receive greater emphasis. This further suggests that the outlook of engineers should be broadened to include community planning, and possibly more planners should be added to the Division of Highways staff.

#### PLANNING STRATEGIES: THE APPROACHES TO PLANNING

Planning strategy, in the context of this report, is the method of approach to those concerned about or affected by a proposed freeway. These include governmental agencies, individual public officials, and private groups and individuals. Strategy is a procedure, established in advance, that determines how, when, and to what depth various parties will participate in the planning, evaluation, and decisions. It is not, in any way, an attempt to deceive or to bypass or to circumvent legitimate interests.

It is helpful to look at planning strategies first in an abstract way in order to identify the present approach of the Division of Highways and to point up the direction of possible changes. Six feasible planning strategies have been adapted from Bolan's (1) studies of planning. They are shown in Figures 2 through 7.

1. Strategy of Information (Fig. 2). In using a strategy of information, the highway planner controls and conducts the study and only contacts community groups to present findings or gather information or data.

2. Information With Feedback (Fig. 3). In the strategy of information with feedback, the highway planner controls the studies. He develops alternatives and makes planning decisions. Alternatives are presented to community officials and staff and other public groups during the studies. Comment and feedback are obtained. Proposed plans may or may not be adjusted based on these inputs.

TABLE 8  
RESPONSE OF COMMUNITY GROUPS REGARDING ORGANIZATION  
THAT SHOULD HAVE PRIMARY RESPONSIBILITY FOR FREEWAY PLANNING

Community Group	Number	Response (percent)				
		Division of Highways	Cities and Counties	Consultants	Multi- Response	No Response
Community officials and staff						
Mayors and councilmen	49	51	27	10	2	10
City managers	32	50	38	6	3	3
City engineers	47	68	17	6	4	4
City planners	27	26	63	7	0	4
Citizens	147	46	22	27	2	3

3. The Coordinator (Fig. 4). Acting as a coordinator, the planner places himself in contact with the important elements of the local communities, assesses their objectives, tests alternatives as they develop, and receives feedback. Interaction among different community interests is not encouraged. A possible way to implement this approach is for the Division of Highways to establish a field office in the local area where local officials or citizens could come with questions, suggestions, and information.

4. The Coordinator-Catalyst (Fig. 5). As a coordinator and catalyst, the highway planner promotes participation in the planning studies. The affected parties confront and interact with one another. Under this strategy, highway planners of the Division of Highways would supply methodological and technical skills and serve to synthesize ob-

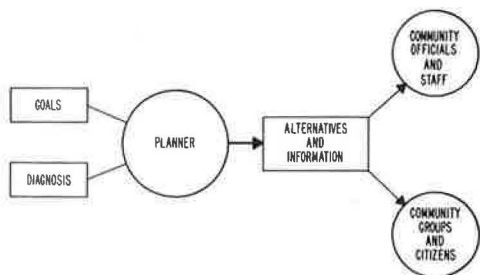


Figure 2. Strategy of information.

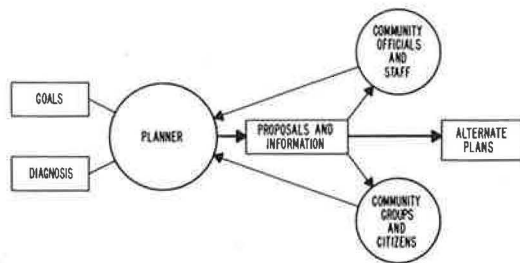


Figure 3. Information with feedback.

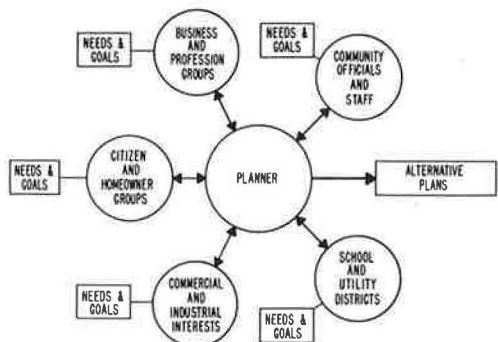


Figure 4. The coordinator.

