TECHNICAL REPORT STANDARD TITLE PAGE

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.
TTI-2-8-75-190-3F		

4. Title and Subtitle	5. Report Date
A METHODOLOGY FOR EVALUATING THE PUBLIC INVOLVEMENT PROCESS USED IN PROJECT PLANNING	November 1976
	6. Performing Organization Code
7. Author(s)	8. Performing Organization Report No.
Michael E. Weiss and Theron K. Fuller	Research Report 190-3F
9. Performing Organization Name and Address	10. Work Unit No.
Texas Transportation Institute Texas A&M University College Station, Texas 77843	11. Contract or Grant No. Research Study 2-8-75-190
	13. Type of Report and Period Covered
12. Sponsoring Agency Name and Address	Interim- September 1974 November 1976
State Department of Highways and Public Transportation 11th and Brazos, Austin, Texas 78701	14. Sponsoring Agency Code

15. Supplementary Notes

Research performed in cooperation with DOT, FHWA, and SDHPT
Research Study Title: Transportation, People, and Planning: An Interdisciplinary Study

16. Abstract

Although there is a long history of State Department of Highways and Public Transportation (SDHPT) public involvement and although the more structured Action Plan processes have been operating for over two years, there are no established methodologies or criteria for evaluating public involvement techniques. Therefore, the methodologies and analysis developed in this report will be of direct use to state and district offices for purposes of evaluation of public involvement processes.

17. Key Words	18. Distribution Statement
Public involvement, public hearings, project planning, evaluation and analysis	No Restrictions. This document is available to the public through the National Technical Information Service, Springfield, Virginia 22151.

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages	22. Price
Unclassified	Unclassified	185	

Form DOT F 1700.7 (8-69)

A METHODOLOGY FOR EVALUATING THE PUBLIC INVOLVEMENT PROCESS USED IN PROJECT PLANNING

by

Michael E. Weiss
Assistant Research Planner

and

Theron K. Fuller
Research Assistant

Research Report 190-3F
Research Study Number 2-8-75-190

Research Conducted for
STATE DEPARTMENT OF HIGHWAYS
AND PUBLIC TRANSPORTATION
in cooperation with
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

November, 1976

TEXAS TRANSPORTATION INSTITUTE
Texas A&M University
College Station, Texas

ACKNOWLEDGEMENTS

Mr. Dock Burke, TTI Supervisor of Study 2-8-75-190, Dr. Patricia K. Guseman, TTI Assistant Research Sociologist, and Mr. Dale Schafer, TTI Systems Analyst, were particularly helpful in providing guidance and technical assistance during the study. Appreciation is expressed to Mrs. Melinda Morgan, Mrs. Frances Neal, and Mrs. Barbara Page for their excellent typing services. Appreciation is also expressed to Messers. Robert L. Lewis and James W. Barr of the State Department of Highways and Public Transportation for their support of the work in Study 2-8-75-190.

Prepared in cooperation with the U.S. Department of Transportation, Federal Highway Administration, and the Texas State Department of Highways and Public Transportation.

The contents of this report reflect the views of the authors who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the SDHPT or FHWA. This report does not constitute a standard, specification, or regulation.

IMPLEMENTATION STATEMENT

There are no established methodologies or criteria for evaluating public involvement techniques in the Texas State Department of Highways and Public Transportation's project planning process. The methodologies and analysis developed in this report will be of direct use to state and district offices for purposes of evaluation of public involvement processes.

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

LIST OF TABLES

LIST OF TABLES (Continued)

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Although there is a long history of State Department of Highways and Public Transportation (SDHPT) public involvement and although the more structured Action Plan processes have been operating for over two years, there are no established methodologies or criteria for evaluating public involvement techniques. The consequences of this situation are not certain. It is probable that some criteria of successful participation exists in the minds of the district officials responsible for public involvement. It is also probable that certain factors influence the public's perception of particular involvement techniques as being good or bad. Different sub-groups among the public may have basic attitudinal differences. The group attending a public hearing may have a higher concentration of activists and citizens directly affected by a proposed project than the general population. Those people located in the project area but not attending the public hearing may have different attitudes and opinions from those in attendance. Also, those who are located outside of the project area and not directly affected by the project are likely to exhibit a third point of view.

Other variables play a role in the quality and quantity of public representation in public participation events. For example, it is possible that hearings and meetings attract a skewed population sample. It is possible that people of a particular socioeconomic level attend meetings and hearings in greater proportion than their normal percentage of the population at large. Other variables, such as education level and experience in attending public gatherings, may also characterize the kind of people in attendance and therefore dominate the input received at hearings and meetings. Knowledge of these differences provides a check on the degree to which public involvement techniques are

accurately determining the attitudes and opinions of a majority of the public and the degree to which these techniques are determining the attitudes and opinions of only a narrow segment of the population.

Purpose of Study

Comparison of participation variables can provide statistical evidence of significant relationships that have value for public involvement. For example, in a study for the Utah Department of Transportation, Thuet discovered a positive correlation between the methods by which one learned of a proposed project and initial attitudes toward the project.[1] The indication was that a more positive reaction to a project was formed initially when the newspaper was the medium of informing, than when a neighbor brought the news. Findings of this kind suggest definite steps for improving participation techniques and allow practical evaluation measures. In the above instance, heavy newspaper publicity is indicated and the impact of the technique can be simply evaluated through direct questioning of the public.

Thuet also found that little change in attitude toward a project occurred over time.[2] This relationship was also statistically significant. The implication is that early newspaper reporting is associated with a positive reaction that does not change over time. This kind of information, if true in Texas, is valuable for improving public involvement techniques. Unfortunately, this and other similar information is not available because no data are systematically accumulated regarding SDHPT personnel and private citizen response to public involvement efforts.

By accumulating and studying the above kind of information it would be possible to discover some criteria by which SDHPT personnel and private citizens could judge the quality of involvement techniques. Analysis of the criteria

would help identify those issues over which SDHPT personnel and private citizens differ. Varying involvement needs resulting from regional and socioeconomic differences could also be identified. If these kinds of information are developed within SDHPT districts, it would be possible for local personnel to compare their public involvement activities with that of other districts. Evaluation by local participants and the ability to compare experiences with other districts can be beneficial aides for measuring the effectiveness of district public involvement efforts. Making decisions regarding public involvement techniques can then be based on experience rather than being based on theory and supposition.

Method of Study

The two major tasks to be accomplished in this study include: (1) identifying and describing criteria by which to evaluate involvement techniques, and (2) identifying and describing evaluation methodologies for applying the criteria. Two sources of criteria have been utilized. One source is the body of literature about public participation which has been discussed in an earlier report and will not be repeated here.[3] The other source is the attitudes and opinions of SDHPT district officials and the public. The literature provides a comprehensive view of experience with public involvement. The input of local highway officials and citizens provides specific information about what are thought to be good and bad involvement techniques in varying regions of Texas. The second task, identifying and describing evaluation methodologies, also involves input from local officials and citizens.

Uniform involvement techniques are not feasible in Texas because of its geographical variety, large size, and socioeconomic mix. Since varied involvement techniques are needed, evaluation methodologies will be designed to be

sensitive to these differences. The design will be based on input made by the SDHPT district offices relative to their needs and experiences.

Accomplishment of the two tasks outlined above will provide a base for future research. Implementation of the evaluation methodologies will make a data collection process possible. Once that process is established, it will be capable of systematically accumulating information about public involvement in SDHPT projects.

Background

In 1973, the SDHPT issued a set of guidelines titled, Guidelines and Processes for Systems and Project Planning (Action Plan). These guidelines formalized some public involvement techniques that the SDHPT has used in the past and instituted other, new, procedures.[4]

Public involvement responsibilities and personnel are located both in the main office and the district offices of the SDHPT. Within the main office, the Planning and Research Division is responsible for coordinating public involvement in systems development and the Highway Design Division is responsible for coordinating public involvement in project development activities. Both divisions are responsible for, "monitoring of public involvement activities and project planning; reviewing reports and documentation; maintaining mailing lists for notification purposes; and coordinating environmental activities within the divisions with those performed at the district level."[5]

At the district level, public involvement is administered by a Public Affairs Officer appointed by the District Engineer. The Public Affairs Officer arranges appropriate techniques for the prehearing, the hearing, and the post-hearing phases of project development. He assembles and distributes information while receiving and coordinating public input. In addition to assisting

in the formulation of plans and preparation of recommendations for public involvement activities, the Public Affairs Officer serves on related planning and project staffs and helps develop and maintain project files.[6]

The SDHPT uses a variety of public involvement techniques in order to respond flexibly to varying project conditions. During the prehearing phase of a project the Public Affairs Officer may:

(1) correspond directly with local and neighborhood groups expressing a desire to discuss the project;

(2) correspond with proprietors and residents within a specified distance of the proposed location;

(3) make efforts to contact and promote participation of minority groups that may be affected;

(4) arrange for relevant data to be available for public inspection at locations and times convenient to the public;

(5) issue news releases before and/or after meetings with organizations if the news would be of public interest;

(6) provide spot announcements on radio and television media, as deemed necessary;

(7) schedule meetings at a time to promote maximum public attendance and participation; and

(8) post notices of pending meetings within the study area, as appropriate.[7]

During the post-hearing phase, the Public Affairs Officer is responsible for: (1) informing the public about the final decisions regarding route location and design; (2) responding to inquiries regarding the status of the project; (3) informing the public about the awarding of the contract of the project; and (4) assisting in general publicity regarding the project.[8]

SDHPT project planners, who are responsible for program development, route selection, design approval, right-of-way acquisition, and construction, also determine the public involvement activities needed for a given project at a Project Concept Conference.[9] The conference results in a report containing

information to be used in project publicity and which serves as the basis for interacting with the public during project development. Public input is coordinated with social, economic, and environmental studies conducted in the project area. Attempts are made to locate and work with groups affected by the project. Public meetings are held to inform the public of study results and to obtain citizen comments. Subsequently, a draft environmental document or a negative environmental declaration is prepared. If the environmental conditions are acceptable, a determination of need for a public hearing is made. If a public hearing is required, announcements are made, opportunity for interested groups and individuals to comment is afforded, and a transcript of the proceedings becomes a part of the official project record and is made available for inspection.[10] Post-hearing involvement activities, which have already been discussed above, are then initiated.

Summary

In 1973, the SDHPT issued an action plan which described public involvement processes for transportation planning. Responsibility for public involvement is divided between the main office and the district offices. Although there is a history of SDHPT public involvement effort which has recently been bolstered by the Action Plan, there are no established methodologies or criteria for evaluating public involvement techniques. It is probable that some criteria exists in the minds of district officials, and it is probable that certain factors influence public perception of what constitutes good and bad involvement techniques. Accumulating and studying the criteria by which SDHPT personnel and private citizens judge the quality of involvement techniques will make it possible to develop evaluation methodologies that have relevance for the SDHPT and for the public.

Two major tasks need to be accomplished in this study. One task is to identify and describe criteria by which to evaluate involvement techniques; and the other task is to identify and describe evaluation methodologies for applying the criteria. Two sources of information are used for completing these tasks. One source is the body of literature about public participation which has been discussed in an earlier report and will not be repeated here. The other source is the attitudes and opinions of SDHPT officials and the public. Input from the public is discussed in the next chapter and input from SDHPT personnel is described in Chapter 3.

NOTES

1. James H. Thuet, Effective Public Involvement in Highway Decision Making (Salt Lake City, Utah: Utah Department of Transportation, 1975), p. 26.

2. Ibid., p. 27.

3. See Michael E. Weiss, A Study of Public Participation in Highway Planning and Decisionmaking (College Station, Texas: Texas Transportation Institute, 1974).

4. Texas Highway Department. The Action Plan of the Texas Highway Department: Process Guidelines for Systems Planning and Project Development, August, 1973.

5. Ibid., p. 12.

6. Ibid.

7. Ibid.

8. Ibid., p. 13.

9. Ibid., p. 26.

10. Ibid., pp. 30-1.

CHAPTER II

PUBLIC ATTITUDES ABOUT PARTICIPATION

Introduction

A public participant questionnaire was distributed to 407 persons attending a SDHPT combined highway location and design hearing held in Pearland, Texas on the evening of January 8, 1976. The questionnaire was given to individuals as they registered prior to the beginning of the hearing. At the onset of the hearing, the hearing moderator encouraged the audience to complete and return the questionnaire at their convenience. During the latter stages of the proceedings, personnel were stationed at the exits with additional copies of the questionnaire for distribution to individuals who had either not received a copy initially or who had left their copy in the auditorium. The initial distribution was followed by a letter which thanked those who had responded and encouraged those who had not returned their questionnaire to do so. A combination letter of this kind was required because the questionnaire was anonymous and it was impossible to identify who had and had not responded. Responses were accepted until February 16, 1976. A total of 86 questionnaires were returned, for a return rate of 21 percent.

The questionnaire included questions designed to elicit the following information:

(1) Socioeconomic information about respondents and their households;

(2) organizational affiliation and representation;

(3) respondents' opinions concerning the proposed project, the public involvement process, and the degree of satisfaction regarding their experiences.[1]

Several of the questions were open-ended and respondents were encouraged to express their opinions or provide additional information regarding most areas

covered by the questionnaire. This type of question was used in order to allow respondents to explain the reasons for their opinions, if they desired. One result of using open-end questions was that many of the respondents used the questionnaire to state their positions regarding the proposed project, thus providing valuable information regarding their attitudes toward the project and their involvement activities.

An assessment of the information regarding public opinion about the proposed project collected by the SDHPT office indicated no major opposition to the construction of the project. The major controversy prior to the hearing was whether the project should be located east or west of Pearland. Therefore, it was expected that the proposed project would be desired by the majority of the persons attending the hearing and that anti-SDHPT feelings would be minimal. Based on the results of the questionnaire, this expectation seems to be accurate. For this reason, the conclusions drawn from this study may not be generalized to situations where there is a strong component of public opposition to a proposed project which generates anti-SDHPT attitudes. However, the results are probably representative of the general population in those situations where there is no strong general hostility to SDHPT projects and to the SDHPT.

Socioeconomic Characteristics of Hearing Participants

In a survey of public hearing participants in Virginia, Walton and Saroff concluded that there was a disproportionate representation of higher socioeconomic groups at highway project hearings.[2] They found that, in general, persons who attended hearings tended to be homeowners, well-educated, and employed in occupations classified as white-collar. The data from the Pearland hearing indicate similar findings. As shown in Table 1, 92 percent of the

respondents own their homes. From Table 2, it can be seen that 89 percent of the respondents had completed high school, and 73 percent had completed some formal education beyond high school. These characteristics are consistent with those of middle and upper socioeconomic status.

The distribution of respondents by types of tenure is shown in Table 1. A very high proportion of the respondents own their residences. This would indicate that homeowners, as often claimed, are more concerned about and take a greater interest in their community than do renters. A conclusion of this kind was reached in the Walton and Saroff study of Public hearings in Virginia.

Table 1

Percentage Distribution of Respondents by Type of Tenure
(N = 86)

Type of Occupancy	Percent
Own	92
Rent	5
No Answer	3
Total	100

This conclusion received additional support from other data on the questionnaire. Respondents were asked to indicate their physical relationship to the proposed project area. The choices included: (1) my residence is located in, near, some distance from the project area; (2) I own a business in, near, some distance from the project area; (3) I am employed in, near, some distance from the project area.

Table 2

Percentage Distribution of Respondents by Education Level
(N = 86)

Level of Education	Percent
Finished Grade School	11
Finished High School	16
Some College	35
Finished College	13
Graduate or Professional School	23
No Answer	2
Total	100

The distribution of responses to this question are shown in Table 3. A majority of those responding (74 percent) reported themselves to be living in or near the project area. Thirty percent of the respondents own businesses and 24 percent of the respondents are employed in or near the project area. Of all respondents, 86 percent own a home or business, are employed in or near the project area, or both. The indication is that those reporting are predominantly local persons representing their direct economic interests in the community. This conclusion is further supported by the fact that of the 86 persons in the survey, 58 respondents or 67 percent of the sample reside in the city of Pearland or Brazoria County.

Table 3

Percentage Distribution of Location of Residence, Business, and Employment Relative to Project Area
(N = 86)

	In	Near	Some Distance From	No Answer	Total
My residence is located	33%	41%	20%	6%	100%
I own a business	11%	19%	6%	64%	100%
I am employed	80%	16%	19%	57%	100%

Public Involvement Activities of Respondents

Attendance at an SDHPT public hearing was a new experience for the majority of respondents; 52 percent were at their first public hearing and 20 percent had attended only one previous hearing. Slightly over 72 percent had attended no more than two hearings. However, since 27 percent of respondents indicated that they had attended three or more highway hearings, it can be assumed that their was also a segment of experienced public hearing participants present. Of the total group responding, 38 percent had attended "other meetings" concerning the highway project in question.

Respondents took part in other public involvement activities also. The incidence of types of public involvement activities related to the project in addition to attendance at the public hearing are shown in Table 4. Approximately two-thirds of the respondents had engaged in some type of involvement activities in addition to attending the hearing. The most prevalent activity was phoning others, which 41 percent of respondents reported. The next most prevalent activities were voting on a bond issue regarding the project (23 cent of respondents), and sending letters or telegrams (16 percent of

Table 4

Percentage Distribution of Respondents by Involvement Activities Reported
(N = 84)

	Percent*
None	33
Voting	23
Sending Letters/Telegrams	16
Phoning	41
Other	21

* Percentages do not total 100 because of multiple responses.

respondents). "Other" activities centered around circulating petitions and informal discussions. Eight people (9 percent) said that they circulated petitions regarding the project, and six respondents (7 percent) stated that they communicated personally with others, either asking or telling them about the project.

There was a background of other public involvement experiences among the group, as indicated in Table 5. It can be seen that over half the respondents (51 percent) have attended city council meetings and between a fourth and a third have attended either county commission meetings (22 percent), planning and zoning meetings (33 percent), or school board meetings (30 percent). This indicates that the group was experienced in attending public meetings and has demonstrated a continuing interest in and involvement with the community. As can be seen in Table 5, the meetings attended are oriented to local concerns. The "other" category contains references to meetings or regional or statewide significance, but even these dealt with subjects pertaining to Brazoria County.

Table 5

Percentage Distribution of Respondents by Other Public Meetings Attended
(N = 86)

Type of Meeting	% of Respondents* Reporting Attendance
City Council	51
County Commissioners	22
Planning and Zoning	33
School Board	30
Other	12
None	28
No Response	6

*Percentages do not total 100 because of multiple responses.

Reasons for Attending Hearing

The distribution of responses to the question, "What were your reasons for attending this hearing?", is shown in Table 6. The majority of respondents (72 percent) say one reason for attending the hearing was to listen. In addition, 19 persons (22 percent) planned to make statements and 20 (23 percent) wanted to ask questions. Several checked more than one response. Among those responding "other," the main reasons for attending were concern for personal property (8 respondents) and to keep informed of the project's development (9 respondents).

The hearing drew the attention of organizations. Fourteen of the 84 responding (17 percent) to this question said they attended as a representative of an interested organization. Of the 14, eight are officers of the organization represented.

Table 6

Percentage Distribution of Responses to the Question "What are your Reasons for Attending this Hearing?" (N = 85)

Response	Percent of all Respondents*
To Listen	72
To make a Statement	22
To ask Questions	23
Other	1

*Percentages do not total 100 because of multiple responses.

Attitudes Toward Public Hearings

From Table 7, it can be seen that, as a group, the respondents had usually favored highway projects. Of the 74 persons in the sample responding to a question on usual attitude toward highway projects, 88 percent said they usually approve. Reaction to the public hearing was also very positive. Seventy-one percent of the respondents thought that the SDHPT did a good job of conducting the hearing, as shown in Table 8.

Table 7

Distribution of Responses to the Question "If you have Attended One or More Highway Hearings, have you usually Favored the Project(s)?" (N = 74)

Response	Percent
Favor	88
Did not Favor	12
Total	100

Table 8

Distribution of Responses to the Question "How Well did the Highway Department Conduct this Hearing?" (N = 86)

Response	Percent
Good	71
Fair	16
Poor	6
Other	2
None	5
Total	100

Evaluation of Specific Aspects of the Hearing Process

In addition to commenting on the project and the hearing, respondents were asked to evaluate specific aspects of the public involvement process. They were asked how strongly they agreed or disagreed with each of a series of 11 statements regarding participation in the project. The statements and the distribution are shown in Table 9 and discussed below.

Consistency and Accuracy of Project Information and Ability to Communicate with Project Personnel

The public involvement process must provide consistent and accurate information so that individuals in the project area can properly evaluate potential impacts. The involvement process must also provide the means for individuals to communicate specific concerns to the SDHPT and receive feedback in return. Survey respondents were asked to evaluate these two aspects of the public involvement process with regard to the Pearland project.

From Table 9, it can be seen that 72 percent of respondents in the sample felt that the information they had received about the project had been consistent and accurate. Nineteen percent of respondents felt there had been inaccuracies or inconsistencies, and 9 percent had no opinion. In this particular case, project planning had been carried out in a social atmosphere where no major controversy was generated about the proposed highway. In addition, as was already discussed, a majority of the persons in the sample generally supported the construction of highways. Under these conditions, the SDHPT was able to provide information evaluated as consistent and accurate by almost three-fourths of respondents, even though the project had been under study for well over ten years.

Communication with SDHPT officials was even more favorably evaluated. Here, 82 percent of the respondents felt that it had been possible to personally communicate with highway officials about the project. Only 5 percent felt that it had not been possible, and 13 percent had no opinion.

It is interesting to compare the percentage of respondents who do not feel they had been able to communicate personally with highway officials with the percentage of respondents who feel that the information they had received is inaccurate or inconsistent. Only 5 percent of respondents reported that it was difficult to communicate with SDHPT officials, while 19 percent thought project information was inconsistent or inaccurate. One conclusion that may be drawn from this difference is that information was not communicated to the public in such a way that the course of the planning process could be followed over the long time span of the project. SDHPT personnel, closely associated with the project, saw project changes as natural and logical results of their work. Citizens, in touch with the project only periodically or sporadically, may have viewed such changes as arbitrary and unwarranted. If this analysis is accurate,

one measure of successful participation may be the degree to which changing conditions and needs can be communicated to the public over the full time span of a project.

Awareness of the Progress of the Project and Ability to Get Directly Involved in Project Planning

While a large proportion of respondents expressed favorable attitudes toward the accuracy and consistency of the information they had received and felt they could communicate with highway officials about the project, less than half of the respondents felt that it had been possible to determine the progress of the project. From Table 9, it can be seen that 44 percent of respondents agreed with the statement "It has been possible to determine the progress of this highway project when desired," while 34 percent disagreed. This statement drew several written comments from respondents, including complaints about their inability to learn anything definite about the status of the project. Some respondents stated that no official or agency is able to make a final, binding decision about the location and construction of the highway. Similarly, some persons at the hearing expressed frustration at their inability to discover what they considered to be satisfactory explanations for changes in earlier plans and for delays in the decisionmaking process.

In a related area, only 36 percent of respondents agreed with the statement "If desired, it has been possible to get directly involved with highway project planning," while 37 percent had no opinion and 27 percent disagreed. The percentage of the respondents who checked "no opinion" is probably indicative of the proportion of the sample who had not attempted to get involved in project planning, and is not surprising considering the level of participation required. However, almost half of the respondents who had desired to get

Table 9

Participant Evaluation of Selected Aspects of Public Involvement

Statement	Strongly Agree	Tend to Agree	No Opinion	Tend to Disagree	Strongly Disagree
The highway project information I have received has been consistent and accurate.	40%	32%	9%	10%	9%
If desired, it has been possible to personally communicate with highway officials about this highway project.	50%	32%	13%	1%	4%
If desired, it has been possible to personally communicate with local officials about this highway project.	35%	24%	32%	4%	5%
If desired, it has been possible to get directly involved in highway project planning.	21%	15%	37%	16%	11%
The public has been well represented by those citizens who are participating in highway project planning.	24%	29%	18%	15%	14%
Attendance at meetings about this highway project has been small enough to allow everybody to participate, if desired.	22%	29%	9%	30%	10%
It has been possible to determine the progress of this highway project, when desired.	16%	28%	22%	15%	19%
Highway officials have been willing to make highway project planning changes when requested by citizens.	20%	27%	35%	5%	12%
Local, elected officials have been willing to make highway project planning changes when requested by citizens.	19%	26%	34%	7%	14%
The public hearing process has had an influence on the proposed project planning.	23%	38%	22%	7%	10%
There was enough time to prepare for the highway hearing.	47%	39%	10%	1%	3%

involved in the planning process indicated they were not able to. This might have been the result of some resistance on the part of project personnel. The SDHPT district office questionnaires, which will be discussed in detail in another section, indicate that SDHPT personnel draw a distinction between citizen involvement in data gathering and information exchange and citizen involvement in the conduct of planning. There is resistance to public participation in planning, but support for maintaining effective communications. The reflection of this attitude in SDHPT behavior could be a cause for the responses given.

Attitudes Toward the Representatives of Citizens Participating in Highway Project Planning

One major area of concern to highway officials is whether those participating in the public involvement process are representative of the public, especially in those instances where there is major conflict between two or more factions involved in the process. Participants at the Pearland hearing were asked if the public had been well represented by those citizens who participated in highway project planning. Slightly over half the sample (53 percent) responded positively, 29 percent responded negatively, and 18 percent had no opinion. This statement drew several written comments from respondents to the effect that participants who represented a position contrary to the respondent's did not represent the public.

These results indicate that public involvement is not necessarily an activity that will result in consensus among participants. Attempts to assess the amount, degree, or success of public involvement in terms of the amount of consenses reached can be misleading. The Pearland project is a good case in point. Observers and community residents generally agreed that few people are opposed to the project; the debate was over the best site. Public involvement,

no matter how vigorous, may never resolve the dispute. It will still be possible to conclude that the public involvement program was successful since most people had an opportunity to participate, the issues were raised and thoroughly discussed, and the opportunity to reach a consensus was genuinely present.

Attitudes Toward Size of Meeting

In response to the statement "Attendance at meetings about this highway project has been small enough to allow everyone to participate, if desired," 51 percent expressed agreement, 40 percent expressed disagreement, and 9 percent had no opinion. Several written comments were made about the large number of people in attendance at the hearing and the considerable length of time it took for everyone who so desired to address the group formally or to make a formal statement. This was the only formal public hearing on the project and was attended by approximately 400 persons. The meeting was over four hours long and did not adjourn until after midnight. Given these factors, it was not surprising that a considerable proportion of the sample said attendance was not small enough to allow everyone to participate.

Ability to Personally Communicate with Local Officials About the Project

When asked if they felt that it had been possible to communicate personally with local officials about the project if desired, 59 percent of the sample respondents answered affirmatively, 32 percent had no opinion, and only 9 percent answered negatively. Thus, while respondent opinion was generally favorable toward the receptivity of local officials, there was also a fairly high rate of response of "no opinion." This probably indicated that no attempt was made by these respondents to contact local officials. A failure to contact

local officials could be the result of the public viewing SDHPT officials as having sole charge of project decisions and not being aware of the role of local officials in the decision process. Based on the "no opinion" response from this sample, the local government was not viewed as a significant organization for discussing project concerns.

Implications of the Study Findings

The information provided by District Engineers and their staffs regarding the administration of the public involvement process indicates that the procedures utilized to inform the public about the Pearland project and to elicit feedback from individuals and groups in the impact area are typical of the methods utilized throughout the state. Also, the findings from the Pearland survey are very similar to those reported by Walton and Saroff in their statewide study of public hearings in Virginia and by Thuet[3] in a study of public hearings in Utah. Therefore, it is reasonable to conclude that the findings from this study can, in many instances, be generalized to comparable situations statewide. For these reasons, analysis of the findings can be utilized to improve the public involvement process to the benefit of both the public and the SDHPT.

It should be noted that, in any area of analysis, generalizations made on the basis of findings from a single case must be made with caution, and the present study is no exception. These are two limitations to the present study that must be considered. The first limitation is the small size of the sample. With only 86 respondents, small shifts in the frequency of a given response can result in considerable shifts in the corresponding percentages. The second limitation is that the setting of the study does not

duplicate some of the conditions that affect the public involvement process, particularly those found in metropolitan transportation projects.

With allowances made for these limitations, the implications of the study findings are presented.

The Socioeconomics Characteristics of Hearing Participants

The findings from the present study support the conclusions drawn in several other studies of public involvement (Walton and Saroff, 1971; Thuet, 1976) that persons of middle and upper socioeconomic status are overly represented at formal hearings. One important implication of this finding is that the formal hearing provides an appropriate vehicle for communicating with this segment of the population about the proposed project. The middle or upper status individual tends to be well-educated and experienced in attending public meetings, and therefore has the background needed to articulate his concerns within the format of the public hearing. These characteristics also imply that individuals who attend the hearings are fairly sophisticated in assimilating information, so that SDHPT officials can discuss the proposed project in some degree of technical detail.

Authenticity of Involvement

The findings indicate that the majority of the persons attending the hearing tend to own a home, a place of business, or to be employed in the project area. Moreover, a large proportion have never attended a highway project hearing before. This indicates a genuine interest in the proceedings motivated by some type of personal concern about the project. No support was found for the contention that public hearings tend to be dominated by "professional citizens"

or individuals who want to cause trouble or disrupt the hearing. This implies that, unless there is evidence to the contrary, the individuals who participate in the hearing process should be accepted as authentic representatives of their particular population segment, and their testimony and questions accepted as valid.

The Role of Public Hearings in the Public Involvement Process

The conclusion that the middle and upper socioeconomic groups tend to be overly represented at public hearings implies that this segment of the population will tend to be overly represented in the information about public concerns that SDHPT officials obtain from the hearing. Thus, if the formal hearing is the primary means of public involvement, project decisions may be biased in favor of those of higher socioeconomic status at the expense of other segments of the population. For this reason, careful assessment must be made of the degree to which inputs from the formal hearing process represent the whole population in the project area. If there are lower socioeconomic groups, or ethnic or other social minority groups in the project area, it may be necessary to utilize public involvement activities in addition to the formal public hearing. The inputs from these alternative activities must be considered together with the inputs from the public hearings to obtain balanced information about the concerns of all population segments.

Continuity of the Information Provided to the Public by SDHPT Officials

The findings that a significant proportion of hearing participants felt that it had not been possible to determine the progress of the project points to a need for providing a continuity of information and feedback throughout the

entire length of the project. This involves periodically reminding "old" participants in the involvement process of the reasons for current decisions regarding the project and of informing "new" participants of the background and history of the project and of the process through which the current status of the project was reached. This would probably do much to alleviate feelings that project decisions were made arbitrarily and that interests of particular groups or individuals had been arbitrarily disregarded. A technique for monitoring this aspect of the involvement process is discussed in a later chapter.

Involvement of the Public in the Planning Process

The finding that only about a third of the respondents felt that it was possible to get involved in the project planning process, if desired, points out a need for allocating part of the SDHPT's time and resources for educating the public in a project area about the roles that individuals and groups may take in the planning process, and encouraging participation by interested persons in positions appropriate for them. Including this type of activity in the public involvement process has several potential payoffs for the SDHPT: (1) it is a concrete demonstration that the SDHPT is interested in and open to input from the public; (2) it is a potential source of support for the project from those interested persons who become involved in the planning process; and (3) in certain situations, it allows the SDHPT to place responsibility for difficult project decisions with the community.

Involvement of Local Government Officials in the Project

The finding that almost a third of the hearing participants did not know whether it was possible to personally communicate with local governmental

officials about the project can be interpreted in several ways. It might be that some of those individuals who have power in the local government make all their input inconspicuously through this channel and do not participate in the hearing process, since their interests are adequately represented in the official position of the local government toward the project. If this is the case, then the position of the local government and the concerns expressed at the public hearing might represent inputs from different segments of the public. In a situation where conflict over the project exists, this possibility should be investigated carefully.

In any case, the SDHPT should publicize the position of the local government toward the project and make the public aware of the role of local officials in project decisionmaking. The public should also be aware that they can have a role in project decisionmaking through inputs to local governmental officials. Such a strategy would make the public aware that the SDHPT does not make project decisions independently of local governmental support, that the SDHPT properly shifts part of the responsibility for project decisions to local officials.

SDHPT officials have their own criteria for public involvement activity which largely determines how they evaluate participation and participants. Those criteria will be discussed in Chapter 3. The findings presented in this chapter provide the SDHPT with an understanding of how the public evaluates public involvement activity and how the public evaluates the SDHPT. It will be helpful for SDHPT officials to be aware of the attitudes and opinions of the public regarding involvement activities. This knowledge is of some importance because these are the kinds of values that will be reflected in public evaluations of the SDHPT involvement process.

Summary and Recommendations

A questionnaire was administered to public participants to determine attitudes about public involvement. Information provided by District Engineers and their staffs in another survey and demographic data from this questionnaire make it reasonable to conclude that the findings can be generalized to comparable situations statewide. For these reasons, analysis of the findings can be utilized to improve the public involvement process to the benefit of both the public and the SDHPT. The findings and implications are presented below.

Persons of middle and upper socioeconomic status are overly represented at formal hearings. This implies that the formal hearing is an appropriate vehicle for communicating with this population segment which has the educational and experimental background needed to articulate concerns and to assimilate some degree of technical detail within the format of the public hearing.

The majority of persons attending a hearing tend to own a home, a business, or are employed in the project area and have not attended a highway project hearing before. This indicates that participants have a genuine interest in the proceedings and that they should be accepted as sincere public representatives.

Because middle and upper socioeconomic groups tend to be over represented at public hearings, careful assessment must be made of the degree to which inputs from the formal hearing process represent the entire project area population. Inputs from alternative activities representing other socioeconomic and ethnic groups must be considered together with the inputs from the public hearing to obtain balanced information about the concerns of all population segments.

The finding that a significant proportion of hearing participants felt that it had not been possible to determine the progress of the project points to the need for providing a continuity of information and feedback throughout the entire length of the project. A technique for monitoring this aspect of the involvement process is discussed in Chapter VI.

The finding that only about a third of the respondents felt that it was possible to get involved in the project planning process, if desired, points out a need for allocating part of the SDHPT's time and resources for educating the public about the roles that individuals and groups may take in the planning process, and encouraging participation by interested persons in positions appropriate for them.

Approximately a third of the hearing participants were not aware of their opportunity to communicate with local governmental officials about the project. The implication is that the public is not aware of the fact that the SDHPT does not make project decisions independently of local governmental support, that the SDHPT properly shifts part of the responsibility for project decisions to local officials. The SDHPT should publicize the position of the local government toward the project and make the public aware of the role of local officials in project decisionmaking.

NOTES

1. A copy of the questionnaire is available upon request from the authors.

2. L. Ellis Walton, Jr., and Jerome R. Saroff, Citizen Participation in Public Hearings in Virginia (Charlottesville, Virginia: Virginia Highway Research Council, 1971).

3. James H. Thuet, "Community Involvement in Utah, an Examination of Attitudes, Attendance, and Notification" (unpublished paper).

CHAPTER III

A SURVEY OF SDHPT DISTRICT OFFICE PUBLIC INVOLVEMENT ACTIVITIES

Introduction

The office of the District Engineer is an important part of the SDHPT organizational structure. District Engineers have key positions of control over SDHPT-related activity in their districts, and their attitudes, experiences, and preferences will be strongly reflected in the type and quantity of public involvement activities relative to a given transportation project in their district. The attitudes, experiences, and preferences of the District Engineer will also greatly influence how the input from the public that results from these activities will be treated at the district level. Consequently, the development of effective strategies for the evaluation of public involvement will be facilitated if input from District Engineers is taken into account. This input is especially important since evaluation of the effectiveness of public involvement activities will be an in-house activity of the SDHPT. If the district offices are made responsible for conducting an evaluation process and for implementing the findings, care must be taken to insure that the evaluation techniques correspond as closely as possible with the preferred practices of the District Engineers.

A survey was conducted among SDHPT District Engineers to obtain information about the techniques they currently use to obtain public involvement in transportation project planning, the techniques they would prefer to use, and their opinions and attitudes about the involvement process. The results of this survey are presented in this chapter.

Methodology

A questionnaire[1] was mailed to each SDHPT District Engineer and to the District Manager of the Houston Urban Project with a cover letter explaining the purpose of the study and a request for cooperation. A follow-up letter and another copy of the questionnaire was sent to those persons who did not respond initially. Responses were received from 19 of the 26 persons in the sample, for a response rate of 73 percent.

The distribution of job titles of those who responded to the questionnaire is shown in Table 10. Of the six questionnaires that were completed by someone other than the District Engineer, cover letters indicated that the responses represented the District Engineer's viewpoint towards the public involvement process. This, combined with the high response rate, indicates that the survey is generally representative of the attitudes and preferences of District Engineers in the SDHPT. The results of the survey are presented in the following sections.

Table 10

Percent Distribution of Job Title of Respondents
(N = 19)

Job Title	Percent
District Engineer	64
Engineer-Manager (Houston Urban Project)	5
Assistant District Engineer	11
Supervising Planning Engineer	5
Public Affairs Officer-Supervising Planning Engineer	5
District Design Engineer	5
Senior Planning Engineer	5
Total	100

Types of Public Involvement Techniques Utilized and Types of Public Involvement Techniques Preferred

Respondents were asked to list the types of public involvement techniques they currently employ in conjunction with the planning of a transportation project. A summary distribution of the responses is shown in Table 11. The most frequently used techniques are meetings with organized groups (100 percent),

Table 11

Percent Distribution of Comparison of Public Involvement Techniques Utilized and Public Involvement Techniques Preferred
(N = 19)

Technique	Percent Indicating Use	Percent Indicating Preference
Meetings with Civic, Educational, Religious, Professional, or Planning Groups	100	37
Newspaper Publicity	95	47
Public Hearings	95	10
Public Meetings	79	74
Meet with Interested Individuals	63	21
Work with Local Officials	58	37
Media Presentations	21	5
Postal Communications	21	0
Project Tours	10	0
Project Concept Conferences	5	0
Seminars	5	0
Short Courses	5	0
Public Notices	5	5
Mini-Hearings	5	0
Public Acceptance Through Job Well Done	0	5
Make Phone Number Known	0	5
Have Project Information Readily Available	0	5

newspaper publicity (95 percent), public hearings (95 percent), public meetings (79 percent), meetings with interested individuals (63 percent), and working with local officials (58 percent). Two other techniques, conducting postal communications and conducting project tours, were mentioned by 4 of the 19 (21 percent) respondents. The extensive use of public hearings, newspaper publicity, and working with local officials is to be expected, since these are activities required by the SDHPT Action Plan.

The use of a particular technique does not necessarily imply that district personnel have favorable attitudes toward them. Respondents were also asked to list, based on their own experiences, the best public involvement techniques to use in project planning. The distribution of responses to this question is shown in Table 11.

It can be seen that there are major differences between the types of public involvement techniques used in the districts and those listed as the best to use. Meetings with organized groups are used in all the districts, but slightly more than a third of the respondents (37 percent) rate this technique as preferable to others. Conducting public meetings is the most frequently mentioned preferred involvement technique. This technique was preferred by 74 percent of the respondents, which corresponds closely to the proportion of the respondents who reported using it (79 percent). The emphasis of this technique is on informal public meetings that allow relaxed discussion and interaction between SDHPT personnel and the individuals who attend the meeting. This is the only technique preferred by more than half of those responding. A major required technique, the public hearing, was ranked poorly as one of the best involvement techniques to use. Although reported as being used by 95 percent of the respondents, only 10 percent (2 respondents) reported it as one of the best techniques to use.

Negative Effects of Public Involvement Techniques

In addition to obtaining information about preferred techniques, respondents were also asked if, in their experience there had been particular public involvement techniques that produced negative results. Relatively few respondents gave negative evaluations of specific techniques. As can be seen from Table 12, negative responses were generally limited to particular aspects of specific techniques, rather than of the techniques themselves.

Table 12

Percent Distribution of Public Involvement Techniques Producing Negative Results (N = 15)

Negative Result	Percent
Special Interest Groups Which Dominate Others	27
Public Hearings Which Present Information After too Many Decisions Have Already Been Made	13
Slanted Reporting of Project Information	7
City Council Conducted Hearings Led by Uninformed Chairman	7
Complaints of too Much Red Tape	7
Confusion Arises When Several Alternatives Are Proposed Without Clear-cut Recommendations Based on Study Conclusions	7
No One Showing Up for Hearing	7
Mail-out Personal Contact Efforts Which Inadvertently Omit Someone	6
Previous Public Hearing Arrangement Whereby No Prior Public Meetings Were Held and Rigid Format Required Tedious Explanation of Procedures	13
The Policy of Taking Public Statements Without Replying Leads Some to Think Testimony Is not Being Given Serious Consideration	6
Total	100

Perceptions of the Role of Public Involvement in the Planning Process

A portion of the questionnaire was designed to obtain information about the perceptions district officials have of the interrelationships between public involvement and the project planning process. The questionnaire contained two questions relating to attitudes about the role public participation should have in the planning process. First respondents were asked which highway planning decisions, if any, the public should participate in. Second, respondents were asked which highway planning decisions, if any, the public should not participate in. The responses to these two questions are shown in Tables 13 and 14. It can be seen that there was no general consensus of opinion among respondents regarding the areas of project planning in which the public should and should not participate. In Table 13, decisions regarding location of a highway were perceived by slightly less than half (47 percent) of the respondents and decisions regarding access-interchange location were perceived by slightly less than a third (32 percent) of the respondents as areas in which the public should participate. Only one planning area, that of decisions regarding design features of the project (Table 14), was perceived as one in which the public definitely should not participate. Slightly over half (58 percent) of the respondents gave this response.

The lack of any broad consensus on the part of respondents regarding major areas where the public should and should not be involved in project planning indicates that there is no general concept at the district level of the role of public involvement in the project planning process. This lack of a general concept of the role of public involvement has direct implications for the evaluation of public involvement techniques at the district level. One of the most important implications is that, in a given situation, two district

Table 13

Percent Distribution of Highway Planning Decisions in Which the Public Should Participate (N = 19)

Category	Percent*
Highway Location	47
Access-Interchange Location	32
General Design	16
Need for Project	16
General Highway Planning (Type of Project - Environmental Effects)	10
Almost All Decisions	10
Funding of Project	10
Systems Planning	5
Corridor Design	5
Asthetics	5
Project Priorities	5
General Horizontal and Vertical Alignment	5
Scope of Project (No. of Lanes, Traffic Projections, Growth of Land Use)	5
Encouraged to Comment on All Phases	5

*Percentages do not total 100 because of multiple responses.

Table 14

Percentage Distribution of Highway Planning Decisions in Which the Public Should Not Participate (N = 19)

Category	Percent*
Design Features	58
Engineering Decisions	5
Finance Decisions	5
Technical or Professional Considerations	5
Detailed Planning	5
Items Affecting Traffic Carrying Portions	5
Pavement Structure	5
In Rare Cases, a Strictly Technical Engineering Decision	5
Choice of Materials	5
Raodway and Structure Dimensions	5
Hydraulic Analyses	5
Final Location	5
All Planning Other than Major Relocation or Design Change	5
Should not Participate in Any	5
Day to Day Design (Lane Width, Exact Ramp Location, Exact Right-of-Way Widths, Base Requirements, Pavement Type)	5

*Percentages do not total 100 because of multiple responses.

officials with different perceptions of the role of public involvement will evaluate similar outcomes of the use of the same technique quite differently. In this type of situation, there can be no consistent evaluation of public involvement relative to general, statewide standards of effectiveness.

Attitudes Toward Communicating Project Information to the Public

One section of the questionnaire dealt with attitudes toward communicating project information to the public. Respondents were asked to indicate the degree to which they would recommend particular techniques. The communication techniques mentioned and the distribution of responses are shown in Table 15.

In all instances, a large majority of respondents approved of the use of each technique in some or most projects. There was clearly a greater willingness on the part of the respondents to provide project information and to solicit involvement on some general level than there was to include the public in project decision making.

Perceptions of Public Hearings

Since public hearings are a part of the project-planning process, and since they have formed an integral part of the public involvement process, a part of the questionnaire elicited responses regarding the perceptions and attitudes of district personnel regarding public hearings. Respondents were asked to indicate the amount of agreement or disagreement with a series of statements about public hearings and their utility. The statements and distribution of responses to them is shown in Table 16.

The respondents generally agreed that public hearings are beneficial for determining if additional project study is needed (89 percent favorable), are

Table 15

Attitudes Toward Communicating Project Information to the Public
(N = 19)

Statement	Recommend Technique for Most Projects	Recommend Technique for Some Projects	No Opinion Regarding Technique	Technique Has Little Value	Recommend Technique Not be Used
Correspond with proprietors and residents within a specified distance of the proposed location of a highway project during project planning.	16%	74%	-0-%	10%	-0-%
Communicate directly with local and neighborhood groups expressing a desire to secure their involvement in highway project planning.	47%	53%	-0-%	-0-%	-0-%
Make efforts to contact and promote participation of minority groups that may be affected by project planning.	53%	42%	-0-%	5%	-0-%
Arrange for relevant project information to be available for public inspection at locations and times convenient to the public.	95%	5%	-0-%	-0-%	-0-%
Issue news releases before and/or after meetings with interested organizations.	84%	5%	11%	-0-%	-0-%
Provide spot announcements on radio and television media regarding the highway project.	47%	47%	6%	-0-%	-0-%
Schedule meetings at a time to promote maximum public attendance and participation.	89%	11%	-0-%	-0-%	-0-%
Post notices of pending meetings within the study area.	58%	32%	-0-%	10%	-0-%

Table 16

Attitudes About the Benefits of Public Hearings (N = 19)

Statement	Strongly Agree	Tend to Agree	No Opinion	Tend to Disagree	Strongly Disagree
A public hearing is beneficial for determining if additional project study is needed.	26%	63%	0	11%	0
A public hearing is beneficial for determining if additional public meetings are needed.	5%	47%	0	42%	6%
A public hearing is beneficial for clarifying public misconceptions about a project.	26%	58%	0	11%	5%
A public hearing is beneficial for developing public attitudes and opinions about a proposed project.	0	63%	0	32%	5%
A public hearing is beneficial for developing public awareness of systems planning.	21%	26%	5%	42%	6%
A public hearing is beneficial for developing public awareness of project planning.	32%	47%	0	16%	5%
A public hearing is beneficial for developing public confidence in the SDHPT's processes and procedures.	32%	26%	16%	21%	5%
A public hearing is beneficial for ensuring that the participation of political activists is balanced by the participation of the general citizenry.	16%	21%	5%	53%	5%
Public meetings are beneficial for ensuring that ideas from people outside the SDHPT are carefully considered beginning early in the project planning process.	58%	42%	0	0	0

beneficial for clarifying public misconceptions about a project (84 percent favorable), and are beneficial for developing public awareness of project planning (79 percent favorable). Slightly less than three-fourths of the respondents (63 percent) felt that public hearings are beneficial for developing public attitudes and opinion about a proposed project, and beneficial for developing public confidence in the SDHPT's processes and procedures (58 percent favorable). Respondents were roughly equally divided about whether public hearings are beneficial for determining if additional public meetings are needed (52 percent favorable), and are beneficial for developing public awareness of systems planning (47 percent favorable). Slightly more than one-third of the respondents (37 percent) felt that public hearings are beneficial for ensuring that the participation of political activists is balanced by the participation of the general citizens.

In contrast to the divided opinion about public hearings, 100 percent of the respondents agreed that public *meetings* are beneficial for ensuring that ideas from people outside the SDHPT are carefully considered beginning early in the project planning process. This indicates more general preference on the part of respondents for less formal, more personal interaction with interested individuals than for the more formal, sometimes confrontational interaction of public hearings.

SUMMARY AND RECOMMENDATIONS

Summary

The district engineers were selected for interviews because practical application of evaluation findings will be limited to the degree that the district engineers agree with the evaluation criteria used. If the district

offices are made responsible for administering the evaluation process also, input is necessary to insure that the evaluation methodologies are in a format that facilitates their use by district office personnel.

The respondents indicated that meetings with organized groups, newspaper publicity, public hearings, public meetings, meeting with interested individuals, and working with local officials are the most frequently used involvement techniques. The most preferred technique is a public meeting that allows relaxed discussion and intereaction. Meetings with civic, educational, religious, professional, or planning groups, newspaper publicity, and working with local officials are the three other preferred categories of involvement. It is reasonable to expect that these preferred activities will receive more positive evaluations by SDHPT officials.

Relatively few respondents identified negative results from public involvement efforts. No involvement category was categorized as having completely undesirable results. Also noteworthy is the fact that none of the points made indicate that public involvement techniques hinder SDHPT planning. Most of the comments described inconvenience or negative effects for the public.

The data indicate that SDHPT evaluations will be more positive toward public involvement in decisionmaking that involves non-engineering matters and less positive toward public involvement that involves engineering criteria. There is clearly a greater willingness on the part of the respondents to provide project information and solicit involvement on a general level than there is to include the public in decisionmaking processes. The respondents tended to downplay the attributes of public hearings that are supposed to accrue to the SDHPT; and then evaluated citizen benefits resulting from public hearings more highly. There was strong support for use of public meetings to secure public input. On balance, the data indicate that there is a preference for less formal, more personal interaction with interested citizens.

Recommendations

There seems to be no general concept at the SDHPT district level of the role of public involvement in the project planning process. In a given situation, two district officials with different perceptions of the role of public involvement will evaluate similar outcomes of the use of the same technique quite differently. In this type of situation, there can be no consistent evaluation of public involvement relative to general, statewide standards of effectiveness.

If this is correct, then additional SDHPT policy statements to supplement the SDHPT Action Plan should delineate in some detail the role of the public involvement process in transportation planning. These policy statements can serve as guidelines for district personnel to use in integrating input from the public involvement process into the project planning process. In addition, it is recommended that the SDHPT sponsor some type of training program for the personnel who administer the public involvement programs at the district level so that they can be given the most effective and efficient means of utilizing public involvement in project planning.

Notes

1. A copy of this questionnaire is available upon request from the authors.

CHAPTER IV

APPROACHING THE PROBLEMS OF EVALUATING PUBLIC INVOLVEMENT TECHNIQUES

The public involvement process is designed to incorporate public interests and needs into the planning of a new transportation project or major facility alteration. One of the major objectives of this process is to provide the widest possible opportunities for individuals and groups to make known their particular concerns regarding a proposed project. Another related major objective is to have balanced, representative input from all types of citizen interests. Achievement of these objectives requires some means of evaluating the effectiveness of the involvement process in eliciting inputs from all segments of the public and some means of analyzing the utility of various types of involvement techniques. Generally, the problems involved in such evaluation and analysis consist of a very large number of interacting variables, many of which defy quantification. This type of situation can be approached efficiently by means of systems analysis. The purpose of the systems approach is to develop methods, mathematical or otherwise, to deal systematically and rationally with the quantifiable parameters of a problem and to provide a clear understanding of the situation at hand as an aid to the decision maker for subjectively evaluating the intangibles which are present in most real problems. A systems approach to evaluating public involvement techniques is presented in this chapter.

Basic Steps in the Systems Analytic Approach

Systems analysis involves the process of separating or breaking up a whole system into its fundamental elements or component parts. Further, a detailed examination of the system is made to understand its nature and to determine

its essential features.[1] In analyzing a problem by means of systems analysis, it is useful to consider the following classification of elements:

1. *A set of decision and state variables.* The decision variables are those over which the analyst has complete control and which he can manipulate at will. The state variables are those which are dependent on the decision variables and which, consequently, cannot be directly controlled by the decision maker. Often, the classification of variables into decisions and states is an arbitrary one. However, once they have been so stratified, their behavior follows the stated pattern. This element is basically in the analysis phase of the problem solution and the significance of each variable--that is, how sensitive the problem is to its settings--as well as whether or not the variable is quantifiable must be ascertained in this stage.

2. *An optimization model.* This solution element is necessary for understanding the problem at hand. It involves both analysis and synthesis and consists of the development of a conceptual model which is sufficiently analogous to the real problem but which, on the other hand, is simple enough to be amenable to quantitative analysis.

3. *A measure of effectiveness.* Called the objective function, this measure is formulated as a means for evaluating the degree of success or failure attained in fulfilling the problem goals. It relates various decision and state variables for the expressed purpose of ranking the outcome of the different decision sets.

4. *Generation of alternatives and optimal solution.* After the problem has been formulated quantitatively, the sets of decisions arrived at following a rational, systematic plan are evaluated by means of the objective function, and the one producing the most desirable results is selected. The different sets of decisions are the alternative plans of action and the selection of the most desirable outcome constitutes the optimization phase of the problem solution; the decision policy producing the best results is the optimal policy. Frequently, a system cannot be completely optimized. Near optimal results are often extremely valuable, especially when the objective function is not too sensitive to changes in the values of the decision and state variables near the optimum. This phase of problem solution is primarily a design phase.

5. *Policy implementation.* This step involves the carrying out of the optimal policy into the real physical situation. It constitutes, in fact, the realization of the objective and the only reason for having gone through the previous four steps. Usually, because of additional knowledge gained or because conditions change, the analyst finds it necessary to recycle the process by returning to one of the previous steps. This recycling is required in adaptive or learning processes where newly acquired data permit the system to refine itself and to adapt to a changing environment.[2]

This classification scheme will be used in the systems analysis of the public involvement process. However, step 4, generation of alternatives and optimal solution, and step 5, policy implementation, are properly functions that can only be carried out in the field and will differ somewhat for each particular project. Therefore, these steps will not be discussed in this analysis.

The Public Involvement System

The first step in the analysis is to delineate the system to be considered. In the simplest terms, a system is a set of objects of any kind together with relationships between the objects and/or between their qualitative and quantitative attributes.[3] For purposes of this analysis, the public involvement system will consist of two components as shown in figure 1. One component is the subsystem of activities carried out by the Public Affairs Officer and his staff in processing information about a proposed project. The second component of the system is the subsystem of public concerns about the project. The two subsystems are related primarily through the public involvement process, which can be conceptualized as an information flow and feedback process. The major input to the system is information detailing the proposed project, and the major system output is a summary evaluation of the public concerns regarding the proposed project. When the system is defined in this manner, the public involvement process consists of the flow of information between the two subsystems. Similarly, maximizing this information flow is a major systems goal.

In defining the system in this manner, it is recognized that the public involvement process has been greatly simplified and that several organizational elements have been excluded from consideration. This simplification is needed

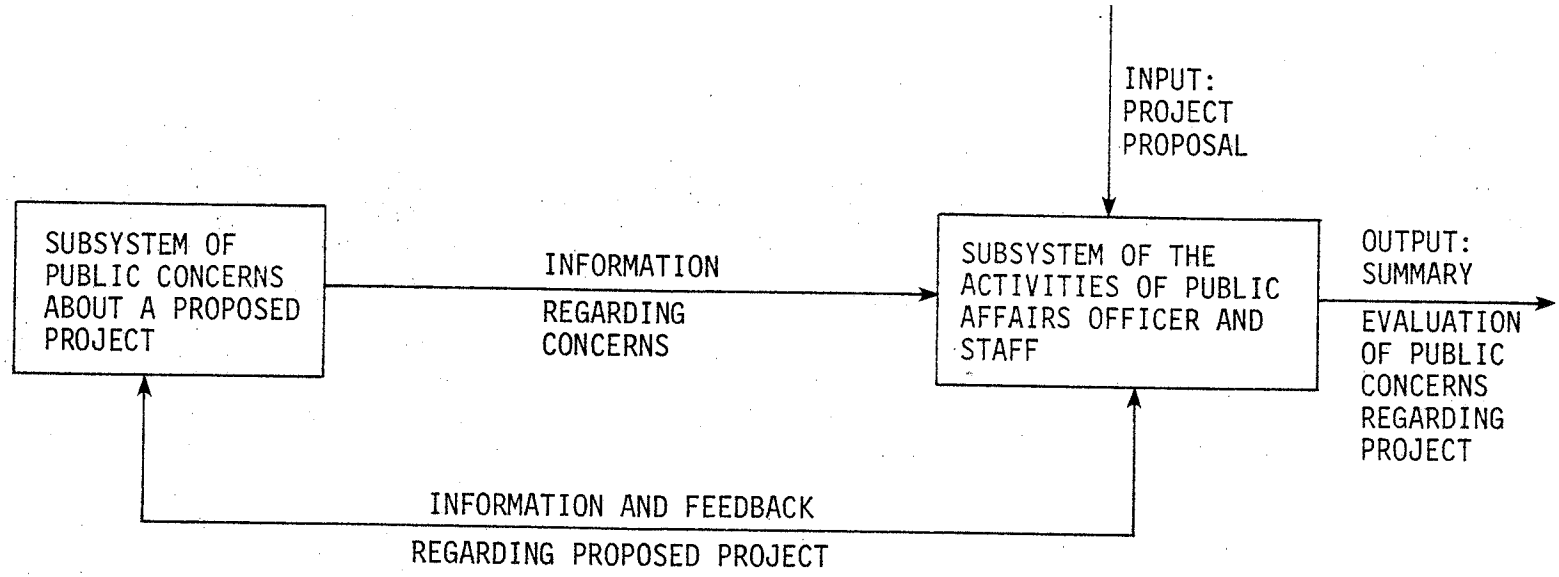


Figure 1. Public Involvement System

to concentrate on the essential aspects of public involvement, especially those that can be quantified and evaluated in an objective fashion. Other components of public involvement, such as the distribution of social power, have not been included in the systems model because they cannot be directly quantified for purposes of evaluation, and because they are of secondary importance when considering the effectiveness of different types of public involvement techniques.

The Set of Decision and State Variables for the System

The variables which the public affairs officer has complete control over are the types of public involvement techniques that are utilized and the intensity with which each technique is applied in a particular set of circumstances. These variables, then, are the set of decision variables for the public involvement system. The state variables for the system can be conceptualized as the set of ways an individual or group can be classified with respect to involvement after a particular involvement technique has been employed. In this respect, there are three major categories of outcome: (1) the individual or group receives the information regarding the project the public affairs officer intended to disseminate, or does not receive it; (2) the individual or group provides feedback regarding project concerns to the public affairs subsystem or fails to provide such feedback (that is, the individual or group *becomes involved*, or *fails to become involved*); and (3) an individual or group feels that their experience with the involvement process is either satisfactory or unsatisfactory. These are variables which depend on the types of involvement techniques employed by the public affairs officer but which cannot be directly controlled once a particular technique is used.