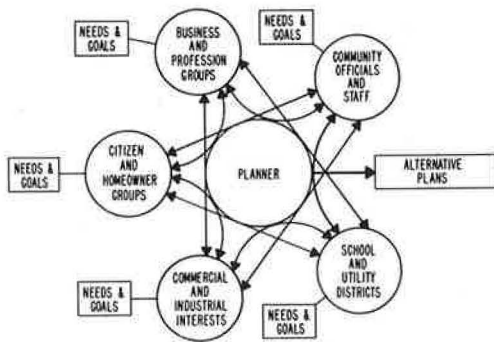


Figure 5. The coordinator-catalyst.

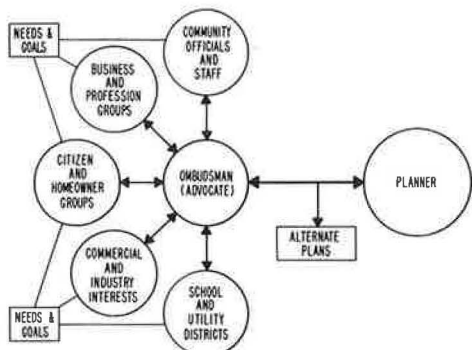


Figure 6. Community advocacy planning.

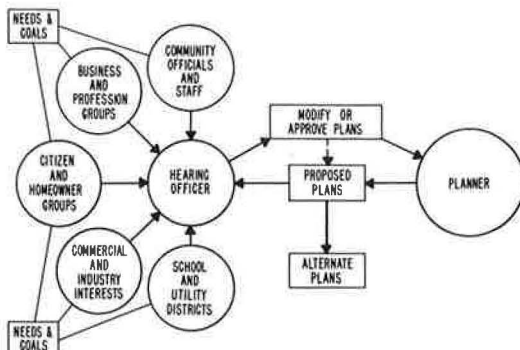


Figure 7. Arbitrative planning.

jectives, coordinate interests, and work out compromises in areas of conflict. The vehicle for such a planning approach might be a workshop group composed of representatives of the community such as elected officials, city planning and engineering staff members, and representatives of business, commercial, and industrial establishments, school districts, and homeowner groups. The Division would provide the engineering services and technical expertise.

5. Community Advocacy Planning—The Ombudsman (Fig. 6). As an advocate, the ombudsman, a specially appointed expert, works directly with highway planners on behalf of community groups. The affected parties supply him with data and information and inform him of their desires and preferences. He represents these views in working with the planner of the Division to develop alternatives.

6. Arbitrative Planning—A Hearing Officer (Fig. 7). This strategy places an independent hearing officer between the highway planner and community groups to act as an arbitrator. He comes to the community at important stages during the planning period—for example, at initiation of studies when study alternatives are being developed. In each instance, the Division presents its current proposals, and groups in the community present criticism, suggestions, or other alternatives. The hearing officer evaluates the testimony and recommends appropriate changes in the studies. Possibly he would make the final choice among alternatives.

#### SUGGESTED MODIFICATIONS TO PLANNING PROCEDURES

The present procedure of the Division of Highways as shown in Figure 1 is more nearly like the strategy of information with feedback than any of the other planning strategies. However, this approach could easily become simply a strategy of information if Division representatives do not promote open exchanges of pertinent information and seriously consider suggestions. The data given in Tables 5 and 6 indicate that local representatives feel that this has sometimes been the case. The point is that these strategies worked well when local communities were anxious to have freeways and when recognition of protests from certain local individuals or groups would at most require location or design modifications. Currently, however, the situation is far different. Many powerful local interests may not want freeways at all. And, although the state legislature has directed the Division of Highways to construct a designated freeway system, it has granted local authorities a strong voice and in some cases full veto power not only over freeway location decisions but also over the decision as to whether or not to build the freeway at all. This probably forces the Division of Highways into the role of the coordinator-catalyst. If so, it seems logical to adapt the planning process to fit this reality.