The Optimization Model for the Public Involvement System

The set of state variables defined above can be further broken down and ordered hierarchally to form a relevance tree of possible outcomes with regard to involvement. Relevance trees are used to analyze systems or processes in which distinct levels of hierarchy can be identified. They are developed by carrying out successive identification of components at progressively lower levels.[4] Public involvement is clearly a hierarchical process. An individual must be provided information about a proposed project before he can participate in the public involvement process. He must have some means of entering the involvement process before he can provide feedback about his concerns. Finally, he must become involved in order to evaluate the involvement process. The hierarchical ordering of all the alternative outcomes forms a relevance tree that can be used as an optimization model of the public involvement system.

A relevance tree is shown in figure 2. It has four levels and shows five feasible outcomes from employing a particular involvement technique. In order of increasing desirability, these outcomes are as follows:

1. An individual is not informed about the proposed project.
2. An individual is informed about the project, wants to provide feedback, but is unable to do so.
3. An individual is informed about the project, but does not want to provide feedback.
4. An individual is informed about the project, provides feedback, but is not satisfied with his involvement.
5. An individual is informed about the project, wants to give feedback, gives feedback, and is satisfied with his involvement.

In this relevance tree ordering, a distinction is made between those persons who do not feel that the impact of the proposed project is of sufficient importance to take the effort to give feedback (outcome 3) and those

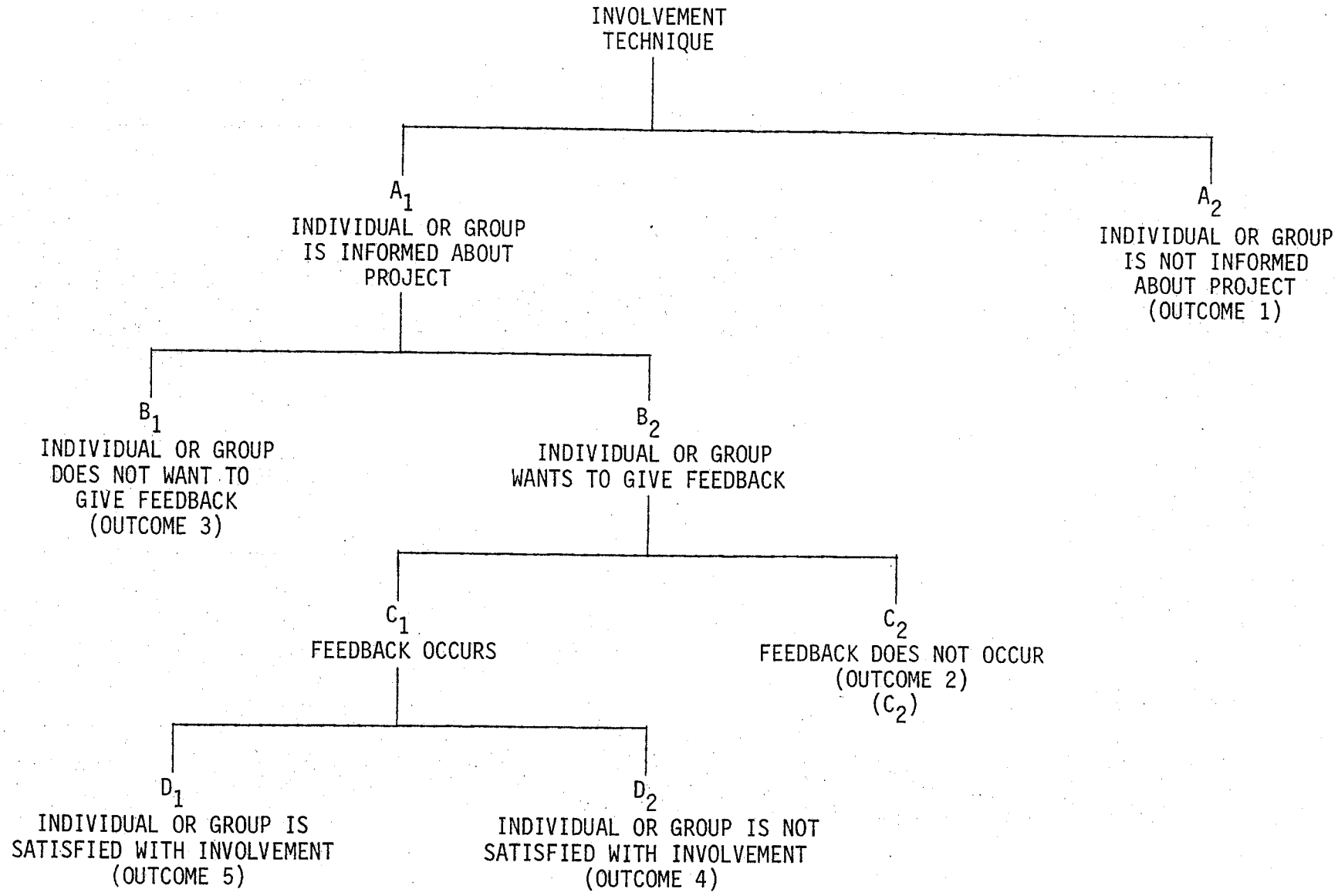


FIGURE 2. RELEVANCE TREE OF THE PUBLIC INVOLVEMENT PROCESS.

persons who want to express their concerns about the impact of the project but are unable to do so (outcome 2). For example, a person who does not want to take the time to attend a public hearing to express his concerns would be placed in outcome 3, while a person who wanted to express his concerns, but is unable to attend a hearing, would be classified in outcome 2.

The Measure of Effectiveness

In relevance tree analysis, it is frequently possible to assign numerical weights to the branches, which can be used to obtain quantitative estimates of the relative importance of elements on the lower levels of the tree. In the case of evaluating the effectiveness of public involvement techniques, the primary concern is assigning a set of weights to the 5 outcome categories that indicate the relative effectiveness of a particular technique in producing each outcome. One of the simplest and most straightforward quantitative measures in this instance is the percentage of the target population that is classified into each distinct outcome. The rationale for using these percentages as weights of importance is as follows.

The relevance tree for the public involvement system presents an exclusive and exhaustive ordering for possible outcomes of the public involvement process. After a particular involvement technique has been employed, every individual or group in the target population can be placed in 1 and only 1 of the 5 outcome categories on the relevance tree. The use of an ideal public involvement technique would produce a situation in which everyone in the target population could be placed in outcome 5. That is, as a result of using the technique, 100 percent of the target population was informed about the project, provided feedback about their concerns, and was satisfied with

their involvement experience. Thus, the relative effectiveness of an involvement technique can be evaluated primarily by the percentage of the population who are categorized as belonging in outcome 5, and secondarily by the distribution of percentages of persons placed in the other 4 categories. For example, given two involvement techniques, the more effective is the one that produces the highest percentage of population in outcome 5.

If two involvement techniques produce results that place the same precentage of the target population in outcome 5, then the more effective technique is the one that results in the greater percentage of the population in outcome 4.

It is also possible to evalute the effectiveness of involvement techniques in terms of how little they contribute to negative results. In this approach, the ideal involvement technique is one in which none of the population (0%) is placed in outcome 1 (not informed about the project). Here, given two involvement techniques, the more effective is the one which results in the smaller percentage of persons in outcome 1. This approach might be preferable in situations where no feasible technique is very successful in achieving the most desirable outcome or outcomes. Thus, if it is not possible to maximize desirable outcomes, then undesirable outcomes should be minimized.

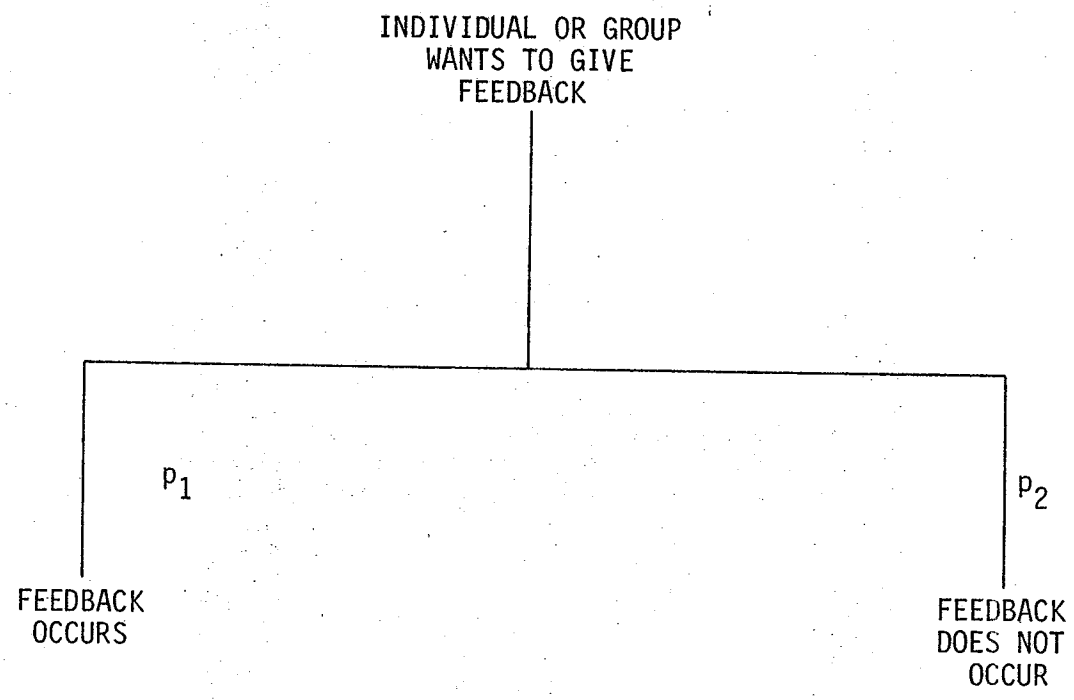
A third approach is to consider certain outcomes as "desirable" and all other outcomes as "undesirable." For example, outcome 1 (not informed about the project) and outcome 2 (unable to provide feedback) may be classified as "undesirable outcomes" and outcomes 3, 4, and 5 may be classified as "desirable outcomes." In this approach, two different techniques are equally effective if they result in the same percentage of the population in the "undesirable outcomes" category, or conversely, the same percentage in the "desirable outcomes" category. For analytical purposes, consolidating categories in this manner results in a

loss of information, and is not particularly recommended. However, this may be an effective means of presenting descriptive information about the effectiveness of various techniques after the analysis is complete.

It is also possible to use the relevance tree to measure the effectiveness of involvement techniques in achieving the preferable outcome at each level of the hierarchical process. Thus, it is possible to determine which technique is better in informing the public about a project, which technique is better at getting individuals to want to give feedback, which technique is best in getting individuals to enter the feedback process, and which technique results in more persons expressing satisfaction with their involvement. To analyze the system in this manner, each branch of the relevance tree is broken down into a set of smaller, one-level relevance trees. For example, to evaluate the effectiveness of a particular technique in eliciting feedback, the relevance tree in figure 3 is used. In this case, the measure of effectiveness is the percentage of persons who want to give feedback and who succeed in doing so.

This last approach can be used to formulate a "stepdown" strategy of maximizing public involvement. This strategy consists of maximizing the proportion of persons who follow the "desirable" branch at each hierarchical level. In this strategy, the first step is to utilize the technique or techniques that are most effective in informing the public about the proposed project, followed by the technique that results in maximizing the number of persons who want to provide feedback. The third step is to maximize entrance into the involvement process, and the final step is to utilize the technique that maximizes satisfaction with involvement. This strategy assumes that outcomes at lower levels are independent of outcomes at higher levels, which may not be the case. For example, the most effective

Figure 3. One-level relevance tree for evaluating effectiveness of an involvement technique in eliciting feedback



way to get persons to give feedback may be to tell them that project changes will be made in accordance with their wishes. However, this technique almost assures that those persons who do not get the project changes they request will be dissatisfied with their involvement experiences.

Collecting Data for the Evaluation Process

Evaluating the public involvement process requires detailed information about the target population regarding their social characteristics, the degree to which they are informed about the proposed project, and their opinions about their involvement or lack of involvement. This is especially true in the case of analyzing the effectiveness of involvement techniques by means of relevance tree analysis, because the analyst must have information sufficient to place the proper proportion of the target population into each of the 5 outcome categories. Such information can probably be collected most easily by means of sample surveys. An optimum strategy for conducting such surveys might be to distribute questionnaires to those persons who participate in a particular involvement process, and to conduct interviews with a sample of the target population. A survey technique of this kind will be discussed in the next chapter.

Summary and Recommendations

System analysis is the process of separating a whole system into its fundamental elements and is recommended for evaluating public involvement processes. For purposes of this analysis, the public involvement system consists of two elements: (1) the subsystem of activities carried out by the Public Affairs Officer and his staff; and (2) the subsystem of public concerns about the project. The public involvement process consists of the flow of

information between the two subsystems. This simplification is done in order to concentrate on the aspects of public involvement that can be quantified and evaluated in an objective fashion. There are three major categories of measurable outcomes: (1) the individual or group receives the information regarding the project that the Public Affairs Officer intended to disseminate, or does not receive it; (2) the individual or group provides feedback regarding project concerns to the public affairs subsystem or fails to provide such feedback (that is, the individual or group becomes involved, or fails to become involved); and (3) an individual or group feels that the experience with the involvement process is either satisfactory or unsatisfactory.

Public involvement is clearly a hierarchical process. An individual must be provided information about a proposed project before he can participate in the public involvement process. He must have some means of entering the involvement process before he can provide feedback about his concerns. Finally, he must become involved in order to evaluate the involvement process. The hierarchical ordering of all the alternative outcomes forms a relevance tree that can be used as an optimization model of the public involvement system. In order of increasing desirability, these outcomes are as follows:

1. An individual is not informed about the proposed project.
2. An individual is informed about the project, wants to provide feedback, but is unable to do so.
3. An individual is informed about the project, but does not want to provide feedback.
4. An individual is informed about the project, but is not satisfied with his involvement.
5. An individual is informed about the project, wants to give feedback, gives feedback, and is satisfied with his involvement.

In this relevance tree ordering, a distinction is made between those persons who do not feel that the impact of the proposed project is of sufficient

importance to take the effort to give feedback (outcome 3) and those persons who want to express their concerns about the impact of the project but are unable to do so (outcome 2).

The relevance tree for the public involvement system presents an exclusive and exhaustive ordering for possible outcomes of the public involvement process. Thus, the relative effectiveness of an involvement technique can be evaluated primarily by the percentage of the population that is categorized as belonging in each of the possible outcomes. It is also possible to evaluate the effectiveness of involvement techniques in terms of how little they contribute to negative results, i.e. the ideal involvement technique is one in which none of the population is placed in outcome 1 (not informed about the project).

The analyst must have information sufficient to place the proper proportion of the target population into each of the 5 outcome categories. Such information can probably be collected most easily by means of sample surveys. A strategy for conducting such surveys might be to distribute questionnaires to those persons who participate in a particular involvement process and to conduct interviews with a sample of the target population.

Notes

1. Rodolfo F. Aguilar, System Analysis and Design (Englewood Cliffs, New Jersey: Prentice Hall, 1973), p. 5.

2. Ibid., pp. 5-6.

3. A.D. Hall and R.E. Fagen, "Definition of System" in Modern System Research for the Behavioral Scientist, Ed. by Walter Buckly (Chicago: Aldine, 1968).

4. Joseph Martino, Technological Forecasting for Decisionmaking (New York: American Elsevier, 1972), p. 288.

CHAPTER V

PUBLIC INVOLVEMENT EVALUATION SURVEY INSTRUMENTS

Introduction

One survey instrument included in this chapter, called the random sample survey, is designed to be administered on a random basis in an area where public involvement activity has taken place and the other survey, called the public participant survey, is designed for use with people who are known to have participated in the SDHPT involvement process. The intent of the survey instruments is to determine how many people know of their opportunity to participate, how those who know find out, how many actually participate, what kinds of participation they engage in, and participants' attitudes about their participation experience.

The survey techniques for evaluating public involvement were all field tested. One public involvement questionnaire was distributed at a combined location and design public hearing held at Pearland, Texas. The other survey questions were used in surveys conducted in Houston, Waco, and Beaumont.[1] Based on these field experiences, the survey instruments presented below are recommended for use by the SDHPT in evaluating their public involvement process. The questionnaires are designed to be used either periodically to obtain progress reports on involvement or as a single survey to be conducted toward the end of a project to determine general conclusions about the involvement process.

If the self-evaluation technique (described in Chapter VI) is used in conjunction with the survey instruments, the data from each can be compared so that differences in the perceptions of participants and of SDHPT officials can be compared. For example, SDHPT officials may conclude from their self-evaluation that there is large scale resistance to a proposed project while the

survey instruments reveal that most respondents object to a particular feature of the project but favor the overall concept. The indication would be that the input segment of the public involvement process is not working well as evidenced by the lack of communication of citizens' attitudes and values. Conversely, when the compared data are similar, SDHPT officials will know the self-evaluation system is working well and that the public involvement process is working well.

The Survey Instrument for Public Participants

The survey instrument for public participants is designed to be administered to people who have participated in the public involvement process. Some of these people can be reached through their attendance at the SDHPT public hearing or meeting. Any required follow-up contacts with public hearing and/or meeting attendees can be facilitated by collecting names and addresses during registration. The SDHPT has the option of distributing questionnaires at the hearing and meetings or using the hearing and meeting registration lists to mail out or personally administer questionnaires at participants' homes.

Those people who neither attend public hearings nor meetings but participate in other activities can be contacted through mailing lists compiled at the public involvement activities which they attend.

This survey instrument is similar to the random sample survey in that both are designed to learn: (1) how participants become informed about involvement opportunities; (2) what factors motivate them to participate; (3) the number and kinds of involvement activities they participate in; and (4) their attitudes about the participation experience. In addition, both survey instruments have questions built into them that are designed to provide the requisite data for relevance tree data analysis.

The difference in the two surveys lies in their area of emphasis. A large majority of random sample survey respondents will be people who have not participated. Since a very small percentage of the population participates in public involvement activities, there is little statistical probability that many participants will turn up in a random survey. Therefore, the emphasis of the random survey will be on non-participants. In recognition of this situation, the public participant survey is designed to get input from people who do participate. By obtaining input from both sources, a balanced evaluation from participants and non-participants can be obtained.

The first ten questions in the survey instrument for public participants ask for information about respondents' public hearing and/or meeting experience. These questions are designed to determine whether the participant has public hearing and/or meeting experience, and, if so, what the experience was like. Questions 11 through 14 are intended to obtain information about other, non-hearing and non-meeting, participation activities. In order to measure attitudinal changes occuring as a result of the public involvement process, question 15 asks what the initial feeling about the project was and question 16 asks what the respondent's attitude toward the project is now. By comparing the responses to these two questions against responses to other questions in the survey, it is possible to measure the effect of various variables on attitude change toward a project (see Appendix A for example). The subsequent two questions, 17 and 18, are included to measure attitudes about the public involvement process. The questions are directed to the involvement process in general and are designed to measure attitudes regardless of the kind of involvement activities respondents engage in. Questions 20 through 24 are demographic and socioeconomic in nature so that participants' characteristics can be identified. Finally, an open-ended question is presented asking for suggestions

that would improve future public involvement efforts. The questionnaire is presented below.

Table 17

The Public Participant Survey

1. *How many highway hearings and/or meetings have you attended?*

   0[] *1*[] *2*[] *3*[] *4*[] *5 or more*[]

2. *If you have attended one or more highway hearings or meetings, have you usually favored the project(s)?* *Yes* [] *No* []

3. *Have you spoken at a highway hearing or meeting?* *Yes* [] *No* []

4. *How did you find out about the highway hearing(s) and/or meetings you attended? (Check all that apply.)*

   [] *Highway Hearings*
   [] *Highway Department Handouts*
   [] *Radio*
   [] *Newspapers*
   [] *TV*
   [] *A Friend*
   [] *Community Meetings*
   [] *Direct Mail*
   [] *Calls to Highway Department*
   [] *Legal Advertisement*
   [] *Organization (please give name)* _____
   [] *Other (please describe)* _____

5. *Did you attend this public hearing or meeting as a representative of an organization?*

   Yes [] *No* []

6. *If as a member or representative of an organization, were you a/an*

   1) Officer []
   2) Board Member []
   3) Committee Chairman []
   4) Other [] *(please describe)* _____

7. *Please check reasons for attending this hearing or meeting:*

[] *To Listen*

[] *To Make a Statement*

[] *To Ask Questions*

[] *Other (please describe)* _____

_____

8. *What other public hearings or meetings have you attended?*

[] *City Council Hearings*

[] *County Commissioners*

[] *Planning and Zoning*

[] *School Board*

[] *Other (please describe)* _____

_____

[] *None*

9. *How far did you travel to attend this highway public hearing or meeting (approximately)?*

[] *Less than 1 mile*

[] *1-2 miles*

[] *2-3 miles*

[] *3-4 miles*

[] *4-5 miles*

[] *More than 5 miles*

10. *How well did the Highway Department conduct the hearing or meeting?*

[] *Good*

[] *Fair*

[] *Poor*

[] *Other*

Why?

11. *Have you attended any other meetings concerning the highway project?*

Yes [] *No* []

12. *If yes, were representatives from the Highway Department at the meeting?*

Yes [] *No* []

13. *How well were the meetings conducted?*

[] *Good*

[] *Fair*

[] *Poor*

[] *Other*

Why?

14. *Please indicate any other activities you took part in that were directly related to this highway project. (Check all that apply.)*

[] *Voting*

[] *Sending letters/telegrams*

[] *Phoning people about the project*

[] *Other (please describe)* _____

_____

15. *What was your feeling about the highway project when you first heard about it?*

[] *Strongly Approved* [] *Disapproved*

[] *Approved* [] *Strongly Disapproved*

[] *Uncertain or No Opinion*

16. *What is your feeling about the project now?*

[] *Strongly Approved* [] *Disapproved*

[] *Approved* [] *Strongly Disapproved*

[] *Uncertain or No Opinion*

17. *Do you believe that you have had any influence on the project plans?*

Yes [] *No* [] *Don't Know* [] *Uncertain* [] *(please explain)*

_____

_____

_____

18. *Based on your experience with this highway project, choose one of the answers below and write the corresponding number in the box in front of the question.*

1. *I strongly agree*
2. *I tend to agree*
3. *I have no opinion*
4. *I tend to disagree*
5. *I strongly disagree*

[] *The highway project information I have received has been consistent and accurate.*

[] *If desired, it has been possible to personally communicate with highway officials about this highway project.*

[] *If desired, it has been possible to personally communicate with local officials about this highway project.*

[] *If desired, it has been possible to get directly involved in highway project planning.*

[] *The public has been well represented by those citizens who are participating in highway project planning.*

[] *Attendance at meetings about this highway project has been small enough to allow everybody to participate, if desired.*

[] *It has been possible to determine the progress of this highway project when desired.*

[] *Highway officials have been willing to make highway project planning changes when requested by citizens.*

[] *Local, elected officials have been willing to make highway project planning changes when requested by citizens.*

[] *The public hearing process has had an influence on the proposed project planning.*

[] *There was enough time to prepare for the highway hearing.*

19. *Occupation (please be specific)* _____

20. *Do you own residence* [] *or rent* []*?*

21. *Educational level attained:*

[] *Finished Grade School* [] *Finished College*

[] *Finished High School* [] *Graduate or Professional School*

[] *Some College*

22. *Which of the following applies to you?*

a. [] 1. *My residence is located in project area*

[] 2. *My residence is located near project area*

[] 3. *My residence is located some distance from project area*

b. [] 1. *I own a business in the project area*

[] 2. *I own a business near the project area*

[] 3. *I own a business some distance from project area*

[] 4. *Does not apply to me*

c. [] 1. *I am employed in the project area*

[] 2. *I am employed near the project area*

[] 3. *I am employed some distance from the project area*

[] 4. *Does not apply to me*

23. *Are you Male* [] *or Female* []*?*

24. *What suggestions do you have for conducting public participation efforts in the future? (Leave adeuqate space for narrative response.)*

Data for Relevance Tree

In order to use relevance tree analysis, certain items of information about respondents are needed: 1) whether or not respondent was informed about project; 2) whether or not informed respondent wants to give feedback; 3) whether or not feedback occurs; and 4) whether or not respondent is satisfied with involvement after feedback occurs.

Respondents to the survey instrument for public participants can be categorized in the affirmative for numbers 1, 2, and 3 in the preceding paragraph. Survey questions 10, 13, 17, and 18 provide ample opportunity to determine the proper category for number 4 in the preceding paragraph. Because the necessary relevance tree data is automatically provided through the use of the questionnaire, no extra preparation time or data gathering cost need be incurred to conduct relevance tree analysis.

Introductory Letter for Questionnaire

A cover letter introducing the SDHPT and explaining the purpose of the questionnaire will be helpful in getting people to respond. The exact wording of the letter will vary according to the manner in which the questionnaire is going to be administered. An example is shown below:

PUBLIC PARTICIPATION SURVEY

The State Department of Highways and Public Transportation is conducting an evaluation of public participation in the proposed _____ (name of transportation project). We are trying to learn more about involving the public in this transportation project and in future transportation projects, and to do this, we need first-hand information from people like you.

Please fill out this questionnaire at your earliest convenience and mail it in the attached stamped, self-addressed envelope. Your responses will be treated confidentially. We greatly appreciate your considerate cooperation.

If you have any questions please contact:

Name, Address, and Phone Number
of Public Affairs Officer

The Random Sample Survey Instrument

By selecting a random sample of respondents comprising a particular minimum proportion of the project area population, it will be possible to determine with only a 5% probability of error, attitudes of the residents of the project area. The first thing to determine is what proportion of the project area population is aware of their opportunity to participate. Those who know of their right to participate can be asked to answer additional questions about their involvement behavior, if any. Those who are unaware of their right to participate can be asked questions designed to determine why they are uninformed. By finding out how the former group became informed and by finding out if faulty notification techniques are the cause of the latter group's ignorance, the SDHPT will have a better understanding of their role in involving people in the public participation process.

Having learned how many people know of their opportunity to participate, the next step is to learn who did and did not actually participate. Those who did not choose to participate can be asked questions designed to elicit their reasons for not participating. If the reasons are subject to the SDHPT's control, they can be analyzed and, if possible, corrected. If the reasons are non-SDHPT related, for example, a respondent has no interest, no further effort need be exerted to identify the problem.

Those people who participated can be asked to idenfity the kinds of involvement in which they engaged. By identifying each category of involvement and acquiring participants' comments about each of these involvement categories, a better understanding of the relative benefits and costs of each kind of involvement will be gained. It may also be possible to determine under which conditions each kind of involvement is most beneficial.

Finally, a general analysis of participants' attitudes about their participation experience can be obtained. This attitude analysis includes identifying participants' feelings about the project before and after participating, asking participants to evaluate selected ingredients of the involvement process, and soliciting general comments about ways to improve the involvement process.

Table 18

The Random Sample Survey

The first question to be asked in the random sample survey is: *1. Are you aware of your opportunities to participate in the proposed transportation project* *Yes* [] *No* []

For those respondents answering "no" to question 1, the interviewer asks question 2 and then switches to an alternate survey form A designed to discover why respondents are not aware of involvement opportunities. This survey will be described later.

For those respondents answering "yes" to question 1, the surveyor continues with this questionnaire.

2. Do you favor the proposed transportation project?

[] *Yes* [] *Uncertain or do not know*

[] *No*

3. *Have you or any other immediate family member done any of the following?*

A. *Attended public hearing?* *Yes* [] *No* []

If no, why not? (please explain) _____

_____

_____

B. *Attended neighborhood meetings?* *Yes* [] *No* []

If no, why not? (please explain _____

_____

_____

This list should include all of the public involvement activities made available by the district since the beginning of the public involvement process for the project under consideration.

If none of the categories in question 3 is answered "yes," then the surveyor switches to alternate survey form B designed to discover why respondents did not participate. This survey will be described later.

If one or more categories in question 3 is answered "yes," the surveyor proceeds with this questionnaire.