#### Proposed Changes

At least 4 major adjustments need to be made if the planning procedures in the Division of Highways are to fit the coordinator-catalyst strategy. Actually, some of them are now being carried out informally by the Division. These modifications, shown in Figure 8, are as follows:

1. Community Planning Liaison. The community planning liaison provides continuous contact and coordination among the Division and all local communities, whether or not a new freeway is soon contemplated. The objective is to keep informed on the planning objectives of each community and of the transportation needs and requirements indicated by present and future traffic projections. These periodic reviews would determine if and when a location study is appropriate.

2. Process Legitimization. The purpose of process legitimization is to get positive involvement on the part of local communities in establishing a planning procedure and then working within its framework. This includes (a) identifying the participants; (b) determining the planning strategy, i. e., the ways the study will be made such as organization and involvement of participants; (c) establishing the study limits, particularly in choosing beginning and terminal points; and (d) developing the initial goals and objectives of the study. In other words, the planning strategy is carefully thought out and agreed to by all.



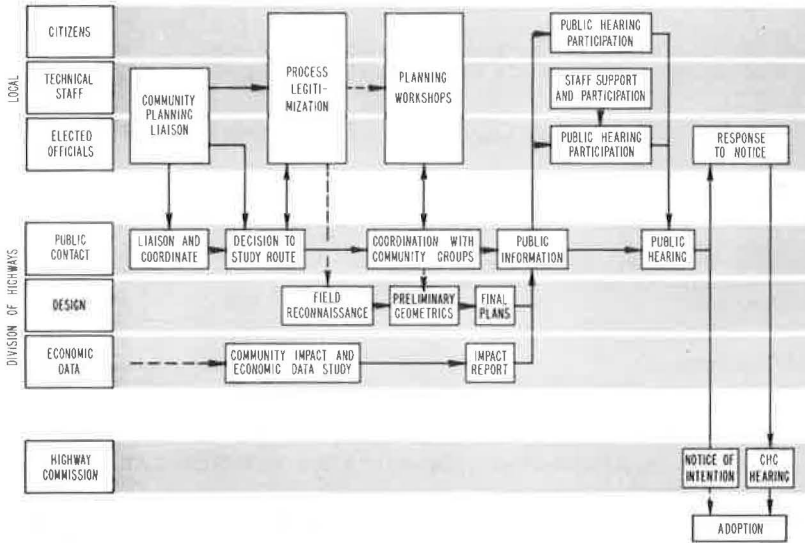


Figure 8. Modified route location planning procedure.

3. Community Socioeconomic and Impact Studies. The aim of the community economic and impact study, as a part of the process of legitimization and early planning, is to stimulate the community to define its goals, both short- and long-range, and to have an understanding of what must be done to meet transportation needs in conjunction with other community objectives. For this type of study to be of any value, it must be done early in the planning process rather than very late or not at all as is the present practice. To accomplish this requires continuous contact with the community as recommended in the first modification. This practice will result in the Division of Highways having the role of partner in community development rather than playing the villain who is going to tear the community apart. Freeways should be considered in context with other possible transportation alternatives for the community, and attention should be focused on the positive as well as the negative effects of freeways or other alternative plans.

4. Planning Workshops. The planning workshop, described as a way of implementing the strategy of the coordinator-catalyst, is basically a method for getting community leaders involved in planning that is tailored to their communities. The expected result is greater coordination and resolution of conflicts, because all groups must confront not only the Division of Highways but also one another with their goals and problems.

### Implications of Proposals

The proposed modifications of the planning procedures have further implications with respect to the operations of the Division of Highways. First, the Division of Highways must assume a broad role in appraising current community planning and participating in community transportation and traffic studies and other aspects of community planning. Second, these approaches require that an engineer have more orientation toward community planning and toward the human factors involved in dealing with people as individuals and in groups. This suggests a careful selection of planning personnel and programs of in-service education.