4. *What was your feeling about the project when you first heard about it?*

[] *Strongly Approved* [] *Disapproved*

[] *Approved* [] *Strongly Disapproved*

[] *Uncertain or No Opinion*

5. *What is your feeling about the project now?*

[] *Strongly Approved* [] *Disapproved*

[] *Approved* [] *Strongly Disapproved*

[] *Uncertain or No Opinion*

6. *Do you believe you have had any influence on the project plans?*

Yes [] *No* [] *Don't Know* [] *Uncertain* [] *(please explain)*

7. *Based on your experience with this project, choose one of the answers below and write the corresponding number in the box in front of the question.*

1. *I strongly agree*
2. *I tend to agree*
3. *I have no opinion*
4. *I tend to disagree*
5. *I strongly disagree*

[] *The project information I have received has been consistent and accurate.*

[] *If desired, it has been possible to personally communicate with SDHPT officials about this project.*

[] *If desired, it has been possible to personally communicate with local officials about this project.*

[] *If desired, it has been possible to get directly involved in project planning.*

[] *The public has been well represented by those citizens who are participating in project planning.*

[] *Attendance at meetings about this project has been small enough to allow everybody to participate, if desired.*

[] *It has been possible to determine the progress of this project when desired.*

[] *SDHPT officials have been willing to make project planning changes when requested by citizens.*

[] *Local, elected officials have been willing to make project planning changes when requested by citizens.*

[] *The public hearing process has had an influence on the proposed project planning.*

[] *There was enough time to prepare for the public hearing.*

8. *Occupation (please be specific)* _____

9. *Do you own residence* [] *or rent* []*?*

10. *Education level attained:*

[] *Finished Grade School* [] *Finished College*

[] *Finished High School* [] *Graduate or Professional School*

[] *Some College*

11. *Which of the following applies to you?*

a. [] 1. *My residence is located in project area.*

[] 2. *My residence is located near project area*

[] 3. *My residence is located some distance from project area*

b. [] 1. *I own a business in the project area*

[] 2. *I own a business near the project area*

[] 3. *I own a business some distance from project area*

[] 4. *Does not apply*

c. [] 1. *I am employed in the project area*

[] 2. *I am employed near the project area*

[] 3. *I am employed some distance from the project area*

[] 4. *Does not apply*

12. *Are you Male* [] *or Female* []*?*

Table 18A

Alternate Survey Form A

Those respondents not aware of their opportunity to participate are asked the following questions after question 2 on the random sample survey is completed:

1. *How much time, on the average, do you spend each day using a newspaper, the radio, etc?*

Reading the Newspaper

____ *Don't read the newspaper*

____ *1-30 minutes*

____ *31-60 minutes*

____ *Over 1 hour*

Reading Magazines

____ *Don't read magazines*

____ *1-30 minutes*

____ *31-60 minutes*

____ *Over 1 hour*

Listening to the Radio

____ *Don't listen at all*

____ *1-60 minutes*

____ *1-3 hours*

____ *Over 3 hours*

Watching Television

____ *Don't watch at all*

____ *1-60 minutes*

____ *1-3 hours*

____ *Over 3 hours*

2. *Which newspaper(s) do you normally read at least 3 times per week? (please list)*

[] *None*

1) _____

2) _____

3) _____

3. What sections of the newspaper do you usually read? (please check your 4 favorites)

____ General news (first section)	____ Want Ads
____ Comics	____ Ann Landers or Dear Abby
____ Sports	____ Entertainment
____ Women's Section	____ Advertisements
____ Business Section	____ Other (which? ________________)

4. What radio stations do you usually listen to? Please check the one(s) you listen to at least 3 times per week, and ALSO check the time(s) you normally listen to each.

List call letters and number appropriate to area.

	Station	7-9a.m.	9a.m.-Noon	Noon-4p.m.	4-6p.m.	6-10p.m.	10p.m.-on
[]		____	____	____	____	____	____
[]		____	____	____	____	____	____
[]		____	____	____	____	____	____
[]		____	____	____	____	____	____
[]		____	____	____	____	____	____
[]		____	____	____	____	____	____
[]		____	____	____	____	____	____
[]		____	____	____	____	____	____
[]		____	____	____	____	____	____
[]		____	____	____	____	____	____
[]		____	____	____	____	____	____
[]		____	____	____	____	____	____
[]		____	____	____	____	____	____
[]		____	____	____	____	____	____

5. *What programs do you usually listen to (please rank your first 4 choices)?*

____ *None*	____ *"Top-40" Music*
____ *News*	____ *Country and Western Music*
____ *Religious Programs*	____ *Classical Music*
____ *Sports Programs*	____ *"Easy-Listening"*
____ *Talk-Shows*	____ *Other Programs*

6. *What T.V. stations do you usually watch? Please check the one(s) you watch at least 3 times per week, and ALSO check the time(s) you normally watch each.*

Station/Channel/City

		7-9a.m.	*9a.m.-Noon*	*Noon-4p.m.*	*4-6p.m.*	*6-10p.m.*	*10p.m.-on*
[]	*List appropriate letters, numbers, and city of origin*	_____	_____	_____	_____	_____	_____
[]		_____	_____	_____	_____	_____	_____
[]		_____	_____	_____	_____	_____	_____

7. *Do you normally read leaflets left at the door of your residence?*

[] *Always* [] *Sometimes*

[] *Almost Always* [] *Never*

8. *Do you normally read advertisements that arrive in the mail?*

[] *Always* [] *Sometimes*

[] *Almost Always* [] *Never*

9. *Do you normally read billboards within the city limits?*

[] *Always* [] *Sometimes*

[] *Almost Always* [] *Never*

10. *Do you think that advertising the public involvement process would encourage you to participate?*

Yes [] *No* [] *Sometimes* [] *Unsure* []

11. *Are you aware of any promotional activities in the past year to encourage public involvement in transportation planning?*

Yes [] *No* []

12. *Occupation (please be specific)* _____

13. *Do you own residence* [] *or rent* []*?*

14. *Educational level attained?*

[] *Finished Grade School* [] *Finished College*

[] *Finished High School* [] *Graduate or Professional School*

[] *Some College*

15. *Which of the following applies to you?*

a. [] 1. *My residence is located in project area*

[] 2. *My residence is located near project area*

[] 3. *My residence is located some distance from project area*

b. [] 1. *I own a business in the project area*

[] 2. *I own a business near the project area*

[] 3. *I own a business some distance from the project area*

[] 4. *Does not apply*

c. [] 1. *I am employed in the project area*

[] 2. *I am employed near the project area*

[] 3. *I am employed some distance from the project area*

[] 4. *Does not apply*

16. *Are you Male* [] *or Female* []*?*

The preceding questionnaire has been used recently and proven highly successful in helping to identify ways to better inform people about public services. The responses to this questionnaire will help the SDHPT identify mechanisms for informing people that may have been overlooked or not exploited with maximum effort.

Table 18B

Alternate Survey Form B

Those respondents who are aware of their opportunity to participate but decline to get involved are asked the following questions after question 3 in the random sample survey is completed:

1. *Would you favor increased public expenditures for city streets?*

   Yes [] *No* [] *No Opinion* []

2. *Would you favor increased expenditures for public transit?*

   Yes [] *No* [] *No Opinion* []

3. *Would you favor increased public expenditures for urban highways?*

   Yes [] *No* [] *No Opinion* []

4. *Do you feel that residents here are becoming more closely tied to this residential area, or are they becoming less closely tied to the area?*

   [] *More Closely Tied*

   [] *Less Closely Tied*

   [] *No Opinion*

5. *Do you feel that you, as a member of an ethnic group, are becoming more closely tied to the ethnic group now than in the past?*

   Yes [] *No* [] *Not Applicable* []

6. *It does not matter what the outcome is concerning the proposed project, the interests of the average person don't matter.*

   [] *Strongly Agree* [] *Disagree*

   [] *Agree* [] *Strongly Disagree*

   [] *No Opinion*

7. *A leader must do what those he represents wish, rather than what he personally believes to be correct.*

[] *Strongly Agree* [] *Disagree*

[] *Agree* [] *Strongly Disagree*

[] *No Opinion*

8. *Fewer personal relationships and contacts with other people in the local residential area are essential in life today than in the past.*

[] *Strongly Agree* [] *Disagree*

[] *Agree* [] *Strongly Disagree*

[] *No Opinion*

9. *The most rewarding organizations a person can belong to are local, neighborhood organizations serving local needs.*

[] *Strongly Agree* [] *Disagree*

[] *Agree* [] *Strongly Disagree*

[] *No Opinion*

10. *No doubt many persons outside the local residential area are capable people, but when it comes to choosing a person to represent local interests, I prefer someone who is well-established in the neighborhood.*

[] *Strongly Agree* [] *Disagree*

[] *Agree* [] *Strongly Disagree*

[] *No Opinion*

11. *Do you belong to any organizations (including church)? (please list)*

_____

_____

_____

_____

12. *Do you presently hold an office in one or more of these organizations?*

None [] *1* [] *2* [] *3* [] *4+* []

13. *Do you think that people working in the following institutions are responsive to individuals like yourself?*

In state government?	*Yes* []	*No* []	*No Opinion* []
Federal government?	*Yes* []	*No* []	*No Opinion* []
Banks?	*Yes* []	*No* []	*No Opinion* []
Public schools?	*Yes* []	*No* []	*No Opinion* []
Police headquarters?	*Yes* []	*No* []	*No Opinion* []
Unions?	*Yes* []	*No* []	*No Opinion* []
Welfare agencies?	*Yes* []	*No* []	*No Opinion* []

14. *Do you belong to any organizations that neighbors also belong to?*

Yes [] *No* [] *Don't Know* []

15. *Do you help neighbors when needed?*

Yes [] *No* [] *Don't Know* []

16. *Do you contact city agencies to express concern about problems?*

Yes [] *No* [] *Don't Know* []

17. *Did you vote in the last presidential election? (insert candidates names)*

Yes [] *No* [] *Don't Know* []

18. *Occupation (please be specific)?* _____

19. *Do you own residence* [] *or rent* []*?*

20. *Educational level attained:*

[] *Finished Grade School*

[] *Finished High School*

[] *Some College*

[] *Graduate College*

[] *Graduate or Professional School*

21. *Which of the following applies to you?*

a. [] 1. *My residence is located in project area*

[] 2. *My residence is located near project area*

[] 3. *My residence is located some distance from project area*

b. [] 1. *I own a business in the project area*

[] 2. *I own a business near the project area*

[] 3. *I own a business some distance from the project area*

[] 4. *Does not apply*

c. [] 1. *I am employed in the project area*

[] 2. *I am employed near the project area*

[] 3. *I am employed some distance from the project area*

[] 4. *Does not apply*

22. *Are you Male* [] *or Female* []*?*

These questions have been previously used with success in identifying how much involvement orientation respondents have. If the data from this questionnaire indicate that respondents are withdrawn from community activities and socially alienated from their neighbors, it can be assumed that lack of participation is not attributable to SDHPT involvement processes. If, on the other hand, the data indicate that respondents are usually active in their neighborhood although inactive in the transportation project participation process, an attempt should be made to discover if the reason is due to matters within the control of the SDHPT.

Data for Relevance Tree

Relevance tree analysis requires four basic kinds of information: (1) whether or not respondent was informed about project; (2) whether or not informed

respondent wants to give feedback; (3) whether or not feedback occurs; and (4) whether or not respondent is satisfied with involvement after feedback occurs. All four items of information are provided in the random sample survey instrument. As with the survey instrument for public participants, the necessary relevance tree data are automatically provided through the use of the questionnaire and no extra preparation time or data gathering cost need be incurred.

Summary and Recommendations

The survey instruments provided here are recommended for obtaining input from the public regarding public involvement processes. One survey instrument, called the Random Sample Survey, is designed to be administered on a random basis and the other survey, called the Public Participant Survey, is designed for use with people who are known to have participated in the SDHPT involvement process. The surveys are intended to be used to determine how many people know of their opportunity to participate, how those who know find out, how many actually participate, what kinds of participation they engage in, and participants' attitudes about their participation experience.

The Public Participant Survey begins with 10 questions about the respondents' prior public hearing experience. Questions 11 through 14 are intended to obtain information about other, non-hearing, participation activities. In order to measure attitudinal changes occurring as a result of the public involvement process, question 15 asks what the initial feeling about the project was and question 16 asks what the respondents' attitude toward the project is now. By comparing the responses to these two questions against responses to other questions in the survey, it is possible to measure the effect of various variables on attitude change toward a project (see Appendix A for example).

The subsequent two questions, 17 and 18, are included to measure attitudes about the public involvement process. These questions are directed to the involvement process in general and are intended to measure attitudes regardless of the kind of involvement activities respondents engage in. Questions 20 through 24 are demographic and socioeconomic in nature so that participants' characteristics can be identified. Finally, an open-ended question is presented asking for suggestions that would improve future public involvement efforts.

The random sample survey has 3 sections. The first section is administered to those respondents indicating that they have been involved in the project. This section is the same as the public participant survey described above. The second section, alternate survey form A, is to be administered to respondents indicating no knowledge of their opportunity to participate. This form has been used recently and proven highly successful in helping identify ways to better inform people about public services. The responses will help the SDHPT identify mechanisms for informing people that may have been overlooked or not exploited with maximum effect.

The third section, alternate survey form B, is designed for use with respondents who know of their opportunity to take part in public involvement but decline to do so. The questions are intended to determine how involvement oriented the respondents are. If the data from this questionnaire indicate that respondents are withdrawn from community activities and socially alienated from their neighbors, it can be assumed that lack of participation is not attributable to SDHPT involvement processes. If, on the other hand, the data indicate that respondents are usually active in their neighborhood, although inactive in the transportation project participation process, an attempt can be made to discover if the reason is due to matters within the control of the SDHPT and appropriate action can be taken.

Notes

1. See P.K. Guseman and J.M. Hall, The Identification of Minority Community Leaders for Involvement in Transportation Planning (College Station, Texas: Texas Transportation Institute, Texas A&M University, Research Report 190-2, forthcoming).

   Also, preliminary data from marketing surveys in Beaumont and Waco, Texas, August, 1976 for Texas Transportation Institute Project 2-10-76-1052, sponsored by the State Department of Highways and Public Transportation.

CHAPTER VI

SDHPT SELF EVALUATION

Introduction

One of the major difficulties with conducting public involvement processes during project planning phases of transportation projects is the long time span encompassed. Maintaining continuity of involvement and public interest in projects that have an eight- to ten-year development schedule is a significant problem. The problem can be complicated by changing conditions, such as new federal and state regulations, varying economic conditions, and fluctuations in public attitudes, that require new project planning processes and/or decisions. Changes in procedures and plans can be confusing and frustrating to public participants who are not involved in day to day SDHPT district procedures and who may view such changes as arbitrary and as political manipulations. Similarly, participants, such as newcomers to the area, entering the involvement process after it has been under way for some time may find it difficult to understand waht has transpired prior to their arrival. These and other complicating factors can occur throughout the project planning process. Unless SDHPT personnel identify these kinds of conditions and address them, resentment and hostility toward the SDHPT can occur. The result may be manifest in resistence to the SDHPT and to the plans for the proposed project.

The SDHPT must monitor its involvement process and evaluate citizen input on a continuing basis to be more cognizant of public involvement problems. The techniques utilized need not be time consuming or complicated. A technique for continuously monitoring the various aspects of the involvement process and identifying possible problem areas is discussed in the following section.

A Technique for Monitoring Involvement Activities

The proposed technique consists of evaluating each involvement activity in writing, assembling the written evaluations in an organized manner so they are readily available for review, and entering data from all written evaluations on summary sheets that condense information from many evaluations on to one page (see Appendices B and C for sets of forms used in the evaluation process).

The written evaluations are done on two page Evaluation Forms that ask for information regarding the input made by public participants, the positive and negative results of the involvement activity as seen by the attending SDHPT official, and certain background information about the participants. When filled out, the Evaluation Forms are assembled and organized by categories of involvement activities identified by SDHPT district officials as being those most often used. For example, one category is involvement with civie organizations. Each time there is public involvement with a civic organization, an Evaluation Form (for example, see Figure 4) is filled out and placed with other civic organization evaluations. The success or failure of this particular kind of public involvement activity for this particular SDHPT project can be judged by reviewing the assembled civic organization Evaluation Forms.

As each civic organization evaluation is completed, data from it is transferred to a Summary Evaluation Form (for example, see Figure 5) which is a one-page document containing information from all the civic organization evaluations. By looking at the Summary Evaluation Form, a reviewer can obtain a general picture of the accomplishments of this particular kind of involvement activity.

By monitoring the two-page Evaluation Forms and one-page Summary Evaluation Forms for all 18 categories of public involvement engaged in by SDHPT officials, a comprehensive and detailed evaluation of the entire public involvement

process can be maintained for the full length of the project planning phase of a transportation project. The 18 categories of public involvement are listed below.

Identifying Public Involvement Categories

In a questionnaire administered to SDHPT district officials in January, 1976, 18 kinds of public involvement contacts were identified that district office personnel are most often involved with:

1. Civic Organizations
2. Educational Organizations
3. Religious Organizations
4. Professional Organizations
5. Planning Organizations
6. The Press
7. Television
8. Radio
9. Affected Property Owners
10. Minority Groups
11. Ad Hoc Organizations
12. Mini-Hearings
13. Fomral Public Hearings
14. Phone Calls
15. Direct Contacts
16. Contacts with Local Officials
17. Media Presentations
18. Project Tours

EVALUATION FORM

I. Organizations
A. Civic Organization

Date: _____

Name of Organization

DOMINANT RACIAL/ ETHNIC COMPOSITION	NEGATIVE RESULTS (Summary of Evaluations from Following page)	Value
1 ☐ White		☐ -2
2 ☐ Black		☐ -1
3 ☐ Mexican-American		☐ 0
4 ☐ Other _____		
MAJOR PURPOSE OF GROUP	**POSITIVE RESULTS (Summary of Evaluations from Following page)**	☐ 0
1 ☐ Industrial Development		☐ +1
2 ☐ Community Development		☐ +2
3 ☐ Community Service		
4 ☐ Other _____		
GEOGRAPHIC ORIENTATION OF GROUP		
1 ☐ Statewide		
2 ☐ Citywide		
3 ☐ Downtown		
4 ☐ Local Neighborhood		

Figure 4. Evaluation Form

NAME OF PUBLIC INVOLVEMENT CATEGORY: PAGE 2

AREA OF CONCERN	COMMENTS (Summary of Inputs Made)	SDHPT EVALUATION (SDHPT's Evaluation of Significance of Inputs Made)
NEED FOR PROJECT		
FUNDING OF PROJECT		
TYPE OF PROJECT		
HIGHWAY LOCATION		
ACCESS LOCATION		
INTERCHANGE LOCATION		
SYSTEMS PLANNING		
GENERAL DESIGN		
CORRIDOR DESIGN		
AESTHETICS		
ENVIRONMENTAL EFFECTS		
OTHER _____		

Figure 4 (continued) Evaluation Form

SUMMARY EVALUATION FORM

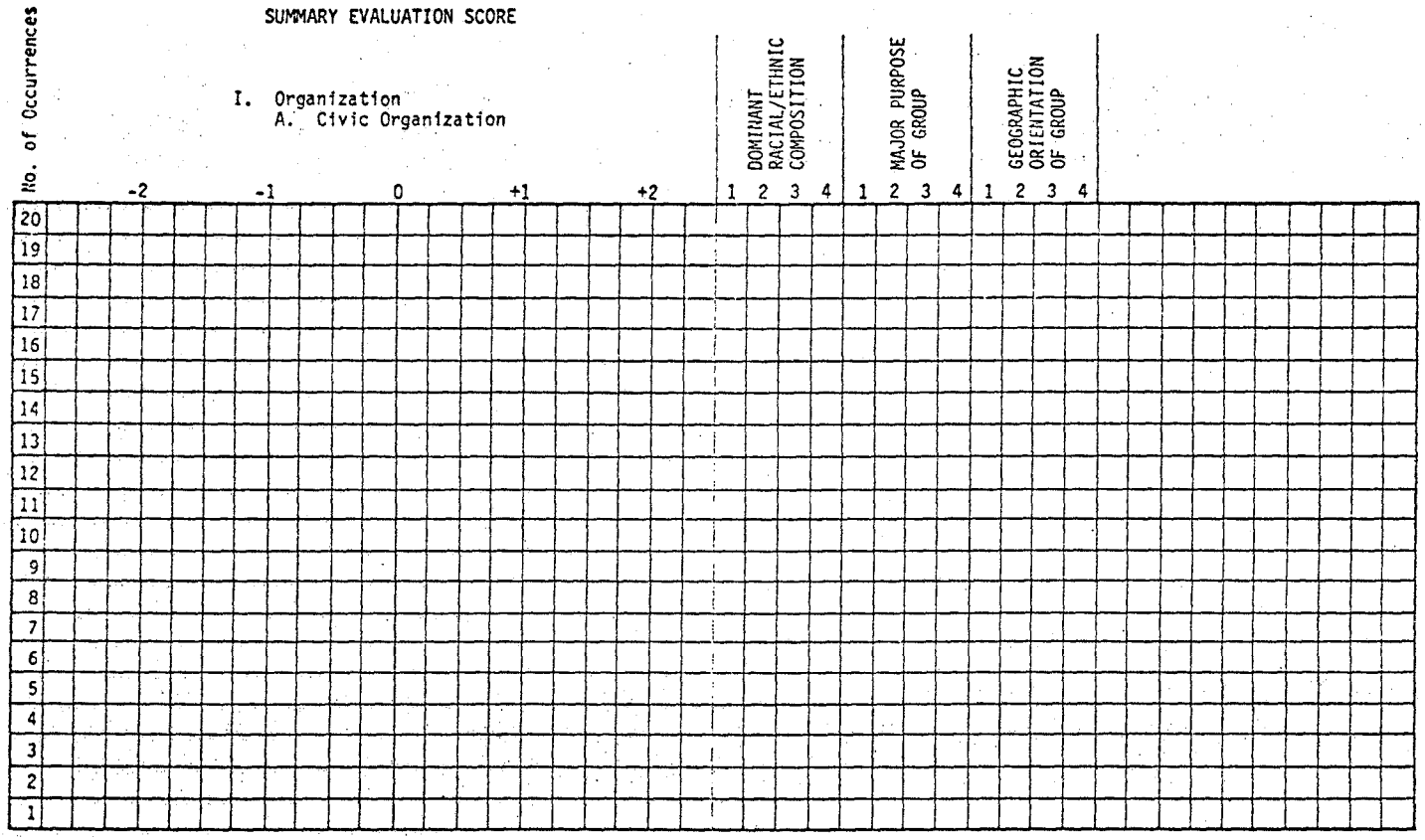


Figure 5. Summary Evaluation Form

Evaluation Form - Second Page

The second page of the Evaluation Form lists 11 areas that district officials suggest the public could be involved in. These include:

1. Need for Project
2. Funding of Project
3. Type of Project
4. Highway Location
5. Access Location
6. Interchange Location
7. Systems Planning
8. General Design
9. Corridor Design
10. Asthetics
11. Environmental Effects

It should be mentioned that none of these categories received unanimous recognition from the district officials, but all were mentioned by some officials.

The SDHPT official filling out the form notes the main inputs made by public participants relating to whichever of the 11 categories of involvement are addressed. The official also comments on his opinion of the significance of the inputs based on the context in which they were made.

Evaluation Form - First Page

The first page of the Evaluation Form varies according to the public involvement category being dealt with; however, all first pages are similar in some respects. Each provides space for a narrative summary of the negative

and the positive results of the involvement activity that are noted on page 2. In addition, all first pages include a subjective scoring column to provide a numerical value for negative and for positive results.

The narrative summary is provided so that SDHPT officials can review involvement activities quickly and easily. The numerical summary is provided so that a running total of each category of activity can be maintained and a reviewer can get a general impression of the overall progress of that involvement activity by looking at only one source of information, the Summary Evaluation Form. The numerical rating system is limited to scores of -2, -1, 0, +1, and +2. Since there is no objective way for different evaluators to assign comparable values to varying involvement activities, it seems more relevant to ask for broad judgments based on relatively few, clearly identified values thereby increasing the probability that the ratings will make meaningful distinctions. In this scheme, -2 represents an extremely negative public impact, and -1 represents any other level of negative impact. The 0 represents no impact and +1 represents any lesser positive impact than +2 which represents a very positive impact.

Categories of Public Involvement

Involvement with Organizations

The first page of the Evaluation Form differs for each of the 18 public involvement categories being evaluated. There are five public involvement categories that relate to involvement with other organizations: (1) civic organizations, (2) educational organizations, (3) religious organizations, (4) professional organizations, and (5) planning organizations. The forms for all of these categories ask that the dominant racial/ethnic composition

of the group be indicated (see public involvement forms for organizations in Figures B1-B5, Appendix B). Where more than one racial/ethnic group is potentially affected by a project, it is important that care be taken to interact with all ethnic/racial groups on an equitable basis. By recording each contact, a profile of the involvement of all ethnic/racial groups will be available. The SDHPT will be able to evaluate how successfully the various minorities are being contacted during the involvement process.

With the exception of the religious organization form, the forms ask that the evaluator indicate what the basic purpose of each organization is. This information will make it possible for the SDHPT to determine which types of organization within each involvement cateogry are being contacted. Civic organizations generally exist to encourage industrial development, community development, or community service. Even if these functions are integrated by an organization in an attempt to provide all three functions, it is probable that one of the three is emphasized and can be identified by the evaluator. The value of making an identification is the same as that of minority identification; the SDHPT will be able to evaluate how successful it is in offering the various civic organization interests access to the involvement process.

For educational organizations, the purposes listed include educational support, parent-teacher interaction, and ad hoc project interests. The same conditions apply. The importance and value of making these identifications is that the SDHPT is enabled to evaluate how successful they have been in offering various educational interests access to the involvement process. For professional organizations, purposes can include property development, community socio-economic development, and neighborhood/community maintenance. The purposes of planning organizations may include ad hoc project related planning, neighborhood improvement, city improvement, and revitalization of downtown.

Four public involvement categories relating to organizations require the evaluator to identify the geographic orientation of the group. The four categories are civic organizations, educational organizations, professional organizations, and planning organizations. Knowledge of the hierarchical level of interests being shown is one way the SDHPT can evaluate the significance a project has for other people. Also, as the involvement process progresses, the SDHPT can periodically review the Summary Evaluation Forms to determine if the hierarchical levels that previously expressed interest are still being kept informed about or being involved in the process.

Involvement with the Media

There are three public involvement categories that provide information to the public via the mass media: (1) the press, (2) television, and (3) radio (see Figures B6-B8, Appendix B). In some instances, the press and radio broadcasting have an audience of primarily one racial or ethnic group. Therefore, the form provided for each of those categories asks that the dominant racial/ethnic composition of the audience be listed. This information will be helpful in the larger metropolitan areas where communication of information must be conducted through a variety of media in order to reach an ethnically and racially diversified audience. As new developments occur or decisions are made, the SDHPT can use the forms to be assured that all relevant groups and citizens are informed and, equally important, that no groups or individuals are inadvertantly not informed.

The type of coverage provided is also of some interest for all three involvement categories. By monitoring the number and intent of editorials, analyses, and new presentations, the SDHPT will be able to identify potential information gaps caused by uneven coverage or slanted reporting. Supplemental

information and corrections can be provided to maintain a balanced perspective. By monitoring the kinds of media coverage provided over a long period of time, insight into historical reasons for attitudes toward a project and toward the SDHPT will be available. When media induced resistance or doubt is discovered to be a problem, it can be addressed by informational kinds of public involvement activities.

The time of presentation of media material has significance for radio and television coverage. Material presented on daytime shows and news broadcasts will not reach most working people. Conversely, material presented only in the evening will not be seen by those who work at night. By monitoring the distribution of times at which media presentations are made, the SDHPT will be able to identify audiences that are being missed or that require special attention. For example, as it becomes apparent that a particular neighborhood or section of a city is going to be impacted by a project, the radio station or stations that are most listened to in the area could carry the heaviest advertising and most frequent public notices regarding the project.

The form developed for the press has two other information sections. The first section is to indicate the type of publication and the second section is to indicate the geographical coverage of the publication. Knowing the frequency of printing and areas of dissemination will help the SDHPT keep informed of the project related public involvement being carried out independently of the SDHPT process. Knowledge of the content of these publications will provide the SDHPT with input about public thinking regarding the project. This will provide the SDHPT with a measure of the relative success of its public involvement process. Misinformation or lack of information as well as

positive and negative attitudes regarding the project will be exhibited. The intensity and strength with which these attitudes are felt and held will be indicated, in part, by the frequency of publication, the length of time publication is maintained, and the geographical area covered by the publication. This kind of indirect evaluation of the impact of SDHPT public involvement processes is meaningful evaluation on the part of those who subscribe to the policies of the publication. Care must be taken to assign no more or no less significance to this kind of evaluation than is justified by the public support it receives.

Involvement with Groups

Three kinds of groups often take a special interest in highway projects: (1) affected property owners, (2) minority groups, and (3) ad hoc organizations formed in response to the presence of a project (see Figures B9-B11, Appendix B). Often these groups will be difficult to differentiate. For example, in a minority neighborhood, properth owners may form an ad hoc organization to protect their investments. There is an advantage to making distinctions between groups. Most groups will have a primary interest. By identifying the primary interest of each group, the SDHPT will be able to provide the kind of information the group will be most concerned about over the full course of the project. Rather than having to contact every group every time something new occurs, the SDHPT can contact only those that are likely to be interested. This procedure reduces the number of contacts required by the SDHPT and reduces the number of demands placed on the groups. It also helps insure that those who are interested in a particular aspect of the project are not overlooked when new information regarding that part of the project becomes available.

Differentiating the groups is best done in terms of their primary interests. A minority group that is primarily concerned with protecting its property values is really interested in the impact of the project on property values and alternatives for minimizing negative impacts. A group that is concerned with the decision making process that results in project plans that have major impacts on a minority neighborhood is interested in being dealt with as an organization concerned with minority rights.

The evaluation forms for all three groups request that the dominant racial/ethnic group be identified. In addition, the major purpose of the group and the purpose of the meeting is asked for. If several meetings are required with a particular group, the information recorded will be helpful in assessing if the meetings are satisfying the needs expressed by the group. For example, if the SDHPT is interacting with an ad hoc organization that is formed out of concern for environmental impacts resulting from the project, examination of evaluation forms from prior meetings with the ad hoc group will tell the SDHPT whether or not it has actually been securing input as well as providing information. Also, the SDHPT can determine if follow-up meetings to respond to issues developed at prior meetings have actually been held, and if so, how successfully the SDHPT was able to respond to the matters in question. Finally, the forms will reveal the general condition of relationships between the SDHPT and each group and indicate where public involvement requires more emphasis.

Involvement with Public Hearings

There are two public hearing categories: (1) mini-hearings and (2) formal public hearings (see Figures B12-B13, Appendix B). Mini-hearings are suggested as a public involvement mechanism because they provide a forum for communication

that is free of the tensions and rigid requirements of the formal public hearing process. In order to monitor the source of input, the mini-hearing form provides a place to indicate the dominant racial/ethnic composition of each mini-hearing held. The SDHPT will be able to assure itself that equitable opportunity for input is being provided to each group.

The formal public hearing form is included even though there may only be one formal public hearing per project. This form is included so that formal public hearing evaluations can be collected over the course of many projects and a longitudinal record of formal public hearing evaluations can be established, if desired.

Involvement with Individuals

Three of the involvement categories identified by SDHPT officials: (1) phone calls, (2) individual personal contacts, and (3) contacts with local officials, probably occur much more frequently than other kinds of involvement. The value of recording each occurrence of these activities is dubious. Evaluation forms are provided, however, in case it becomes desirable to record these activities on a random or periodic basis (see Figures B14-B16, Appendix B). For example, during periods of more intense project activity it may be desirable to monitor the purpose of contacts and the proportion that are responded to satisfactorily. During the relatively longer slack periods of project planning there may not be enough interaction to warrent evaluation.

Involvement with Media Presentations and Project Tours

The final involvement categories are SDHPT media presentations and project tours. The forms (Figures B17-B18, Appendix B) are self-explanatory and basically intended to provide the SDHPT with a mechanism for evaluating how well they are reaching various groups of people.

The Summary Evaluation Forms

The Summary Evaluation Forms are designed to be used both horizontally and vertically (see complete set of forms in Appendix C, Figures C1 through C18). The data from each public involvement evaluation form can be recorded on one horizontal line. The overall pattern of evaluation scores, ethnic and racial involvement, and other evaluation data can be ascertained by reading the Summary Evaluation Forms vertically. There are no places for totals on the forms because evaluation of this kind does not result in a meaningful score. This kind of evaluation is simply a way to monitor activity over time. The value to the SDHPT will not be so much in the evaluation of an isolated involvement activity as in long run trends that reveal strengths and weaknesses in the involvement process. For example, if group meetings consistently receive high evaluation scores, the SDHPT will want to capitalize on that fact by relying more heavily on that kind of involvement activity. If the summary evaluation sheets reveal relatively little involvement on the part of a minority group, special efforts can be taken to rectify the situation and further monitoring will reveal whether the extra effort is successful.

While there are many benefits to conducting a self-evaluation process, there is also a possibility that because the same personnel are conducting the involvement process, some flaws overlooked in the involvement process will be overlooked during the evaluation process. To mitigate this possibility, it is desirable that people from outside the SDHPT also evaluate the involvement process. The findings from both evaluations will be informative and a comparison of the findings will reveal differences in the perceptions of the two evaluating groups. Therefore, it is recommended that the two survey evaluation instruments described in the previous chapter be used in conjunction with the above technique.

Summary and Recommendations

A technique recommended for self-evaluation of public involvement processes consists of evaluating each involvement activity in writing, assembling the written evaluation in an organized manner so they are readily available for review, and entering data from all written evaluations on summary sheets that condense information from many evaluations onto one page.

By monitoring the Evaluation Forms and Summary Evaluation Forms for all categories of public involvement engaged in by SDHPT officials, a comprehensive and detailed evaluation of the entire public involvement process can be maintained for the full length of the project planning phase of a transportation project.

The first page of the Evaluation Form provides space for a narrative summary of the negative and the positive results of the involvement activity recorded on the second page of the form. In addition, all first pages include a subjective scoring column to provide a numerical value for negative and positive results. The narrative summary is provided so that SDHPT officials can review involvement activities quickly and easily. The numerical summary is provided so that a running total of each category of activity can be maintained and a reviewer can get a general impression of the overall process of the involvement activity.

The Summary Evaluation Form is designed to be read both horizontally and vertically. The data from each public involvement evaluation form can be recorded on one horizontal line. The overall pattern of evaluation data for a particular form of participation can be ascertained by reading the summary evaluation sheet vertically. The value to the SDHPT will not be so much in the evaluation of an isolated involvement activity as in the evaluation of long-run trends that reveal strengths and weaknesses in the involvement process.

While there are many benefits to conducting a self-evaluation process, there is also a possibility that because the same personnel are conducting the involvement process, some flaws overlooked in the involvement process also will be overlooked during the evaluation process. To mitigate this possibility, it is desirable that people from outside the SDHPT also evaluate the involvement process. Therefore, it is recommended that the two survey instruments described in the previous chapter be used in conjunction with the self-evaluation process.

CHAPTER VII

SUMMARY AND RECOMMENDATIONS

In 1973, the SDHPT issued an action plan which described public involvement processes for transportation planning. Responsibility for public involvement is divided between the main office and the district offices. Although there is a history of SDHPT public involvement effort which has recently been bolstered by the Action Plan, there are no established methodologies or criteria for evaluating public involvement techniques. It is probable that some criteria exists in the minds of district officials, and it is probable that certain factors influence public perception of what constitutes good and bad involvement techniques. It is recommended that SDHPT officials accumulate and study the criteria by which their personnel and private citizens judge the quality of involvement techniques in order to make it possible to develop evaluation methodologies that have relevance for the SDHPT and for the public.

Two major tasks need to be accomplished in this study. One task is to identify and describe criteria by which to evaluate involvement techniques and the other task is to identify and describe evaluation methodologies for applying the criteria. Two sources of information are used for completing these tasks. One source is the body of literature about public participation which has been discussed in an earlier report and will not be repeated here. The other source is the attitudes and opinions of SDHPT officials and the public.

Public Attitude About Participation

A questionnaire was administered to public participants to determine attitudes about public involvement. Information provided by District Engineers and their staffs in another survey and demographic data from this questionnaire

make it reasonable to conclude that the findings can be generalized to comparable situations statewide. For these reasons, analysis of the findings can be utilized to improve the public involvement process to the benefit of both the public and the SDHPT. The findings and implications are presented below.

Persons of middle and upper socioeconomic status are overly represented at formal hearings. This implies that the formal hearing is an appropriate vehicle for communicating with this population segment which has the educational and experimental background needed to articulate concerns and to assimilate some degree of technical detail within the format of the public hearing.

The majority of persons attending a hearing tend to own a home, a business, or are employed in the project area and have not attended a highway project hearing before. This indicates that participants have a genuine interest in the proceedings and that they should be accepted as sincere public representatives.

Because middle and upper socioeconomic groups tend to be over represented at public hearings, careful assessment must be made of the degree to which inputs from the formal hearing process represent the entire project area population. Inputs from alternative activities representing other socioeconomic and ethnic groups must be considered together with the inputs from the public hearing to obtain balanced information about the concerns of all population segments.

The finding that a significant proportion of hearing participants felt that it had not been possible to determine the progress of the project points to the need for providing a continuity of information and feedback throughout the entire length of the project.

The finding that only about a third of the respondents felt that it was possible to get involved in the project planning process, if desired, points out a need for allocating part of the SDHPT's time and resources

for educating the public about the roles that individuals and groups may take in the planning process, and encouraging participation by interested persons in positions appropriate for them.

Approximately a third of the hearing participants were not aware of their opportunity to communicate with local governmental officials about the project. The implication is that the public is not aware of the fact that the SDHPT does not make project decisions independently of local governmental support, that the SDHPT shares part of the responsibility for project decisions with local officials. The SDHPT should publicize the position of the local government toward the project and make the public aware of the role of local officials in project decision making.

Survey of SDHPT District Office Public Involvement Activities

The district engineers were selected for interviews because practical application of evaluation findings will be limited to the degree that the district engineers agree with the evaluation criteria used. If the district offices are made responsible for administering the evaluation process also, input is necessary to insure that the evaluation methodologies are in a format that facilitates their use by district office personnel.

The respondents indicated that meetings with organized groups, newspaper publicity, public hearings, public meetings, meeting with interested individuals, and working with local officials are the most frequently used involvement techniques. The most preferred technique is a public meeting that allows relaxed discussion and interaction. Meetings with civic, educational, religious, professional, or planning groups, newspaper publicity, and working with local officials are the three other preferred categories of involvement. It

is reasonable to expect that these preferred activities will receive more positive evaluations by SDHPT officials.

Relatively few respondents identified negative results from public involvement efforts. No involvement category was categorized as having completely undesirable results. Also noteworthy is the fact that none of the points made indicated that public involvement techniques hinder SDHPT planning. Most of the comments described inconvenience or negative effects for the public.

The data indicated that SDHPT evaluations will be more positive toward public involvement in decisionmaking that involves non-engineering matters and less positive toward public involvement that involves engineering criteria. There was clearly a greater willingness on the part of the respondents to provide project information and solicit involvement on a general level than there was to include the public in decisionmaking processes. The respondents tended to downplay the attributes of public hearings that are supposed to accrue to the SDHPT and evaluated citizen benefits resulting from public hearings more highly. There was strong support for use of public meetings to secure public input. On balance, the data indicated that there is a preference for less formal, more personal interaction with interested citizens.

Approaching the Problems of Evaluating Public Involvement Techniques

System analysis is the process of separating a whole system into its fundamental elements and is recommended for evaluating public involvement processes. For purposes of this analysis, the public involvement system consists of two elements: (1) the subsystem of activities carried out by the Public Affairs Officer and his staff; and (2) the subsystem of public concerns about the project. The public involvement process consists of the flow of

information between the two subsystems. This simplification is done in order to concentrate on the aspects of public involvement that can be quantified and evaluated in an objective fashion. There are three major categories of measurable outcomes: (1) the individual or group receives the information regarding the project that the Public Affairs Officer intended to disseminate, or does not receive it; (2) the individual or group provides feedback regarding project concerns to the public affairs subsystem or fails to provide such feedback (that is, the individual or group becomes involved, or fails to become involved); and (3) an individual or group feels that the experience with the involvement process is either satisfactory or unsatisfactory.

Public involvement is clearly a hierarchical process. An individual must be provided information about a proposed project before he can participate in the public involvement process. He must have some means of entering the involvement process before he can provide feedback about his concerns. Finally, he must become involved in order to evalute the involvement process. The hierarchical ordering of all the alternative outcomes forms a relevance tree that can be used as an optimization model of the public involvement system. In order of increasing desirability, these outcomes are as follows:

1. An individual is not informed about the proposed project.
2. An individual is informed about the project, wants to provide feedback, but is unable to do so.
3. An individual is informed about the project, but does not want to provide feedback.
4. An individual is informed about the project, but is not satisfied with his involvement.
5. An individual is informed about the project, wants to give feedback, gives feedback, and is satisfied with his involvement.

In this relevance tree ordering, a distinction is made between those persons who do not feel that the impact of the proposed project is of sufficient

importance to take the effort to give feedback (outcome 3) and those persons who want to express their concerns about the impact of the project but are unable to do so (outcome 2).

The relevance tree from the public involvement system presents an exclusive and exhaustive ordering for possible outcomes of the public involvement process. Thus, the relative effectiveness of an involvement technique can be evaluated primarily by the percentage of the population that is categorized as belonging in each of the possible outcomes. It is also possible to evaluate the effectiveness of involvement techniques in terms of how little they contribute to negative results, i.e. the ideal involvement technique is one in which none of the population is placed in outcome 1 (not informed about the project).

The analyst must have information sufficient to place the proper proportion of the target population into each of the 5 outcome categories. Such information can probably be collected most easily by means of sample surveys. A strategy for conducting such surveys might be to distribute questionnaires to those persons who participated in a particular involvement process and to conduct inverviews with a sample of the target population.

Public Involvement Evaluation Survey Instruments

The survey instruments provided are recommended for obtaining input from the public regarding public involvement processes. One survey instrument, called the Random Sample Survey, is designed to be administered on a random basis and the other survey, called the Public Participant Survey, is designed for use with people who are known to have participated in the SDHPT involvement process. The surveys are intended to be used to determine how many people know of their opportunity to participate, how those who know found out, how many

actually participate, what kinds of participation they engage in, and participants' attitudes about their participation experience.

The Public Participant Survey begins with 10 questions about the respondents' prior public hearing experience. Questions 11 through 14 are intended to obtain information about other, non-hearing, participation activities. In order to measure attitudinal changes occurring as a result of the public involvement process, question 15 asks what the initial feeling about the project was and question 16 asks what the respondents' attitude toward the project is now. By comparing the responses to these two questions against responses to other questions in the survey, it is possible to measure the effect of various variables on attitude change toward a project. The subsequent two questions, 17 and 18, are included to measure attitudes about the public involvement process. These questions are directed to the involvement process in general and are intended to measure attitudes regardless of the kind of involvement activities in which respondents engage. Questions 20 through 24 are demographic and socioeconomic in nature so that participants' characteristics can be identified. Finally, an open-ended question is presented asking for suggestions that would improve future public involvement efforts.

The random sample survey has 3 sections. The first section is administered to those respondents indicating that they have been involved in the project. This section is the same as the public participant survey described above. The second section, alternate survey form A, is to be administered to respondents indicating no knowledge of their opportunity to participate. This form has been used recently and proven highly successful in helping identify ways to better inform people about public services.[1]

The responses will help the SDHPT identify mechanisms for informing people that may have been overlooked or not exploited with maximum effect.

The third section, alternate survey form B, is designed for use with respondents who know of their opportunity to take part in public involvement but decline to do so.[2] The questions are intended to determine how involvement oriented the respondents are. If the data from this questionnaire indicate that respondents are withdrawn from community activities and socially alienated from their neighbors, it can be assumed that lack of participation is not attributable to SDHPT involvement processes. If, on the other hand, the data indicate that the respondents are usually active in their neighborhood, although inactive in the transportation project participation process, an attempt can be made to discover if the reason is due to matters within the control of the SDHPT and appropriate action can be taken.

SDHPT Self-Evaluation

A technique recommended for self-evaluation of public involvement processes consists of evaluating each involvement activity in writing, assembling the written evaluation in an organized manner so they are readily available for review, and entering data from all written evaluations on summary sheets that condense information from many evaluations onto one page.

By monitoring the Evaluation Forms and Summary Evaluation Forms for all categories of public involvement engaged in by SDHPT officials, a comprehensive and detailed evaluation of the entire public involvement process can be maintained for the full length of the project planning phase of a transportation project.

The first page of the Evaluation Form provides space for a narrative summary of the negative and the positive results of the involvement activity

recorded on the second page of the form. In addition, all first pages include a subjective scoring column to provide a numerical value for negative and positive results. The narrative summary is provided so that SDHPT officials can review involvement activities quickly and easily. The numerical summary is provided so that a running total of each category of activity can be maintained and a reviewer can get a general impression of the overall process of the involvement activity.

The Summary Evaluation Form is designed to be read both horizontally and vertically. The data from each public involvement evaluation form can be recorded on one horizontal line. The overall pattern of evaluation data for a particular form of participation can be ascertained by reading the summary evaluation sheet vertically. The value for the SDHPT will not be so much in the evaluation of an isolated involvement activity as in the evaluation of long-run trends that reveal strengths and weaknesses in the involvement process.

While there are many benefits to conducting a self-evaluation process, there is also a possibility that because the same personnel are conducting the involvement process, some flaws overlooked in the involvement process will be overlooked during the evaluation process. To mitigate this possibiltiy, it is desirable that people from outside the SDHPT also evaluate the involvement process. Therefore, it is recommended that the two survey instruments described above be used in conjunction with the self-evaluation process.

Notes

1. See P.K. Guseman and J.M. Hall, The Identification of Minority Community Leaders for Involvement in Transportation Planning (College Station, Texas: Texas Transportation Institute, Texas A&M University, Research Report 190-2, forthcoming).

   Also, preliminary data from marketing surveys in Beaumont and Waco, Texas, August, 1976 for Texas Transportation Institute Project 2-10-76-1052, sponsored by the State Department of Highways and Public Transportation.

2. Ibid.

REFERENCES

Aguilar, Rodolfo F. System Analysis and Design (Englewood Cliffs, New Jersey: Prentice Hall, 1973).

Guseman, P.K. and Hall, J.M. The Identification of Minority Community Leaders for Involvement in Transportation Planning (College Station, Texas: Texas Transportation Institute, Texas A&M University, Research Report 190-2, forthcoming).

Guseman, P.K. Preliminary data from marketing surveys in Beaumont and Waco, Texas, August, 1976 for Texas Transportation Institute Project 2-10-76-1052, sponsored by the State Department of Highways and Public Transportation.

Hall, A.D. and Fagen, R.E. "Definition of System" in Modern System Research for the Behavioral Scientist, Ed., by Walter Buckly (Chicago: Aldine, 1968).

Martino, Joseph. Technological Forecasting for Decisionmaking (New York: American Elsevier, 1972), p. 288.

Texas Highway Department. The Action Plan of the Texas Highway Department: Process Guidelines for Systems Planning and Project Development, (August, 1973).

Thuet, James H. Effective Public Involvement in Highway Decision Making (Salt Lake City, Utah: Utah Department of Transportation, 1975).

Thuet, James H. "Community Involvement in Utah, an Examination of Attitudes, Attendance, and Notification" (unpublished paper).

Walton, L. Ellis, Jr. and Saroff, Jerome R. Citizen Participation in Public Hearings in Virginia (Charlottesville, Virginia: Virginia Highway Research Council, 1971).

Weiss, Michael E. A Study of Public Participation in Highway Planning and Decisionmaking (College Station, Texas: Texas Transportation Institute, 1974).

APPENDICES

APPENDIX A

BIVARIATE ANALYSIS OF THE PEARLAND DATA

In addition to analyzing the data from the Pearland public hearing in univariate fashion, the data were examined to determine if there were discernable bivariate relationships between variables. This analysis was conducted by constructing two-way contingency tables using selected pairs of variables from the Pearland questionnaire. A nonparametric statistic, *Pearson's coefficient of mean square contingency*, was used to measure the amount of dependence between pairs of variables. This statistic is defined as

$$R = \sqrt{\frac{T}{N + T}}$$

where T is the Chi-square statistic for the two-way contingency table, and N is the size of the sample. The minimum value of R is 0, and the maximum value of R is

$$R\ (max) = \sqrt{\frac{q - 1}{q}} < 1.0$$

The interpretation of R is similar to the interpretation of a correlation coefficient. Values of R close to 0 indicate little relationship between variables, while a value of R close to 1.0 indicates a very strong relationship (Conover, 1971:177-178).

The results of the bivariate analysis are discussed below.

Relationship Between Number of Highway Hearings Attended and Other Variables

One of the concerns expressed in the public involvement literature is that public hearings tend to be dominated by "professional citizens," or activists who do not necessarily represent local interests. This section describes

the relationships between the degree of activism at public highway hearings and other characteristics of respondents. The number of highway hearings attended, as shown in Table A-1, was used as an indicator of activism in public involvement in transportation planning.

Table A-1

Number of Highway Hearings Attended
(N = 84)

Number of Hearings	% of People Attending
1	52
2	21
3	17
4	2
5	8
Total	100

Attendance at Highway Hearings and Attendance at Other Public Hearings

The distribution of the number of highway hearings attended by the number of other types of public meetings attended is shown in Table A-2. It can be seen from this table that there is some relationship between the number of highway hearings attended and the number of other types of public hearings attended. There is a tendency for those who have participated in a larger number of highway hearings to have attended a greater number of other types of hearings. The estimated value of the contingency coefficient, R is 0.595, indicates that the strength of this relationship is moderately strong. Thus, the number of highway hearings an individual has attended seems to be a fair indicator of his degree of activity in attending other types of hearings.

Table A-2

Percentage Distribution of Frequency of Attendance at Highway Hearings by Number of Types of Other Public Hearings Attended

Number of Highway Hearings	Number of Types of Other Highway Hearings						
	0	1	2	3	4	Total	(No.)
1	7	55	30	9	0	100	(44)
2	6	65	18	6	6	100	(17)
3	0	57	7	14	21	100	(14)
4	0	0	0	100	0	100	(1)
5	0	0	0	43	57	100	(7)
Total	5	52	20	13	10	100	(83)

Chi square = 45.57, 16 d.f., significant at .05 level
R = 0.595

Attendance at Highway Hearings and Participation in Project-Related Public Involvement Activities

The distribution of the number of highway hearings attended by the number of types of project-related public involvement activities is shown in Table A-3. There is a direct relationship between the number of highway hearings attended and the number of types of other public involvement activites. A contingency coefficient value of 0.498 indicates a moderately strong tendency for those persons who attend a greater number of highway hearings to become involved in more types of public involvement activities.

Table A-3

Percentage Distribution of Frequency of Attendance at Highway Hearings by Number of Types of Other Project-Related Activites

Number of Highway Hearings	Number of Types of Other Project Related Activities						
	0	1	2	3	4	Total	(No.)
1	47	47	7	0	0	100	(45)
2	24	53	6	12	6	100	(17)
3	14	50	14	14	7	100	(14)
4	50	50	0	0	0	100	(2)
5	14	14	29	14	29	100	(7)
Total	34	46	9	6	5	100	(85)

Chi square = 28.03, 16 d.f., significant at .05 level
R = 0.498

Attendance at Highway Hearings and Attendance at Other Project-Related Meetings

The number of times respondents had attended highway hearings was also broken down by whether or not respondents had attended other meetings concerning the proposed project. These results are shown in Table A-4. Examination of this contingency table indicates that there is a moderately strong direct relationship between frequency of attendance at highway hearings and attendance at other project-related meetings. This conclusion is supported by the value of the contingency coefficient, which is 0.568 in this instance.

Attendance at Highway Hearings and the Sex of the Respondent

The distribution of the number of highway hearings attended by the sex of the respondent is shown in Table A-5. There is a slightly higher probability

Table A-4

Percentage Distribution of Frequency of Attendance at Highway Hearings by Attendance at Other Project-Related Meetings

Number of Highway Hearings	Attendance at Other Project-Related Meetings			
	Yes	No	Total	(No.)
1	7	93	100	(44)
2	65	35	100	(17)
3	71	29	100	(14)
4	100	0	100	(2)
5	86	14	100	(7)
Total	38	62	100	(84)

Chi square = 39.93, 4 d.f., significant at .005 level
R = 0.568

Table A-5

Percentage Distribution of Frequency of Attendance at Highway Hearings by Sex

Number of Highway Hearings	Sex			
	Male	Female	Total	(No.)
1	77	23	100	(44)
2	76	24	100	(17)
3	85	15	100	(13)
4	100	0	100	(2)
5	100	0	100	(7)
Total	81	19	100	(83)

Chi square = 2.81, 4 d.f., not significant at .05 level
R = 0.181

that a person who has attended 3 or more highway hearings is male than there is for a person who has attended 1 or 2 hearings to be male. However, the value of R is only 0.181, indicating that this relationship is a weak one.

Attendance at Highway Hearings and Education Level

Distribution of the number of highway hearings attended by the education level of respondents is shown in Table A-6. There seems to be a weak direct relationship between higher education level and greater number of highway hearings attended, as indicated by the contingency coefficient (R = 0.253), although it is difficult to find any discernable pattern in the table. The weak relationship indicates that it is not generally possible to successfully predict education level from frequency of attendance at highway hearings, or vice versa.

Table A-6

Percentage Distribution of Frequency of Attendance at Highway Hearings by Level of Education Attained

Number of Highway Hearings	Level of Education Attained						
	Grade School	High School	Some College	College Graduate	Graduate or Professional School	Total	(No.)
1	9	18	36	16	20	100	(44)
2	12	12	41	6	29	100	(17)
3	15	15	31	15	23	100	(13)
4	0	0	50	0	50	100	(2)
5	14	29	29	0	29	100	(7)
Total	11	17	36	12	24	100	(83)

Chi square = 5.70, 16 d.f., not significant
R = 0.253

Attendance at Highway Hearings and Speaking at Hearings

A two-way table relating the number of highway hearings attended to whether or not the respondent had spoken at hearings was constructed in order to see if there was a tendency for those who attended more frequently to make some sort of statement. From Table A-7 it can be seen that the probability of a person having spoken at a highway hearing generally tends to increase with the number of hearings attended. The major differences in probability of speaking is between those respondents who have attended 3 hearings or less (19 percent have spoken) and respondents who have attended 4 hearings or more (77 percent have spoken). The contingency coefficient (R = 0.679) indicates that the relationship between frequency of attending at hearings and speaking at hearings is a strong one.

Table A-7

Percentage Distribution of Frequency of Attendance at Highway Hearings by Speaking at Hearing

Number of Highway Hearings	Spoke at Hearing			
	Yes	No	Total	(No.)
1	11	89	100	(45)
2	35	65	100	(17)
3	29	71	100	(14)
4	50	50	100	(2)
5	86	14	100	(7)
Total	26	74	100	(85)

Chi square = 19.63, 4 d.f., significant at .05 level
R = 0.679

Attendance at Highway Hearings and Attendance at Hearing to Make a Statement

One of the questions asked Pearland respondents was if their primary purpose for attending the hearing was to make a statement. The distribution of responses to this question by the number of hearings attended is shown in Table A-8. Examination of this table indicates a moderately weak relationship (R = 0.298) between frequency of attendance at hearings and the purpose being to make a statement. Here again, the major difference in probabilities is between those persons who have attended 3 or less hearings (19 percent attended to make a statement) and those who have attended 4 or more hearings (44 percent attended to make a statement).

Table A-8

Percentage Distribution of Frequency of Attendance at Highway Hearings by Number Attending Hearing to Make a Statement

Number of Highway Hearings	Attended to Make a Statement			
	Yes	No	Total	(No.)
1	87	13	100	(45)
2	71	29	100	(17)
3	71	29	100	(14)
4	50	50	100	(2)
5	43	57	100	(7)
Total	76	24	100	(85)

Chi square = 8.30, 4 d.f., not significant
R = 0.298

Attendance at Hearings and Feelings About Influence on Project Plans

Respondents were asked to indicate whether or not they felt they had any influence on project plans. Responses to this question were cross tabulated by number of highway hearings attended to see if there was a relationship between the two variables. As can be seen from Table A-9, there is a moderate tendency (R = 0.373) for feelings of influence on project plans to increase and uncertainty about influence to decrease with the increase in the number of highway hearings attended. The percentage of those who felt that they had no influence on project plans does not show much patterning but fluctuates between approximately 36 and 57 percent across the range of hearing attendance frequency.

Table A-9

Distribution of Responses to the Question "How Many Highway Hearings Have You Attended" by the Question "Do You Believe That You Have Had Any Influence on the Project Plans?"

Number of Hearings Attended	Feeling of Influence on Project Plans			
	Yes	Uncertain or Don't Know	No	Total
1	3	16	25	44
2	4	4	8	16
3	4	5	5	14
4	1	0	1	2
5	3	1	3	7
Total	15	26	42	83

Chi square = 13.430 with 8 d.f.
R = 0.373

Summary of the Relationships Between Frequency of Attendance at Highway Hearings and Other Variables

Analysis of the data indicates that the number of times a person has attended highway hearings is directly related to the amount of involvement in other types of project-related activities and to the amount of involvement in non-project related public involvement activities such as city council meetings, county commissioner's meetings, and school board meetings. The probability of an individual speaking at a hearing strongly increases with the number of highway hearings he has attended, especially among those individuals who have attended more than 3 hearings. A slight direct relationship was found between the number of highway hearings attended and education level of the respondent. There was also a slight increase in the probability that an individual who attends highway hearings is male with an increase in the number of hearings attended. There was a slight tendency for more of these individuals who had attended a greater number of hearings to feel that they had had some influence on project plans.

The relationships between the frequency of attending highway hearings and the amount of other types of public involvement activities give credence to the hypothesis that public hearings are attended by "professional citizens," although it does not prove that these individuals tend to dominate the hearings, or tend to attend the hearings to advance some particular viewpoint. There was only a slight tendency for those who had attended a greater number of highway hearings to do so for the purpose of making a statement. The relationships found in the analysis of various variables suggests that persons who attend a greater number of hearings are more likely to make an input into the project planning process through other types of public involvement activity such as

through writing letters, telephoning others, attending other project-related meetings, and attending meetings of local officials. This might imply that these "professional citizens" tend to be experienced in utilizing the public involvement process to inject their particular concerns into project planning. This might cause project officials to over-represent the interests of these individuals in the resultant project. However, this implication is not supported by the data from the Pearland survey and would require further study.

The relationships between frequency of attending highway hearings and other public involvement activity are strong enough that the number of highway hearings an individual has attended can be used as a rough indicator of how active the individual is in public involvement. Thus, an SDHPT hearing officer can roughly estimate the activism of a particular participant at a project hearing by asking him how many project hearings he has attended. In addition, if it is concluded that the input of "professional citizens" into the project planning is out of proportion to that of other individuals and groups, then the number of highway hearings attended might be used to weight the input of all participants in the public involvement so that a balanced appraisal can be made of all interests concerned.

Attendance at Other Public Meetings and Public Involvement in Project Planning

In the previous section, a direct relationship was found between the number of types of public hearings attended and the frequency of attendance at highway hearings. Similarly, it is hypothesized that those persons who tend to be activists, as measured by the number of types of public meetings attended, will tend to be activists in other public involvement activities related to project planning. This section presents an analysis of the

relationship between attendance at other public meetings and degree of participation in various kinds of project-related public involvement activities.