### COMMUNITY ATTITUDES TOWARD THE PROPOSED MODIFICATIONS

The results of the mail survey were also used to assess the attitudes of community officials, staffs, and citizens toward the kinds of procedures that could be used in structuring the planning process. These include the ways in which planning studies might be initiated, the strategy to follow during the planning period, and the way in which the final

TABLE 9  
RESPONSE OF COMMUNITY GROUPS REGARDING  
COMMUNITY RESPONSIBILITY AND PARTICIPATION IN PLANNING STUDIES

Manner of Participation	Percent of Community Officials and Staff	Percent of Citizens
Participate actively in planning studies	53	52
Make statements of community goals and objectives to Division of Highways	12	29
Cooperate with Division of Highways when requested	3	5
Wait and respond only when proposals are made	2	4
None at all	1	0

decision should be made. For each of these aspects of the planning process, the respondents were asked to rank a number of approaches and institutional arrangements in the order of their preferences.

Table 9 gives the attitude of community groups toward the manner in which they should participate in planning studies. Of most significance is that 81 percent of the community officials and staff and 61 percent of the citizens indicated that the community ought to participate actively in the study. This is contrasted to only 6 percent of the officials and staff and 9 percent of the citizens who preferred a passive role. This information then tends to support the suggested modifications that give broader community participation.

#### Community Liaison and Legitimization of Route Studies

The preference of various methods that might be used to initiate route studies confirms the recommendation that a continuous liaison between the community and the Division of Highways be maintained (Table 10). Only in this way would it be possible to have a joint review to determine the need for a location study. Data given in Table 10 show that, even though the communities want to participate in this decision, they would still rather have the Division of Highways decide rather than the local community, an independent board, or the legislature.

The importance of process legitimization by local agreement to a study is underscored by the respondents' attitudes toward another group of questions. Toward these, 88 percent of the officials and staff and 72 percent of the citizens felt that local communities should have a voice in determining the way in which the study would be organized and what participants would be involved; 78 percent of officials and staff and 50 percent of the citizens wanted a voice in defining the limits of the study area.

TABLE 10  
PREFERENCES OF COMMUNITY GROUPS OF THE METHOD FOR  
INITIATING ROUTE LOCATION STUDIES

Method	Weighted Rank <sup>a</sup>	
	Community Officials and Staff	Citizens
Division of Highways and the community review needs	1.4	1.5
Division of Highways reviews needs and decides	2.2	2.0
Independent board reviews needs and decides	3.0	2.5
Studies made only at request of local community	4.0	2.8
Studies made by directive of state legislature	4.2	4.1

<sup>a</sup>For each of the proposed methods, the weighted rank is derived by multiplying each rank value by the frequency for the rank, summing these weighted rank values, and then dividing by the total number (sum of the frequencies). With this procedure, smaller numbers for an alternative express a greater preference for it, and the smallest and largest numbers respectively express first and last choices.

TABLE 11  
PREFERENCES OF COMMUNITY GROUPS FOR PLANNING STRATEGY

Planning Strategy	Weighted Rank	
	Community Officials and Staff	Citizens
Coordinator-catalyst-workshop groups	2.1	2.2
Division of Highways with community feedback	2.5	2.9
Arbitrative planning-hearing officer	3.4	3.1
Coordinator planning-field office	4.3	3.8
Plural planning-each group has its planners	4.5	4.7
Advocacy planning-ombudsman	4.7	4.0
Information only-Division controls the study	5.2	4.9

### Community Preference for a Workshop Approach

The institutional arrangement for conducting planning studies most preferred by both the community officials and staffs and the citizens was that of a workshop group. This would place the Division of Highways in the role of a coordinator and catalyst (Table 11). All of the higher ranked strategies are those that would allow the community a strong voice and some control of the planning studies. Emphasizing this point is that the Division operating with community feedback is ranked second; in contrast, the exercise of complete control of the studies by the Division is ranked last. Such evidence gives further weight to the recommendation that the community have broader participation through planning workshops or some other means agreed to by the participants.