Attendance at Other Public Meetings and Number of Project Meetings Attended

Tables A-10 and A-11 show the distribution of the number of types of public hearings attended, by the frequency of attendance at project-related meetings, and by the frequency of participation in other project related activities. Examination of these tables indicates a moderately weak direct relationship between activism in other public areas and frequency of attendance at project-related meetings (R=0.380); and a moderate direct relationship

Table A-10

Percentage Distribution of Number of Other (Non-Highway) Public Hearings Attended by Number Attending Other (Non-Hearing) Highway Project Meeting(s)

Number of Public Hearings	Attended Other Highway Project Meeting(s)			
	Yes	No	Total	(No.)
0	0	100	100	(5)
1	33	67	100	(43)
2	19	81	100	(16)
3	64	36	100	(11)
4	75	25	100	(8)
Total	36	64	100	(83)

Chi square = 14.00, 4 d.f., significant at .01 level
R = 0.380

Table A-11

Percentage Distribution of Number of Other (Non-Highway) Public Hearings Attended by Number of Other (Non-Meeting) Highway Project Activities Engaged In

Number of Public Hearings	Number of Other Highway Project Activities					
	0	1	2	3	4	(No.)
0	20	80	0	0	0	(5)
1	47	42	7	2	2	(43)
2	29	59	6	6	0	(17)
3	9	55	18	9	9	(11)
4	13	13	25	25	25	(8)
Total	33	46	10	6	5	(84)

Chi square = 28.76, 16 d.f., significant at .05 level
R = 0.505

between activism and participation in project-related activities other than meetings and public hearings (R=0.505). Thus, it can be concluded that there is some tendency for persons who are more active in various types of public involvement events to be more active in the public involvement process of project planning.

Usual Attitude Toward Highway Projects and Other Variables

It was hypothesized that the attitudes that persons have about highway projects in general would have a biasing effect on their attitudes toward various aspects of the public involvement process associated with the Pearland project. To test this hypothesis, two-way tables were constructed using usual attitude toward highway project as one of the variables. These tables are analyzed below.

Respondents were asked to indicate their purpose in attending the hearing. Seventy-four of the 86 respondents, or 86 percent of the sample, indicated their purpose was to listen, rather than to make a statement, ask questions, or some other purpose. It was hypothesized that those persons who usually favored highway projects would be more inclined to attend the hearing to listen, rather than to take an active role. Table A-12 shows the frequency distribution of respondents by their usual attitude and whether

Table A-12

Percentage Distribution of Responses to the Question "If You Have Attended One or More Highway Hearings, Have You Usually Favored the Project(s)?" By Number Indicating Reason for Attending Hearing was to Listen

Usually Favor Projects	Attended Hearing to Listen			
	Yes	No	Total	(No.)
Yes	22	78	100	(65)
No	44	56	100	(9)
Total	24	76	100	(74)

Chi square = 1.18, 1 d.f., not significant
R = 0.125

or not they attended the hearing to listen. It can be seen that there is only a weak relationship between the two variables. The small value of the contingency coefficient (R = 0.125) indicates there is only a slightly greater tendency for those who usually favor projects to attend for the passive purpose of listening to the proceedings. This indicates that those persons who are pro-highway construction are almost as likely to take an active role in the proceedings as those persons who are anti-highway construction.

It was also hypothesized that those individuals who usually favored highway projects would tend to evaluate the public involvement process higher than those individuals who did not usually favor highway projects. Respondents in the Pearland survey were asked to evaluate their public involvement experiences by indicating the amount of agreement they had with a series of 11 statements. The distribution of average responses to these questions by the respondents' usual attitudes is shown in Table A-13. It can be seen that there is some tendency for those respondents who usually favor highway projects to give a more positive evaluation to the public involvement process. However, the contingency coefficient value of 0.345 indicates that this relationship is a moderate one.

Table A-13

Percentage Distribution of Responses to the Question, "If You Have Attended One or More Highway Hearings, Have You Usually Favored the Project(s)?" By the Average of Responses to Eleven Evaluation Statements

Usually Favor Projects	Average Response						
	1	2	3	4	5	Total	(No.)
Yes	15	62	15	6	2	100	(65)
No	11	22	33	33	0	100	(9)
Total	15	57	18	9	1	100	(74)

Chi square = 10.01, 4 d.f., significant at .05 level
R = 0.345

Analysis of the relationship between the attitudes of respondents toward the way the Pearland public hearing and other public meetings are conducted by the SDHPT and the usual attitudes of respondents toward highway projects shows

similar results. As can be seen in Table A-14, there is some relationship between usually favoring highway projects and the evaluation of the way the public hearing was conducted. The contingency coefficient of 0.312 indicates the strength of the relationship is about the same as that for the public involvement process in general. However, as can be seen in Table A-15, the same conclusion cannot be made for the relationship between usual attitude toward highway projects and evaluation of the way the SDHPT conducted public meetings other than the formal hearing. The contingency coefficient value of 0.067 indicates almost no statistical relationship between the two variables. Since there were only 3 respondents who had attended public meetings conducted by the SDHPT and who were not usually in favor of highway projects, the sample size is too small to draw conclusions from.

Table A-14

Percentage Distribution of Responses to the Question, "If You Have Attended One or More Highway Hearings, Have You Usually Favored the Project(s)?" By Evaluation of How Well The Highway Department Conducted the Hearing

	How Well Hearing Was Conducted				
Usually Favor Projects	Good	Fair	Poor	Total	(No.)
Yes	78	19	3	100	(63)
No	57	14	29	100	(7)
Total	76	19	5	100	(70)

Chi square = 7.54, 2 d.f., significant at .005 level
R = 0.312

Table A-15

Percentage Distribution of Responses to the Question, "If You Have Attended One or More Highway Hearings, Have You Usually Favored the Project(s)?" By Evaluation of How Well The Highway Department Conducted the Meeting(s)

Usually Favor Projects	How Well Meeting(s) was Conducted				
	Good	Fair	Poor	Total	(No.)
Yes	70	27	3	100	(33)
No	67	33	0	100	(3)
Total	72	27	3	100	(36)

Chi square = 0.167, 2 d.f., significant at .05 level
R = 0.067

The next relationship examined was that between usual attitude toward highway projects and whether or not respondents felt they had any influence on the Pearland project plans. It was hypothesized that those persons who usually favored construction would give input consistent with the SDHPT's plans for the project, and thus feel that they had exerted some influence when the SDHPT carried these plans out. The findings shown in Table A-16 support this hypothesis. None of the respondents who did not usually favor projects felt that they had had any influence on project plans, while 24 percent of the "usually favor" category did. Similarly, 78 percent of the "do not usually favor" category felt that they had not had any influence on project plans, while only 46 percent of the "usually favor" category gave this response. However, the contingency coefficient for this table (R = 0.226) indicates that the relationship between the 2 variables is statistically weak.

Table A-16

Percentage Distribution of Responses to the Question, "If You Have Attended One or More Highway Hearings, Have You Usually Favored the Project(s)?" By Feeling of Personal Influence on the Project

Usually Favor Project	Felt Influence				
	Yes	Uncertain or Don't Know	No	Total	(No.)
Yes	24	30	46	100	(63)
No	0	22	78	100	(9)
Total	21	29	50	100	(72)

Chi square = 3.41, 2 d.f., not significant
R = 0.226

Relationship Between Feelings of Influence on Project Plans and Other Variables

Several two-way contingency tables were constructed to analyze the relationship between whether or not respondents felt they had had any influence on project plans and other variables. The results of this analysis are reported in this section.

The findings from the Pearland survey suggest there is a moderate relationship (R = 0.574) between a feeling of influence on project plans and positive attitudes toward the public involvement. As can be seen from Table A-17, those respondents who felt they had exerted some influence on project plans were more likely to have a higher positive mean evaluation of the public involvement process.

There is also some direct relationship between feelings of influence on project plans and having spoken at a public hearing, or attending the hearing

Table A-17

Percentage Distribution of Responses to the Question, "Do you Believe That you have had any Influence on the Project Plans?" by the Average of Responses to Eleven Evaluation Statements

	Average Response						
Have Had Influence	1	2	3	4	5	Total	(No.)
Yes	31	63	6	0	0	100	(16)
Uncertain or Don't Know	19	23	46	8	4	100	(26)
No	2	64	18	14	2	100	(42)
Total	13	51	24	10	2	100	(84)

Chi square = 41.323, 4 d.f., significant at .005 level
R = 0.574

for the purpose of speaking. It can be seen from Table A-18 that there is some tendency for those persons who have spoken at public hearings to feel that they have had some influence on project plans. The contingency coefficient value of 0.389 indicates the relationship is a moderate one. A similar relationship was found among those respondents whose purpose for attending the hearing was to make a statement, as shown in Table A-19. The R value of 0.439 also indicates the strength of the relationship is moderate.

The findings do not indicate any relationship between attendance at project meetings, other than the public hearings and feelings of influence on project plans. It can be seen from Table A-20 that the percent of those who feel that they had influence is almost identical between those respondents who attended project meetings and those who did not attend. The R value of 0.085 reflects this lack of relationship.

Table A-18

Percentage Distribution of Responses to the Question, "Have you Spoken at a Highway Hearing?" by the Question, "Do you Believe that you have had any Influence on the Project Plans?"

	Have You Spoken			
Have Had Influence	Yes	No	Total	(No.)
Yes	67	33	100	(15)
Uncertain or Don't Know	19	81	100	(26)
No	17	83	100	(42)
Total	27	73	100	(83)

Chi square = 14.829, 2 d.f., significant at .005 level
R = 0.389

Table A-19

Percentage Distribution of Responses to the Question, "Do you Believe That you have had any Influence on the Project Plans?" by Number Attending Hearing to Make a Statement

	Attended to Make a Statement			
Have Had Influence	Yes	No	Total	(No.)
Yes	33	67	100	(15)
Uncertain or Don't Know	90	10	100	(42)
No	77	23	100	(26)
Total	76	24	100	(83)

Chi square = 19.848, 2 d.f., significant at .005 level
R = 0.439

Table A-20

Percentage Distribution of Responses to the Question, "Have you Attended any Other Meetings (Non-Hearing) Concerning the Highway Project?" by Attitudes About Personal Influence on Project Plans

	Attended Other Project Plans			
Have Had Influence	Yes	No	Total	(No.)
Yes	31	69	100	(16)
Uncertain or Don't Know	24	76	100	(25)
No	33	67	100	(42)
Total	30	70	100	(83)

Chi-square = 0.602, 2 d.f., significant at .050 level
R = 0.085

It was hypothesized that those respondents who attended the Pearland public hearing as representatives of organizations would be more likely to feel that they had influenced project plans, but this was not supported by the findings. Table A-21 shows the relationship between organizational representation and feelings of influence. While 40 percent of those who attended the hearing as organizational representatives felt they had influenced project plans as opposed to 12 percent of those who were not representatives, the Chi-square statistic is not significant at the 0.05 level of probability, so no conclusion about the relationship between the 2 variables can be made. The R value of 0.077 also reflects a lack of relationship.

Table A-21

Percentage Distribution of Responses to the Question, "Did you Attend This Public Hearing as a Representative of an Organization?" by Attitudes about Personal Influence on the Project Plans

	Representative of Organization			
Have Had Influence	Yes	No	Total	(No.)
Yes	40	60	100	(15)
Uncertain or Don't Know	12	88	100	(26)
No	12	88	100	(42)
Total	17	83	100	(83)

Chi-square - 6.989, 2 d.f. not significant at .05 level
R = 0.077

The Relationship Between Active Participation at Public Hearings and Other Variables

It is hypothesized that there is a relationship between active participation in public hearings and other variables. The findings from the Pearland survey were utilized to explore some of the areas where important relationships might be found. In this analysis, a respondent's having spoken at a hearing was used as an operational measure of active participation in public hearings. The results of the analysis are discussed below.

Active Participation and Attitudes Toward the Public Hearing

It was hypothesized that those respondents who actively participated in the hearing would tend to give a higher evaluation of the process than those

who were passive. To test this hypothesis, the variable "speaking at a hearing" was cross-tabulated against the mean overall rating respondents gave to the Pearland hearing. The results are shown in Table A-22. This table offers some support for the hypothesis. There is some probability that those respondents who have spoken at a hearing tend to rate the highway hearing than those respondents who have not spoken. However, this relationship is only a weak one (R=0.244).

Table A-22

Percentage Distribution of Responses to the Question, "Have you Spoken at a Highway Hearing?" by the Average of Responses to Eleven Evaluation Statements

	Average Response						
Have Spoken	1	2	3	4	5	Total	(No.)
Yes	14	55	9	18	5	100	(22)
No	13	52	27	6	2	100	(63)
Total	13	53	22	9	2	100	(85)

Chi-square = 5.393, 4 d.f., not significant at .05 level
R = 0.244

Active Participation at Other Hearings and
Active Participation at Highway Hearings

There is some indication from the Pearland survey that those persons who actively participate in other types of public hearings, public meetings, and other project activities are more likely to have spoken at other hearings. Tables A-23, A-24, and A-25 show that there is some tendency for those respondents who have spoken at other public hearings, or other project meetings, or who

have been more active in other public involvement activities to get to speak at a hearing. The R values for these tables (R=0.226 - 0.394) indicate weak to moderate linkages between active participation in the public hearing and active participation in other types of public involvement.

Table A-23

Percentage Distribution of Responses to the Question, "Have you Spoken at a Highway Hearing?" by Number of Non-Highway Public Hearings Attended

	Number of Hearings						
Have Spoken	0	1	2	3	4	Total	(No.)
Yes	0	41	9	18	23	100	(22)
No	6	54	24	11	5	100	(63)
Total	5	51	20	13	9	100	(85)

Chi-square = 15.66, 5 d.f., significant at .05 level
R = 0.394

Table A-24

Percentage Distribution of Responses to the Question, "Have you Spoken at a Highway Hearing?" by Number of Highway Project Meetings Attended

	Attended Other Project Meetings			
Have Spoken	Yes	No	Total	(No.)
Yes	64	36	100	(22)
No	29	71	100	(62)
Total	38	62	100	(84)

Chi-square = 6.84, 1 d.f., significant at .010 level
R = 0.274

Table A-25

Percentage Distribution of Responses to the Question, "Have you Spoken at a Highway Hearing?" by Number of Highway Project Activities Involved in

Have Spoken	Number of Activities						
	0	1	2	3	4	Total	(No.)
Yes	18	50	14	9	9	100	(22)
No	40	44	8	5	3	100	(63)
Total	34	46	9	6	5	100	(85)

Chi-square = 4.61, 4 d.f., not significant at .05 level
R = 0.226

The Relationship Between Evaluation of How Well the SDHPT Conducted the Hearing and Evaluation of How Well Other Public Hearings were Conducted

One of the problems of asking respondents to evaluate how well the SDHPT conducts a public hearing is that different individuals might use different criteria for their evaluation. Thus, an individual who has not attended a public hearing before might give the hearing a poor evaluation based on how long it lasts and its seeming disorganization. On the other hand, a person experienced in attending hearings might give the hearing a good evaluation based on how efficiently the meeting was run. One means of getting around the difficulty of evaluation of hearings by different criteria is to compare how persons evaluate the conduct of other hearings with the way the SDHPT conducted the highway hearing. This was done with the data from the Pearland survey, with the results shown in Table A-26. It can be seen from this table that respondents tend to rate the highway hearings the same way they rate other public hearings. The contingency coefficient for this table is 0.629,

Table A-26

Percentage Distribution of Responses to the Question, "How Well did the Highway Department Conduct the Hearing?" by Evaluation of How well the Meetings were Conducted

Evaluation of Hearings	Evaluation of Other Meetings					
	1	2	3	4	Total	(No.)
1	89	7	4	0	100	(28)
2	13	88	0	0	100	(8)
3	0	100	0	0	100	(1)
4	0	0	0	100	100	(1)
Total	68	26	3	3	100	(38)

Chi-square = 24.21, 4 d.f., significant at .005 level
R = 0.629

indicating that the relationship is a moderately strong one. Thus, respondents in the Pearland survey who had attended other public hearings tended to rate the highway hearing about the same as the other hearings they attended.

The data in Table A-27 provide some evidence that the use of public hearings is an effective means of developing positive involvement in highway project plans. A higher percentage, 89%, of those learning of highway hearings at meetings indicated a positive evaluation of the involvement process as opposed to 61% of those not learning of highway hearings at meetings. Also, a great difference in the percentage of those with no opinion and negative opinion exists. Eighty-nine percent of those with no opinion and all of those with negative opinions had not heard about the hearing through a community meeting. The use of meetings prior to public hearings is no guarantee that the project will be accepted, but there is reason to believe that respondents tend to have a more positive opinion of the involvement process when informed in a meeting format.

Table A-27

Percentage Distribution of Respondents Who Found Out About Highway Hearing(s) at Community Meetings by the Average of Responses to Eleven Evaluation Questions

Found Out at Community Meeting	Average Response						
	1	2	3	4	5	Total	(No.)
Yes	39	50	11	0	0	100	(18)
No	6	55	25	11	3	100	(65)
Total	13	54	22	8	2	100	(83)

Chi square = 15.15, 4 d.f., significant at .005 level

The respondents' average of responses to the eleven evaluation questions were also compared to several alternative means of learning about public hearings. The alternatives included: (1) highway hearings, (2) highway department handouts, (3) radio, (4) newspapers, (5) TV, (6) a friend, (7) direct mail, (8) calls to highway department, and (9) legal advertisement. Highway hearings and highway department handouts drew a better than average response, although neither involved as many respondents as the category of community meetings did. None of the other categories exhibited a significant relationship with attitudes toward the involvement process. Many, as shall be discussed shortly, are associated with change in attitude toward the project.

In order to obtain an overall view of the effect on participants of public involvement activities, each respondent was asked to indicate his or her feeling about the highway project when first learning of it and to indicate his or her feeling about the highway project now.

Table A-28

Distribution of Responses to the Questions, "What Was Your Feeling about the Highway Project When You First Heard about It?" and "What Is Your Feeling about the Project Now?"

Attitude	"First Heard"	"Now"
Strongly Approved	36	45
Approved	22	20
Uncertain or No Opinion	12	1
Disapproved	1	2
Strongly Disapproved	11	12
No Answer	4	6
Total Responses	86	86

The distribution of responses to these questions were compared to several of the variables in the questionnaire to identify factors associated with change in attitude toward the project. Ten variables were found to be associated with change. The majority of the changes were positive and most involved a change from the uncertain or no opinion category to the approved or strongly approved categories.

Variable 1 responses seem to be consistant with data presented earlier in this chapter. The opinion of those usually favoring projects went up and the opinion of those not usually favoring projects went down. The factors associated with cahnge in Variables 2, 3, and 4, handouts, meetings, and legal advertisements, improve opinions about 15% more than other methods of publicizing hearings. This is a noticeable difference but certainly not so compelling as to abandon other methods. Those attending the hearing to make a statement (Variable 5)

Table A-29

Factors Associated with Change in Attitude Toward the Project

	Variable	Attitude Toward Project % Went Down	% No Change	% Went Up
1.	Usually Favor Projects (N = 65)	3	69	28
	Usually Do Not Favor Projects (N = 9)	25	75	0
2.	Learned of Hearing by Handout (N = 11)	0	60	40
	Did Not Learn of Hearing by Handout (N = 67)	6	72	22
3.	Learned of Hearing by Community Meeting (N = 18)	0	65	35
	Did Not Learn of Hearing by Community Meeting (N = 60)	7	72	21
4.	Learned of Hearing By Legal Advertisement (N = 19)	18	47	35
	Did Not Learn of Hearing by Legal Advertisement (N = 59)	2	77	21
5.	Attended Hearing to Make a Statement (N = 19)	10	85	5
	Did Not Attend Hearing to Make a Statement (N = 61)	5	65	30
6.	Attended Hearing to Ask Questions (N = 20)	5	58	37
	Did Not Attend Hearing to Ask Questions (N = 60)	7	74	20
7.	Conduct of Hearing Was "Good" (N = 57)	5	67	28
	Conduct of Hearing Was "Fair" (N = 14)	0	79	21
	Conduct of Hearing Was "Poor" (N = 4)	50	50	0

Table A-29. Continued

	Variable	% Went Down	% No Change	% Went Up
8.	Original Opinion Was "Strongly Approved" (N = 35)	0	100	0
	Original Oppinion Was "Approved" (N = 22)	9	55	36
	Original Opinion Was "Uncertain or No Opinion" (N = 11)	27	0	73
	Original Opinion Was "Disapproved" (N = 1)	0	100	0
	Original Opinion Was "Strongly Approved" (N = 11)	0	73	27
9.	Final Opinion Was "Strongly Approved" (N = 46)	0	76	24
	Final Opinion Was "Approved" (N = 20)	0	60	40
	Final Opinion Was "Uncertain or No Opinion" (N = 0)	-	-	-
	Final Opinion Was "Disapproved" (N = 2)	50	50	0
	Final Opinion Was "Strongly Disapproved" (N = 12)	33	67	0
10.	Average Evaluation Response "I Strongly Agree" (N = 10)	0	90	10
	Average Evaluation Response "I Tend to Agree" (N = 43)	2	65	33
	Average Evaluation Response "I Have No Opinion" (N = 17)	12	71	18
	Average Evaluation Response "I Tend to Disagree" (N = 8)	25	63	13
	Average Evaluation Response "I Strongly Disagree" (N = 2)	0	100	0

exhibit less of an increase in opinion than those who did not attend to make a statement. Among those who attended the meeting to ask questions (Variable 6), there is a 17% greater increase in opinion than among those not asking questions.

The remaining four variables deal with general evaluation of involvement and the project. Among those evaluating the conduct of the hearing, the largest increase in opinion is by those selecting the "good" category. Next highest are those selecting the "fair" category. Nine of the respondents rating the hearing as "poor" increased their opinion and half of them decreased their opinion. Original opinions about the project remained unchanged for those who "strongly approved" and for those who "disapproved." Those who originally "approved" increased their opinions 36% and decreased them 9%. Significantly, none of the respondents who initially were "uncertain or no opinion" remained that way. While none of the "strongly approved" respondents lowered their opinions, 27% of the "strongly disapproved" category increased their opinion. Final opinions increased for those approving and decreased for those disapproving. None indicated a final opinion of "uncertain or no opinion." Those who averaged positive and neutral scores on the involvement evaluation increased their opinion more than they decreased their opinion. Those averaging "tend to disagree" lowered their opinion. While those who "strongly disagree" had no opinion change.

In summary, the opinion of those usually favoring highway projects tends to go up and the opinion of those not usually favoring highway projects tends to go down. Publicizing hearings tends to improve attitudes about them with meetings, handouts, and legal advertisements being the most effective mechanisms. On the average, those who attend hearings to listen, make a statement, or ask questions, tend to become more favorable toward the project. Those who initially

have no opinion or are uncertain end up having a definite point of view about the project with the majority becoming positively oriented.

SUMMARY

The data indicate that the majority of respondents; (1) are relatively inactive in civic matters, (2) rely heavily on the public hearing for receiving and providing input, (3) have more than the average amount of education, and (4) are predominantly male.

There is a positive relationship between frequency of hearing attendance and propensity to talk. Because few respondents attend hearings frequently, it is reasoned that these few must talk disproportionately often in order to produce the high incidence of talking. However, the data indicate that slightly more than half of those attending in order to make a statement have been to two or fewer hearings. Therefore, it is likely that hearings are not dominated by a small segment of experienced civic activists. The evidence indicates that the desire to exchange information is distributed across all the socio-economic levels represented. This finding tends to refute the claim made by some public involvement critics that only special interest groups are served by the public involvement process.

The majority of respondents approved of the involvement process even though only 18% said they felt they had exerted influence. Many respondents who usually favor highway projects attend hearings to become informed about the proposed project. Having accomplished that relatively easy task and being reassured by the hearing officials that the project is a good thing, the participant feels no need to have direct influence and therefore can feel satisfied with his or her involvement. The key factor is that the participant be in

favor of the highway project prior to the meeting. Those who usually favor highway projects tend to evaluate public involvement processes highly.

Similarly, those who feel they exert influence tend to have a positive attitude about highway projects and tend to evaluate public involvement efforts highly. Unlike those who do not feel they exert influence, the influential group tends to speak at hearings more than average. The implicit and explicit responses made to public participants' statements should be closely examined to be sure that the positive attitudes associated with involvement are not undermined by careless or inappropriate behavior on the part of those receiving the input.

Respondents attending project meetings and respondents acting as representatives of organizations have a greater tendency to feel they exert influence on project plans than other respondents claim to feel. Since representatives of organizations tend to attend project meetings more frequently and those attending project meetings tend to feel more influence, it is probable that project meetings are more issue oriented in content than are hearings. Evaluations of project meetings should be sensitive to the presence or absence of conditions that facilitate serious discussion of issues.

Participants who tend to be active in civic affairs tend to interact, verbally, more than participants who have little prior public involvement experience. There is no indication, however, of civic activists dominating the hearing process. There is an indication that SDHPT public hearing participants, whether they speak out or not, have little prior formal involvement experience with the project. An effective pre-hearing involvement program would result in better informed and prepared participants.

There is virtually no difference between those who do and do not speak at highway hearings in evaluating how well the highway department conducted

the hearing. There is only a slight difference between those who do and do not speak at highway meetings in evaluating how well the highway department conducted meetings. A direct comparison of how well the hearing and meetings were conducted indicated that a majority who evaluate the hearing as "good" evaluate meetings as "good". The very close relationship indicated here suggests that the participants' values and needs can be met with success using both of these processes, even though hearings and meetings differ in character and purpose. The data indicate that those learning of highway hearings at meetings gave a higher percentage of positive evaluations than those not learning of highway hearings at meetings. The use of meetings prior to public hearings is no guarantee than projects will be accepted, but there is reason to believe that respondents tend to have a more positive opinion of the involvement process when involved in a meeting format.

By comparing initial and current project related attitudes to each other, it was determined that those usually favoring highway projects tend to increase their approval and those not usually favoring highway projects tend to increase their disapproval. It was also learned that publicizing hearings tends to improve attitudes about hearings with meetings, handouts, and legal advertisements being the most effective mechanisms. On the average, those attending hearings to listen, make a statement, or ask questions, tend to become more favorable toward the project. Those who initially have no opinion or are uncertain end up having a definite point of view about the project with the majority becoming positively oriented.