### Community Preference for Decision-Maker

If present laws were changed, final legal authority for freeway location decisions could be given to highway planners, community officials, citizens, or some independent public body. Community officials and staff prefer a state review board appointed by the governor (Table 12), the method presently employed by California. On the other hand, the citizens would prefer to leave the decision in the hands of the Division of Highways. They rank either method that would leave the decision to the Division of Highways as better than leaving it to the Highway Commission. Although local officials are disposed toward assuming the decision authority, citizens rank this method fourth. Any method leaving the decision solely in the hands of local officials or citizens is ranked as the least desirable. Generally speaking, the survey results indicate that placing the final authority for route location with the State Highway Commission or the Division of Highways represents a reasonably acceptable procedure.

Observations made throughout this study point to another need for change. Because of fragmented local government structure, current legislative restrictions, and local

TABLE 12  
PREFERENCES OF COMMUNITY GROUPS OF THE  
METHOD FOR MAKING FINAL DECISIONS

Method	Weighted Rank	
	Community Officials and Staff	Citizens
State review board-Highway Commission	2.8	3.1
Highway Division, based on its analyses	3.1	2.6
Local officials after hearings with citizens	3.1	3.2
Highway engineer with citizen recommendation	3.4	2.9
Review board of citizens from local community	4.2	4.4
Local elected officials based on their review	4.4	5.0
Referendum with alternatives placed on the ballot	6.0	4.0

pressures, the Highway Commission, in order to get acceptance of disputed locations, has sometimes spread adverse consequences among the affected local communities or interest groups. Such procedures do not always make for optimum locations from the standpoint of the broad public interest. And yet it seems unfair and unjust to impose severe hardships on local communities. This suggests that, if we assume that the fragmented local governmental structure will not change, some means of compensation for real damage should be devised. This is now being done for individuals under California legislation and the 1968 Federal-Aid Highway Act. It should also be done for communities.

### CONCLUSIONS

Three main conclusions are drawn from the analysis of the California Division of Highways route location procedures and of public attitudes toward them.

1. There are bound to be conflicts with so many difficult problems and diverse viewpoints involved in the urban freeway location process. As planning is now done, the Division of Highways is often very likely to wind up in the role of a villain, for the current approach mainly brings out those who are opposed because they might be adversely affected by the final decision.

2. The decision-making process can be improved and expedited by restructuring the approach to get local communities involved early in the planning process. To be effective, this approach must accomplish 3 major objectives: (a) community participation in establishing planning procedures; (b) definition of goals by the communities; and (c) development of transportation plans that will augment other efforts to reach community goals. This approach can be expedited by (a) maintaining continuous contact with individual communities in order to foresee when transportation planning studies should be made and whether freeways or other transportation facilities are needed or should be augmented and (b), when a study is to be made, conducting the socioeconomic study early in the planning process and using it as a mechanism to involve officials, citizens, and appropriate organizations in developing and interpreting data and iteratively defining community goals. This also provides a vehicle by which the community can begin to think in terms of "with and without" freeways and to consider the full range of possibilities including freeways, expressways, local road improvements, or other transportation modes.

3. The development of broader community participation in freeway planning also has the following implications with respect to Division of Highways operations: (a) An educational and research program is needed to give its personnel a broader viewpoint and knowledge of community problems and of the human aspects of such problems; (b) a continuous interchange with local communities is necessary; and (c) Division of Highways personnel should be assigned and educated to carry out the function of the planner as a coordinator and catalyst to develop community consensus.

### ACKNOWLEDGMENT

This paper covers a part of the subject matter of a research contract at Stanford University sponsored by the California Division of Highways and the U.S. Department of Transportation, Federal Highway Administration, Bureau of Public Roads.

### REFERENCE

1. Bolan, Richard S. Emerging Views of Planning. Jour. of American Institute of Planners, Vol. 33, July 1967, p. 233.