APPENDIX B

PUBLIC INVOLVEMENT EVALUATION FORMS

EVALUATION FORM

I. Organizations
A. Civic Organization

Date: _____

Name of Organization		Value
DOMINANT RACIAL/ ETHNIC COMPOSITION 1 ☐ White 2 ☐ Black 3 ☐ Mexican-American 4 ☐ Other _____	NEGATIVE RESULTS (Summary of Evaluations from Following page)	☐ -2 ☐ -1 ☐ 0
MAJOR PURPOSE OF GROUP 1 ☐ Industrial Development 2 ☐ Community Development 3 ☐ Community Service 4 ☐ Other _____	POSITIVE RESULTS (Summary of Evaluations from Following page)	☐ 0 ☐ +1 ☐ +2
GEOGRAPHIC ORIENTATION OF GROUP 1 ☐ Statewide 2 ☐ Citywide 3 ☐ Downtown 4 ☐ Local Neighborhood		

Figure B-1. Civic Organization Involvement Form

EVALUATION FORM

I. Organizations
B. Educational Organization

Date: _____

Name of Organization

DOMINANT RACIAL/ ETHNIC COMPOSITION	NEGATIVE RESULTS (Summary of Evaluations from Following page)	Value
1 ☐ White		☐ -2
2 ☐ Black		☐ -1
3 ☐ Mexican-American		☐ 0
4 ☐ Other _____		

PURPOSE OF ORGANIZATION	POSITIVE RESULTS (Summary of Evaluations from Following page)	
1 ☐ Educational Support		☐ 0
2 ☐ Parent-Teacher Interaction		☐ +1
3 ☐ Ad Hoc Project Orientation		☐ +2
4 ☐ Other _____		

GEOGRAPHIC ORIENTATION OF GROUP

1 ☐ Statewide

2 ☐ City/Countywide

3 ☐ Project Area

Figure B-2. Educational Organization Involvement Form

EVALUATION FORM

I. Orgnaizations
C. Religious Organization

Date: _____

Name of Organization

DOMINANT RACIAL/ ETHNIC COMPOSITION	NEGATIVE RESULTS (Summary of Evaluations from Following page)	Value
1 ☐ White		☐ -2
2 ☐ Black		☐ -1
3 ☐ Mexican-American		☐ 0
4 ☐ Other _____		
AFFILIATION	**POSITIVE RESULTS** (Summary of Evaluations from Following page)	☐ 0
1 ☐ Catholic		☐ +1
2 ☐ Jewish		☐ +2
3 ☐ Protestant		
4 ☐ Other		

TYPE OF GROUP		
1 ☐ Congregation	5 ☐ Church Service Group	
2 ☐ Association of Congregations	☐	
3 ☐ Association of Religious Leaders	☐	
4 ☐ Church Social Group	☐	

Figure B-3. Religious Organization Evaluation Form

EVALUATION FORM

I. Organizations
D. Professional Organization

Date: _____

Name of Organization

		Value
DOMINANT RACIAL/ ETHNIC COMPOSIITON 1 ☐ White 2 ☐ Black 3 ☐ Mexican-American 4 ☐ Other _____	NEGATIVE RESULTS (Summary of Evaluations from following page)	☐ -2 ☐ -1 ☐ 0
PURPOSE OF ORGANIZATION 1 ☐ Property Development 2 ☐ Community Socioeconomic Development 3 ☐ Neighborhood/ Community Development 4 ☐ Other _____	POSITIVE RESULTS (Summary of Evaluations from following page)	☐ 0 ☐ +1 ☐ +2
GEOGRAPHIC ORIENTATION OF GROUP 1 ☐ National Level 2 ☐ State or Regional Level 3 ☐ Sub-State or Sub-Regional Level 4 ☐ Local Level		

Figure B-4. Professional Organization Evaluation Form

EVALUATION FORM

I. Organizations
E. Planning Organization

Date: _____

Name of Organization

		Value
DOMINANT RACIAL/ ETHNIC COMPOSITION 1 ☐ White 2 ☐ Black 3 ☐ Mexican-American 4 ☐ Other _____	NEGATIVE RESULTS (Summary of Evaluations from following page)	☐ -2 ☐ -1 ☐ 0
PURPOSE OF ORGANIZATION 1 ☐ Neighborhood Improvement 2 ☐ City Improvement 3 ☐ Revitalization of Downtown 4 ☐ Other _____	POSITIVE RESULTS (Summary of Evaluations from following page)	☐ 0 ☐ +1 ☐ +2
GEOGRAPHIC ORIENTATION 1 ☐ Statewide 2 ☐ Citywide 3 ☐ Downtown 4 ☐ Local Area or Neighborhood		

Figure B-5. Planning Organization Evaluation Form

EVALUATION FORM

II. Media Publicity
A. The Press

Date: _____

Name of Organization

DOMINANT RACIAL/ ETHNIC COMPOSITION OF READERSHIP	NEGATIVE RESULTS (Summary of Evaluations from following page)	Value
1 ☐ White		☐ -2
2 ☐ Black		☐ -1
3 ☐ Mexican-American		☐ 0
4 ☐ Other _____		
TYPE OF COVERAGE	**POSITIVE RESULTS** (Summary of Evaluations from following page)	☐ 0
1 ☐ Editorial		☐ +1
2 ☐ News Article		☐ +2
3 ☐ News Analysis		
4 ☐ Paid Notice		

TYPE OF PUBLICATION	GEOGRAPHICAL COVERAGE
1 ☐ Newspaper	1 ☐ City/Countywide
2 ☐ Newsletter	2 ☐ Local Area or Neighborhood
3 ☐ Leaflet	Name of Area _____

Figure B-6. The Press Evaluation Form

EVALUATION FORM

II. Media Publicity
B. Television

Date: _____

Name of Organization

TYPE OF COVERAGE	NEGATIVE RESULTS (Summary of Evaluation from following page)	Value
1 ☐ Editorial		☐ -2
2 ☐ Newstory		☐ -1
3 ☐ Notice		☐ 0
4 ☐ Presentation		
TIME OF PRESENTATION	**POSITIVE RESULTS (Summary of Evaluation from following page)**	☐ 0
1 ☐ Morning		☐ +1
2 ☐ Noon		☐ +2
3 ☐ Afternoon		
4 ☐ Evening		

Figure B-7. Television Evaluation Form

EVALUATION FORM

II. Media Publicity
C. Radio

Date: _____

Name of Organization		Value
DOMINANT RACIAL/ ETHNIC COMPOSITION 1 ☐ White 2 ☐ Black 3 ☐ Mexican-American 4 ☐ Other _____	NEGATIVE RESULTS (Summary of Evaluations from following page)	☐ -2 ☐ -1 ☐ 0
TYPE OF COVERAGE 1 ☐ Editorial 2 ☐ Newstory 3 ☐ Notice 4 ☐ Presentation on Local Community Interest Show	POSITIVE RESULTS (Summary of Evaluations from following page)	☐ 0 ☐ +1 ☐ +2
TIME OF PRESENTATION 1 ☐ Morning 2 ☐ Noon 3 ☐ Afternoon 4 ☐ Evening		

Figure B-8. Radio Evaluation Form

EVALUATION FORM

III. Public Small Group Meetings
A. Affected Property Owners

Date: _____

Name of Organization		Value
DOMINANT RACIAL/ ETHNIC COMPOSITION 1 ☐ White 2 ☐ Black 3 ☐ Mexican-American 4 ☐ Other	NEGATIVE RESULTS (Summary of Evaluation from following page)	☐ -2 ☐ -1 ☐ 0
MAJOR PURPOSE OF MEETING 1 ☐ To Provide Information to Property Owners 2 ☐ To Secure Input From Property Owners 3 ☐ To Respond to Matters Developed at Earlier Meeting	POSITIVE RESULTS (Summary of Evaluation from following page)	☐ 0 ☐ +1 ☐ +2

Figure B-9. Affected Property Owners Evaluation Form

EVALUATION FORM

III. Public Meetings
B. Minority Groups

Date: _____

Name of Organization

MINORITY GROUP	NEGATIVE RESULTS (Summary of evaluations from following page)	
1 ☐ Black		☐ -2
2 ☐ Mexican American		☐ -1
3 ☐ Other		☐ 0
MAJOR PURPOSE OF GROUP	**POSITIVE RESULTS** (Summary of evaluations from following page)	
1 ☐ Develop and Maintain Neighborhood		☐ 0
2 ☐ Develop and Maintain Civil Rights		☐ +1
3 ☐ Develop and Maintain Socio-economic Improvement		☐ +2
4 ☐ Ad Hoc Group Oriented to Project		
MAJOR PURPOSE OF MEETING		
1 ☐ Meeting to Provide Project Information		
2 ☐ Meeting to Secure Input About Project		
3 ☐ Follow-up Meeting to Respond to Matters Developed at Earlier Meeting		

Figure B-10. Minority Groups Evaluation Form

EVALUATION FORM

III. Public Meetings
C. Ad Hoc Organization

Date: _____

Name of Organization

DOMINANT RACIAL/ ETHNIC COMPOSITION

1 ☐ White

2 ☐ Black

3 ☐ Mexican American

4 ☐ Other

NEGATIVE RESULTS (Summary of evaluations from following page)

☐ -2

☐ -1

☐ 0

MAJOR PURPOSE OF GROUP

1 ☐ Neighborhood Maintenance

2 ☐ Ethnic/Minority Protection

3 ☐ Protection of Business Interests

4 ☐ Environmental Concern

POSITIVE RESULTS (Summary of evaluations from following page)

☐ 0

☐ +1

☐ +2

MAJOR PURPOSE OF MEETING

1 ☐ Provide Project Information

2 ☐ Secure Input About Group's Concerns

3 ☐ Respond to Matters Developed at Earlier Meeting

Figure B-11. Ad Hoc Organization Evaluation Form

EVALUATION FORM

IV. Public Hearings
A. Mini-Hearings

Date: _____

Name of Organization

DOMINANT RACIAL/ ETHNIC COMPOSITION	NEGATIVE RESULTS	(Summary of evaluations from following page)	
1 ☐ White			☐ -2
2 ☐ Black			☐ -1
3 ☐ Mexican American			☐ 0
4 ☐ Other			
PURPOSE OF HEARING	**POSITIVE RESULTS**	**(Summary of evaluations from following page)**	
1 ☐ Discussion of a particular project related subject			☐ 0
2 ☐ Discussion within a particular geographic area			☐ +1
3 ☐ General discussion forum			☐ +2
4 ☐ Other			

Figure B-12. Mini-Hearings Evaluation Form

EVALUATION FORM

IV. Public Hearings
B. Formal Public Hearing

Date: _____

Name of Organization

DOMINANT RACIAL/ ETHNIC COMPOSITION

1 ☐ White

2 ☐ Black

3 ☐ Mexican American

4 ☐ Other

NEGATIVE RESULTS (Summary of evaluations from following page)

☐ -2

☐ -1

☐ 0

POSITIVE RESULTS (Summary of evaluations from following page)

☐ 0

☐ +1

☐ +2

Figure B-13. Formal Public Hearing Evaluation Form

EVALUATION FORM

V. Individual Contacts
A. Phone Call

Date: _____

Name of Organization

RESPONSE TO CALL	NEGATIVE RESULTS (Summary of evaluations from following page)	
1 ☐ Provide Informa-Requested		☐ -2
2 ☐ Did not Provide Information Requested		☐ -1
3 ☐ Responded to Project Objectives		☐ 0
4 ☐ Did not Respond to Project Objectives		
PURPOSE OF CALL	**POSITIVE RESULTS** (Summary of evaluations from following page)	☐ 0
1 ☐ To Obtain Information		☐ +1
2 ☐ To Object to Project		☐ +2
3 ☐ To Speak in Favor of Project		
4 ☐ To Provide Information Supportive of Project		
5 ☐ To Provide information that is not Supportive of Project		

Figure B-14. Phone Call Evaluation Form

EVALUATION FORM

V. Individual Contacts
B. Direct Contacts

Date: _____

Name of Organization

RACIAL/ETHNIC TYPE

1 ☐ White

2 ☐ Black

3 ☐ Mexican American

4 ☐ Other

NEGATIVE RESULTS (Summary of evaluations from following page)

☐ -2

☐ -1

☐ 0

LOCATION OF CONTACT

1 ☐ In SDHPT Office

2 ☐ At Project Site

3 ☐ Other

POSITIVE RESULTS (Summary of evaluations from following page)

☐ 0

☐ +1

☐ +2

PURPOSE OF CONTACT

1 ☐ To Obtain Information

2 ☐ To Object to Project

3 ☐ To Speak in Favor of Project

4 ☐ To Provide Information Supportive of the Project

5 ☐ Provide Information not Supportive of Project

RESPONSE

1 ☐ Provided Information Requested

2 ☐ Did not Provide Information Requested

3 ☐ Responded to Project Objections

4 ☐ Did not Respond to Project Objections

Figure B-15. Direct Contacts Evaluation Form

EVALUATION FORM

VI. Contacts with Local Officials Date: _____

Name of Organization

OFFICIAL'S JURISDICTION	NEGATIVE RESULTS (Summary of evaluations from following page)	
1 ☐ City		☐ -2
2 ☐ County		☐ -1
3 ☐ M.P.O.		☐ 0
4 ☐ C.O.G.		

PURPOSE OF CONTACT	POSITIVE RESULTS (Summary of evaluations from following page)	
1 ☐ To Provide Information to Official		☐ 0
2 ☐ To Secure Information from Official		☐ +1
3 ☐ To Conform to Required Procedural Step in Project Planning Process		☐ +2

Figure B-16. Contacts With Local Officials Evaluation Form

EVALUATION FORM

VII. Media Presentations Date: _____

Name of Organization

DOMINANT RACIAL/ ETHNIC COMPOSITION

1 ☐ White

2 ☐ Black

3 ☐ Mexican American

4 ☐ Other

NEGATIVE RESULTS (Summary of evaluations from following page)

☐ -2

☐ -1

☐ 0

RESPONSE TO PRESENTATION

1 ☐ Favorable

2 ☐ Neutral

3 ☐ Mixed

4 ☐ Unfavorable

POSITIVE RESULTS (Summary of evaluations from following page)

☐ 0

☐ +1

☐ +2

AUDIENCE

1 ☐ Civic Organization

2 ☐ Educational Organization

3 ☐ Religious Organization

4 ☐ Professional Organization

5 ☐ Planning Organization

6 ☐ Affected Property Owners

7 ☐ Minority Group

8 ☐ Ad Hoc Group

Figure B-17. Media Presentations Evaluation Form

EVALUATION FORM

VIII. Project Tours Date: _____

Name of Organization

DOMINANT RACIAL/ ETHNIC COMPOSITION

1 ☐ White

2 ☐ Black

3 ☐ Mexican American

4 ☐ Other

NEGATIVE RESULTS (Summary of evaluations from following page)

☐ -2

☐ -1

☐ 0

RESPONSE TO TOUR

1 ☐ Favorable

2 ☐ Mixed

3 ☐ Neutral

4 ☐ Unfavorable

POSITIVE RESULTS (Summary of evaluations from following page)

☐ 0

☐ +1

☐ +2

GROUP ON TOUR

1 ☐ Civic Organization

2 ☐ Educational Organization

3 ☐ Religious Organization

4 ☐ Professional Organization

5 ☐ Planning Organization

6 ☐ Affected Property Owners

7 ☐ Minority Group

8 ☐ Ad Hoc Group

Figure B-18. Project Tours Evaluation Form

APPENDIX C

SUMMARY EVALUATION FORMS

SUMMARY EVALUATION FORM

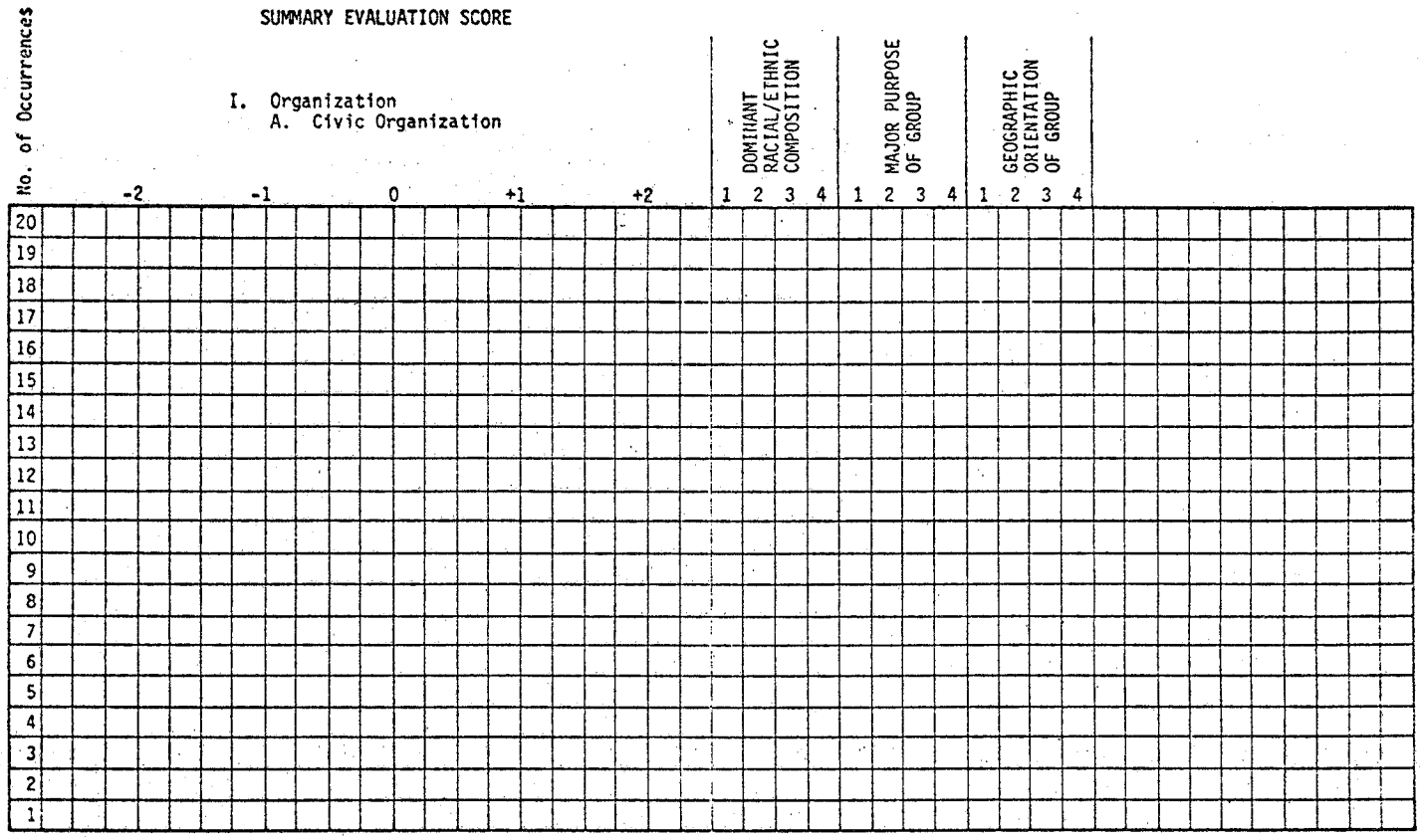


Figure C-1. Civic Organization Summary Evaluation Form

SUMMARY EVALUATION FORM

SUMMARY EVALUATION SCORE

I. Organizations
B. Educational Organization

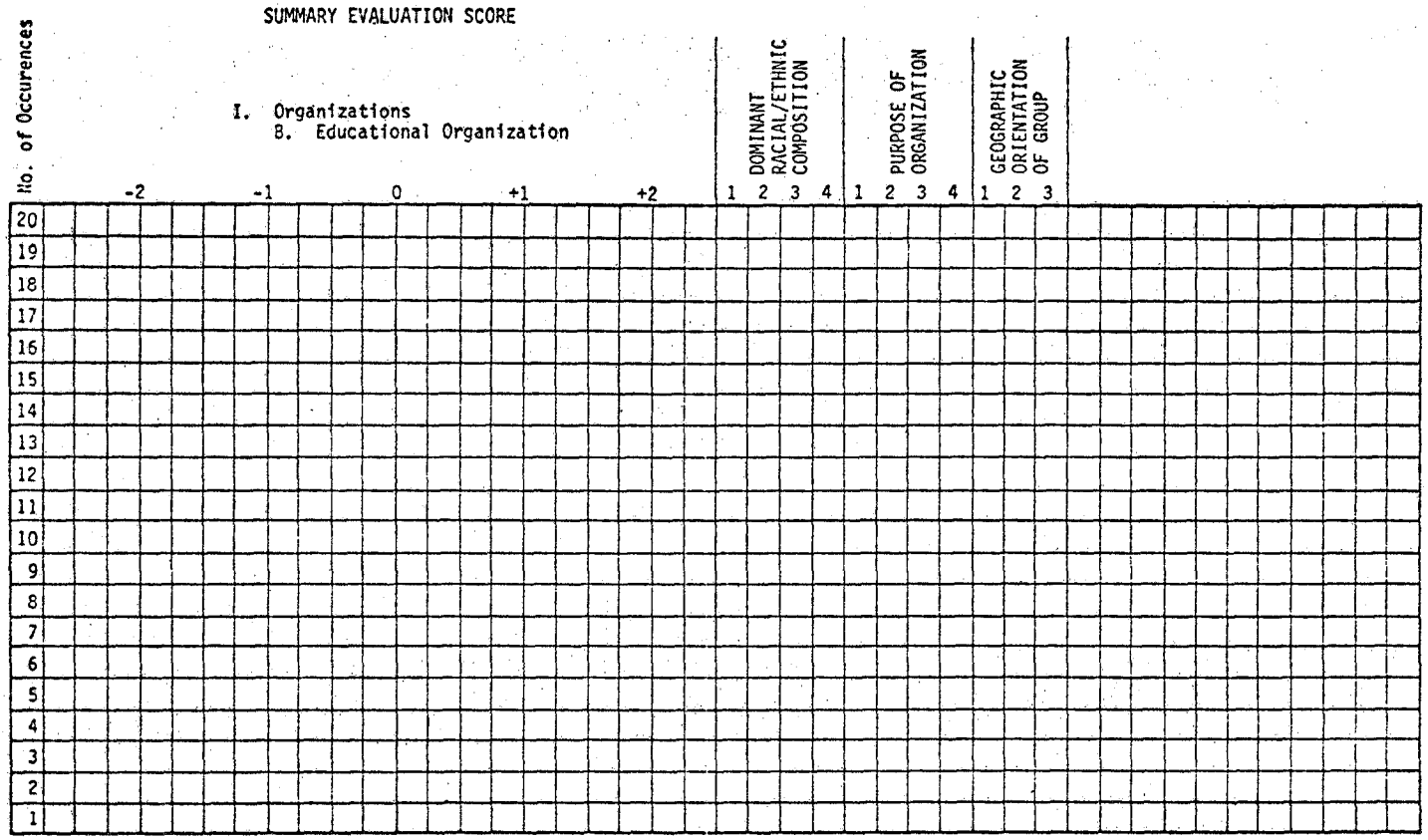


Figure C-2. Educational Organization Summary Evaluation Form

SUMMARY EVALUATION FORM

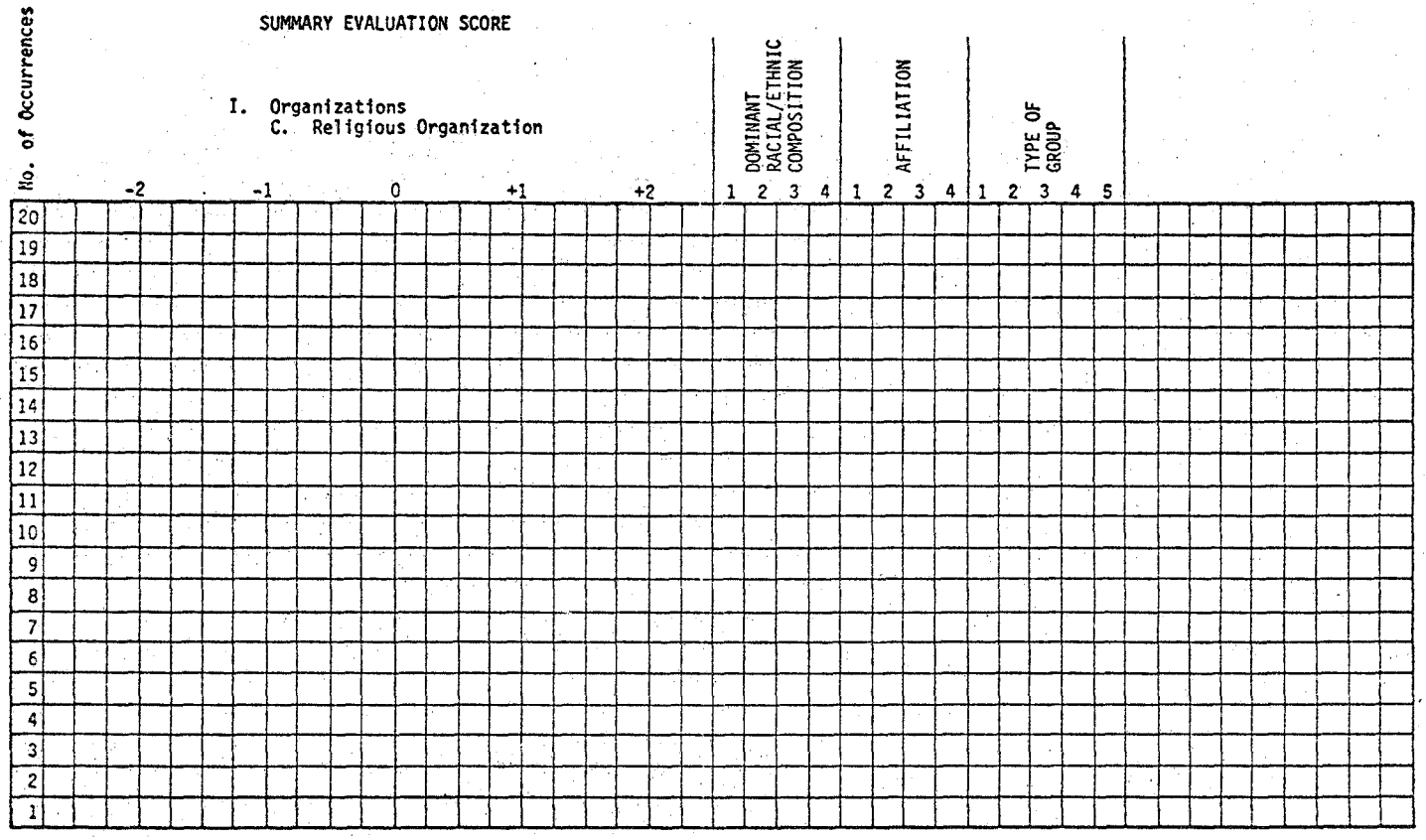


Figure C-3. Religious Organization Summary Evaluation Form

SUMMARY EVALUATION FORM

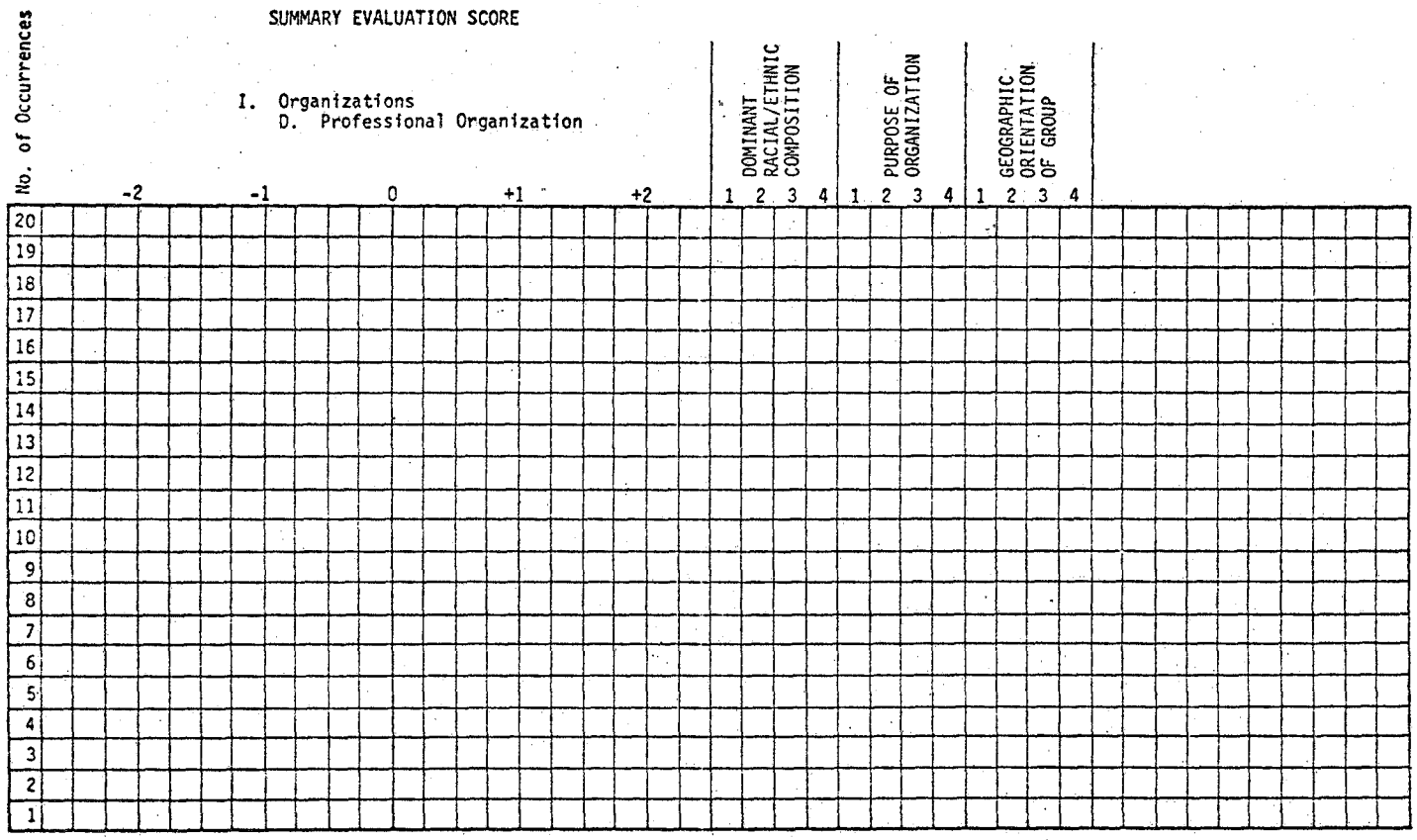


Figure C-4. Professional Organization Summary Evaluation Form

SUMMARY EVALUATION FORM

SUMMARY EVALUATION SCORE

I. Organizations
E. Planning Organization

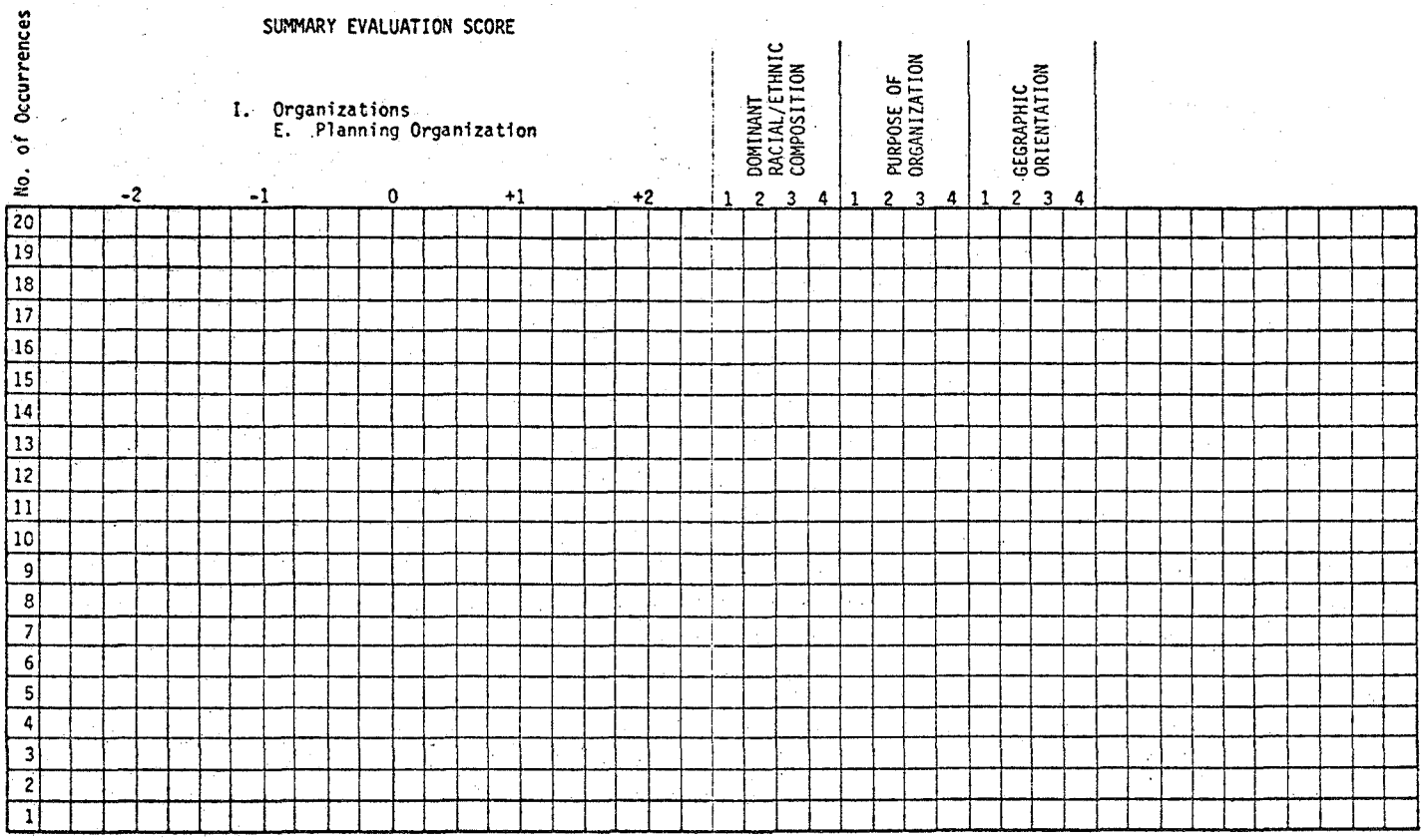


Figure C-5. Planning Organization Summary Evaluation Form

SUMMARY EVALUATION FORM

SUMMARY EVALUATION SCORE

II. Media Publicity
A. The Press

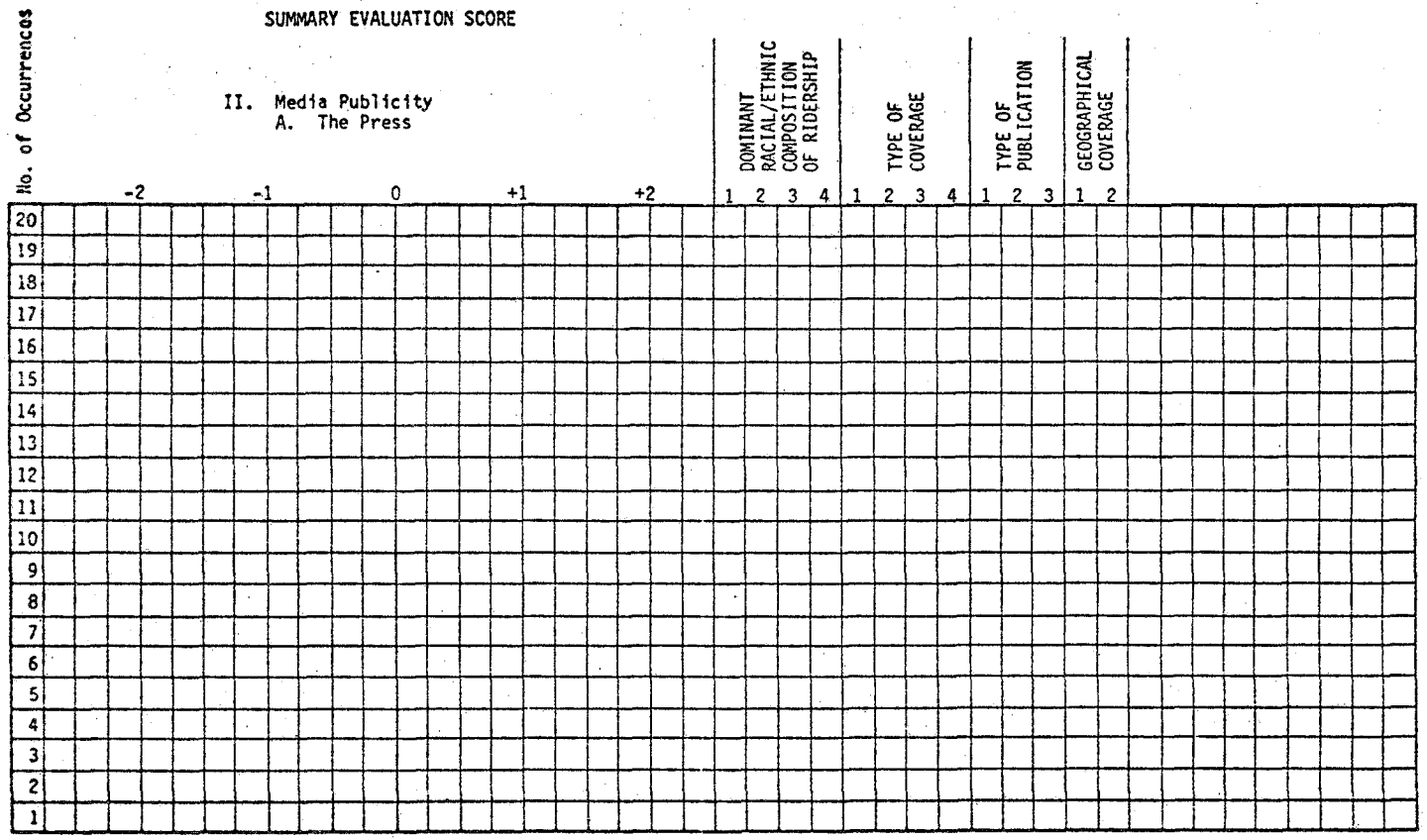


Figure C-6. The Press Summary Evaluation Form

SUMMARY EVALUATION FORM

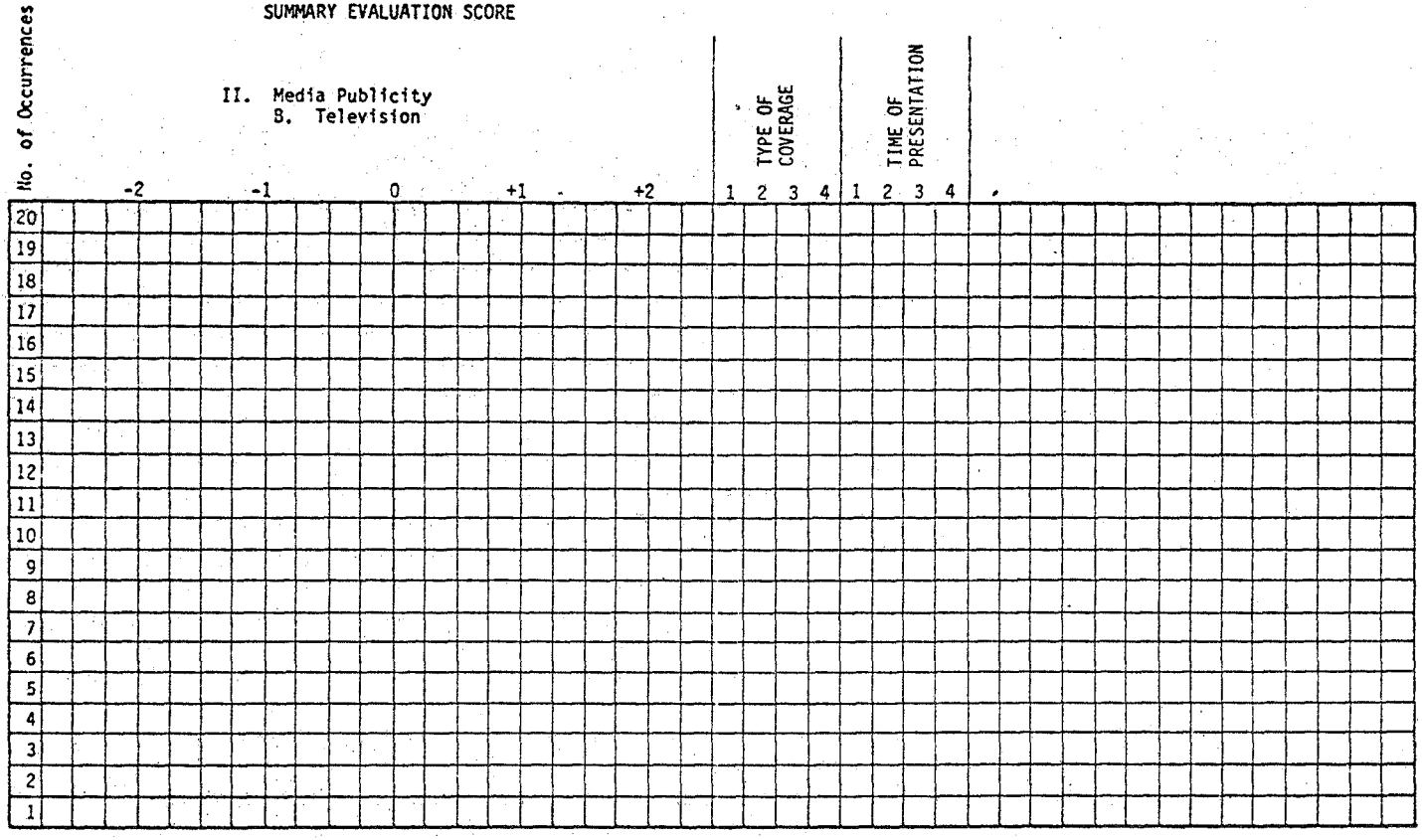


Figure C-7. Television Summary Evaluation Form

SUMMARY EVALUATION FORM

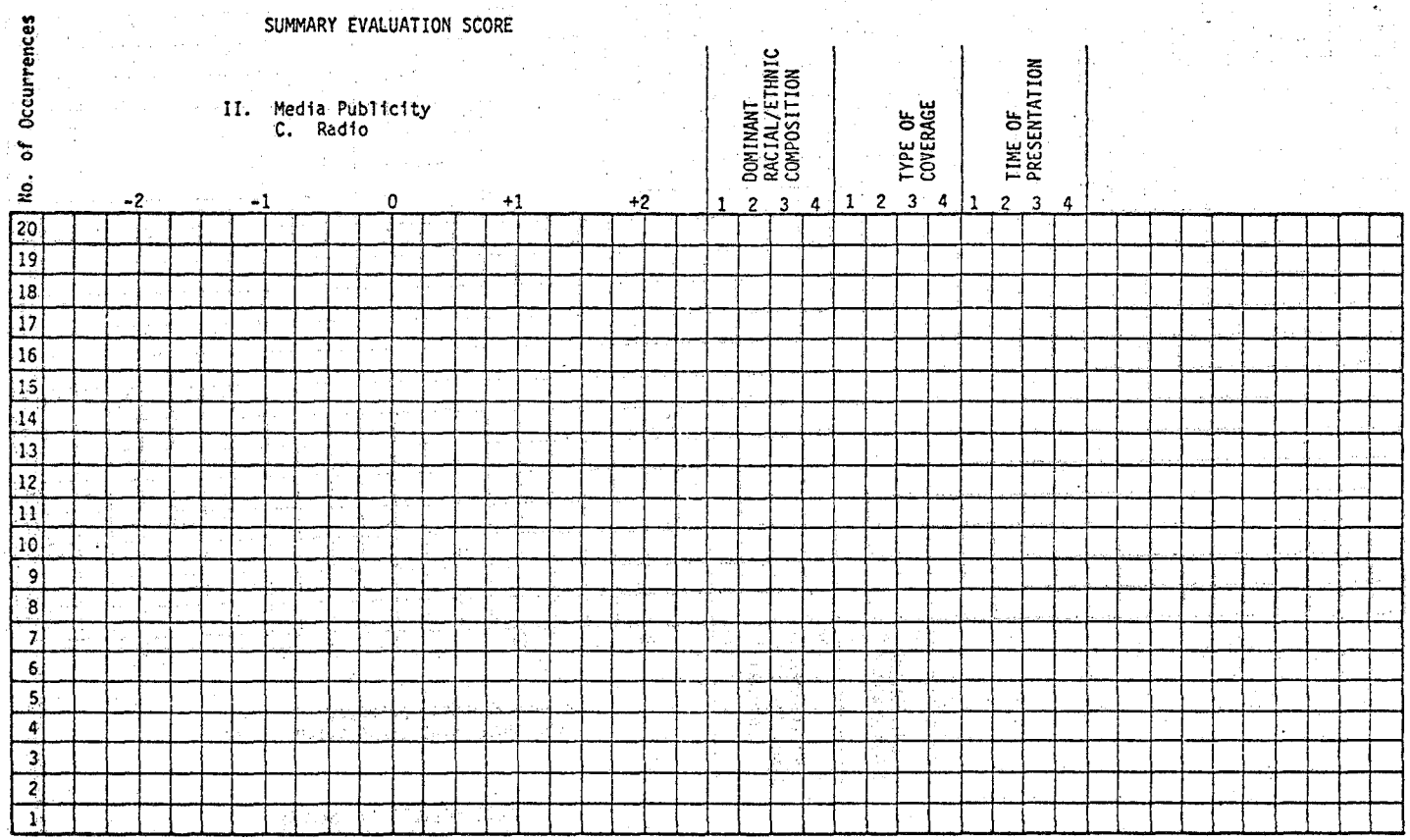


Figure C-8. Radio Summary Evaluation Form

SUMMARY EVALUATION FORM

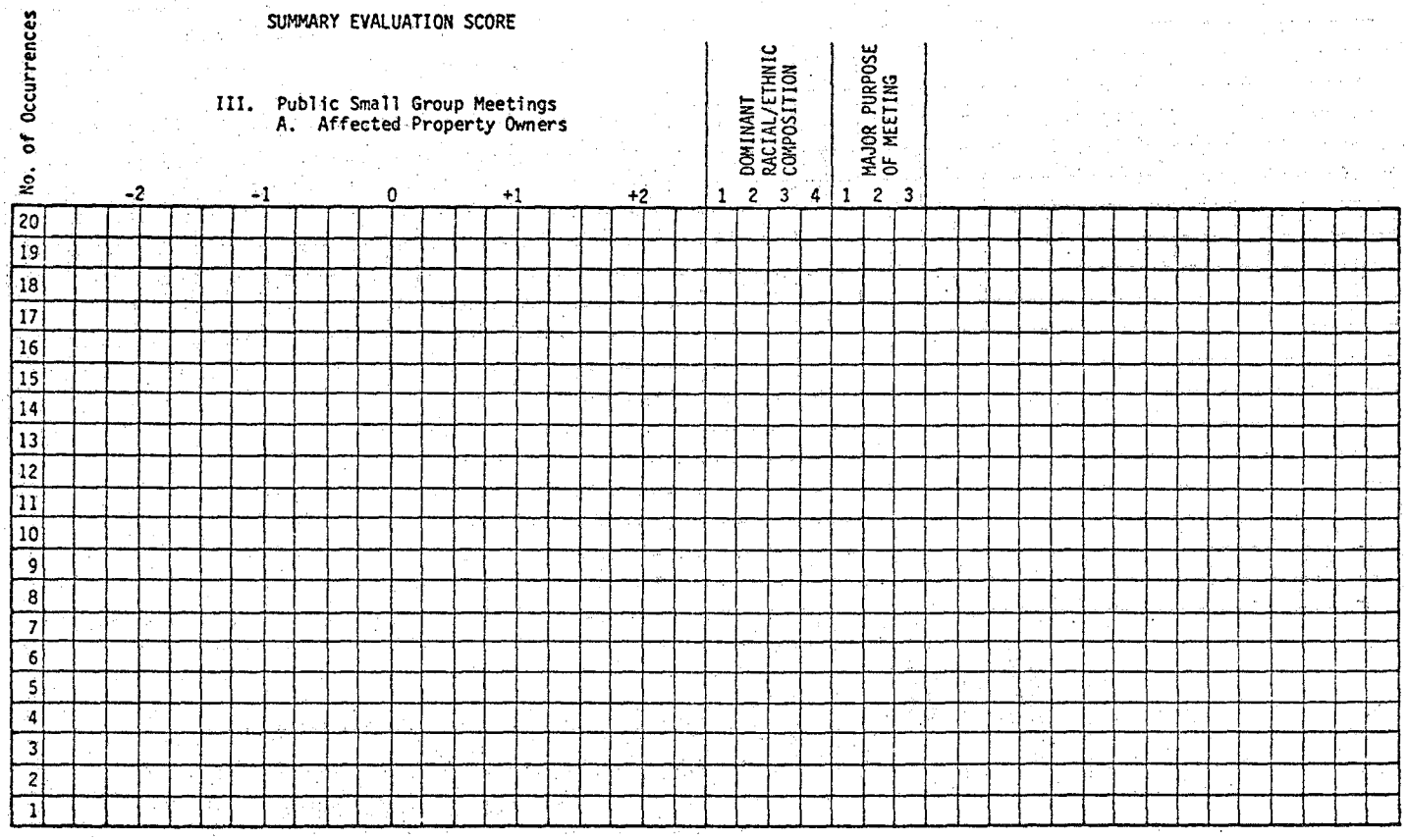


Figure C-9. Affected Property Owners Summary Evaluation Form

SUMMARY EVALUATION FORM

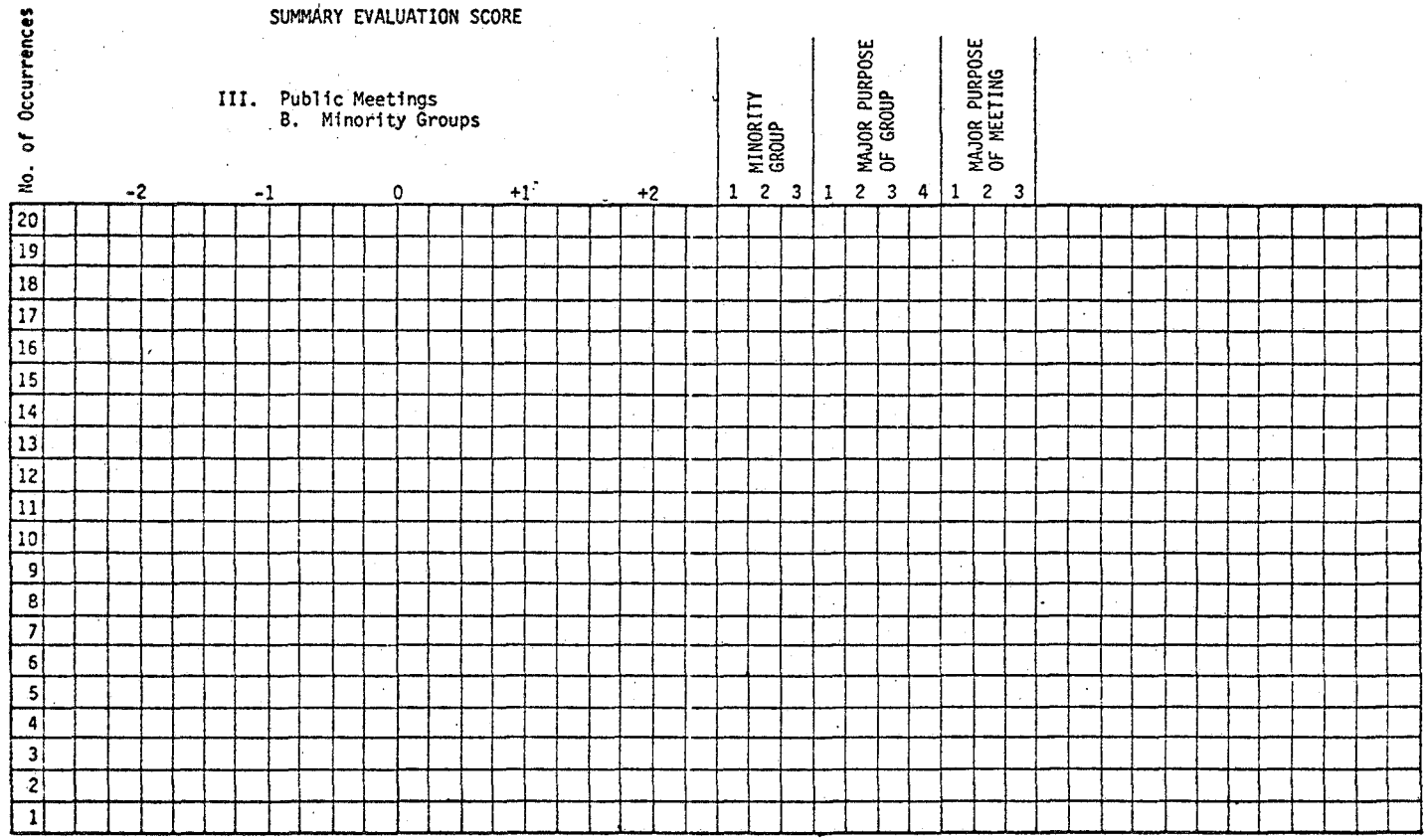


Figure C-10. Minority Groups Summary Evaluation Form

SUMMARY EVALUATION FORM

SUMMARY EVALUATION SCORE

III. Public Meetings
C. Ad Hoc Organization

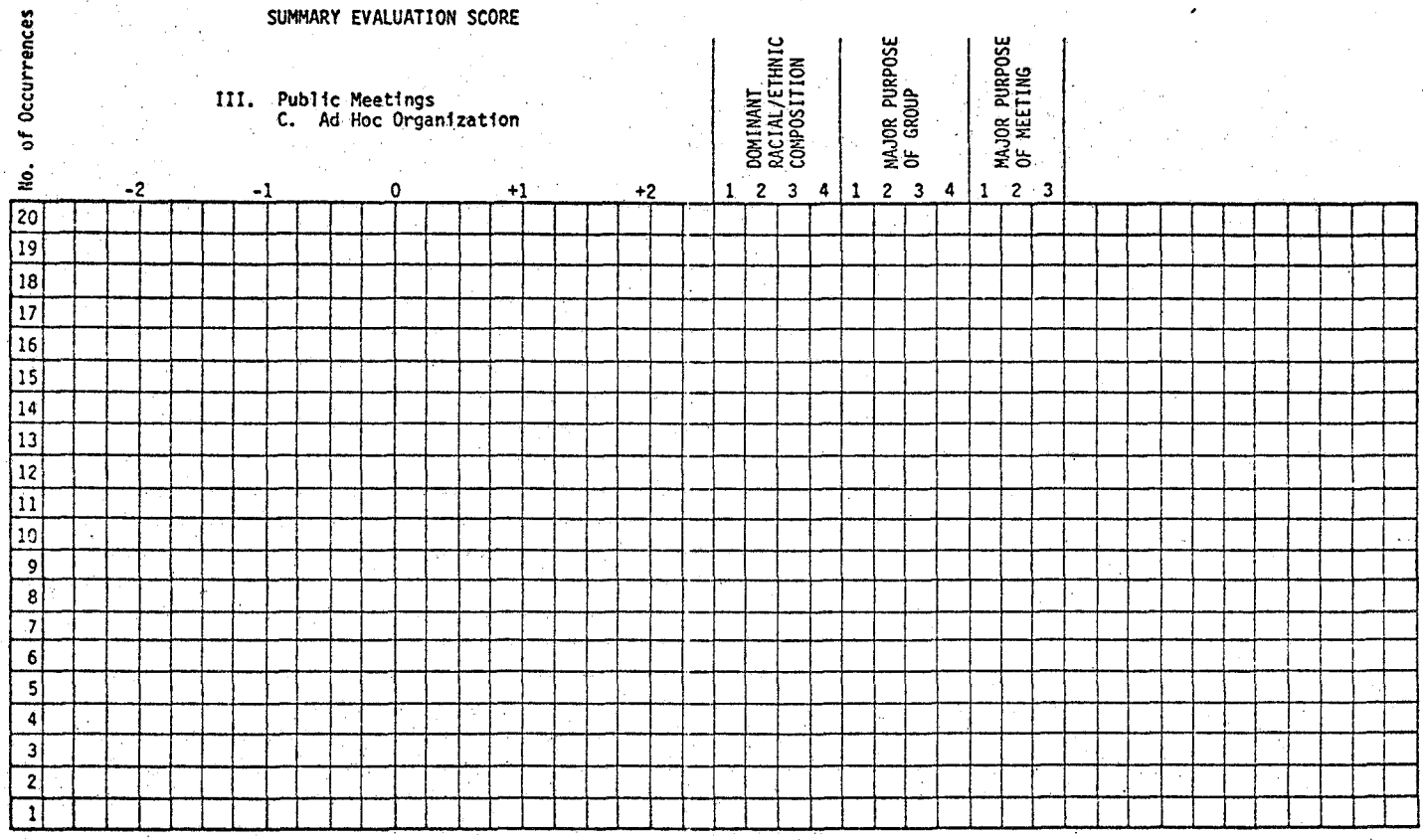


Figure C-11. Ad Hoc Organization Summary Evaluation Form

SUMMARY EVALUATION FORM

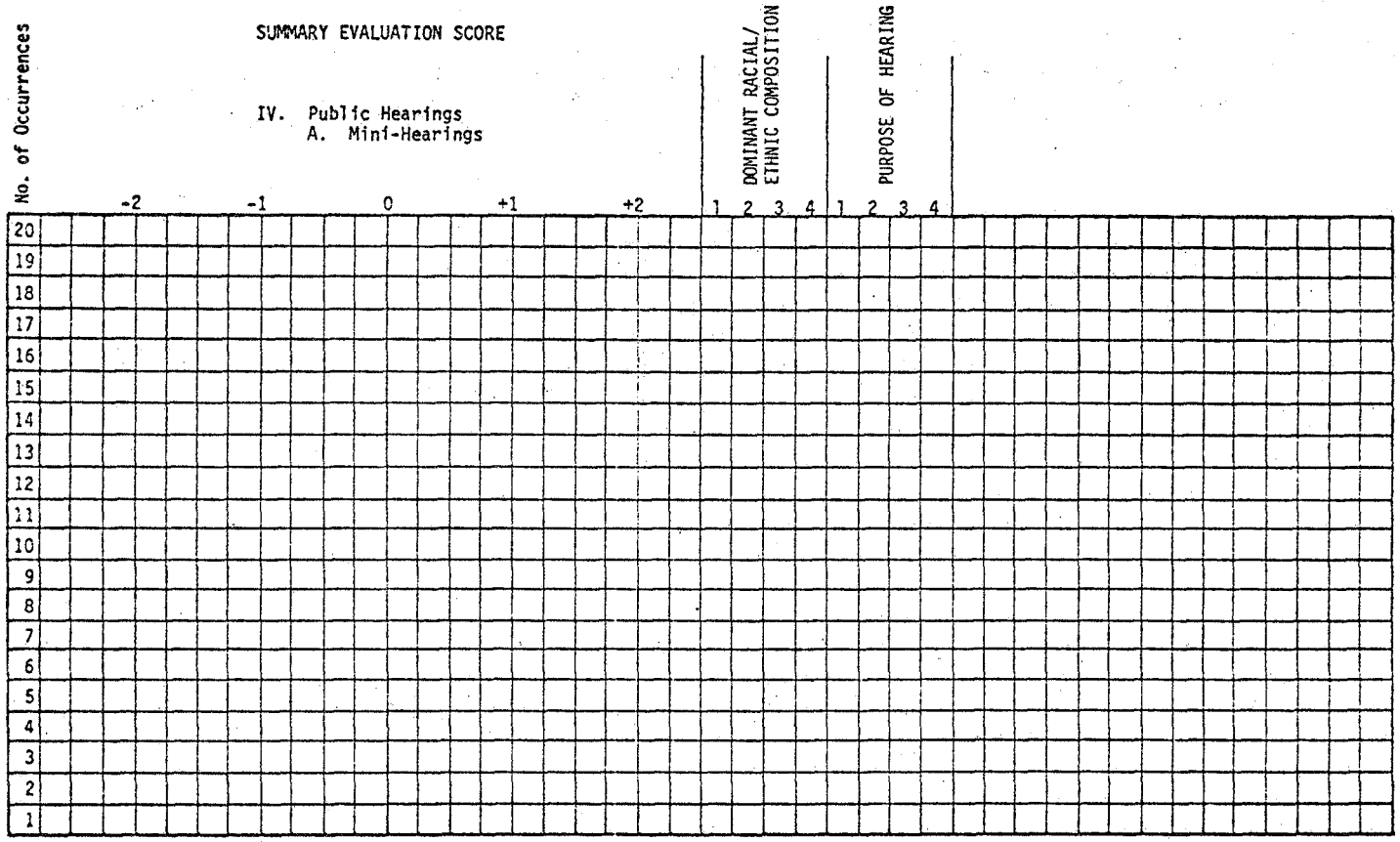


Figure C-12. Mini-Hearings Summary Evaluation Form

SUMMARY EVALUATION FORM

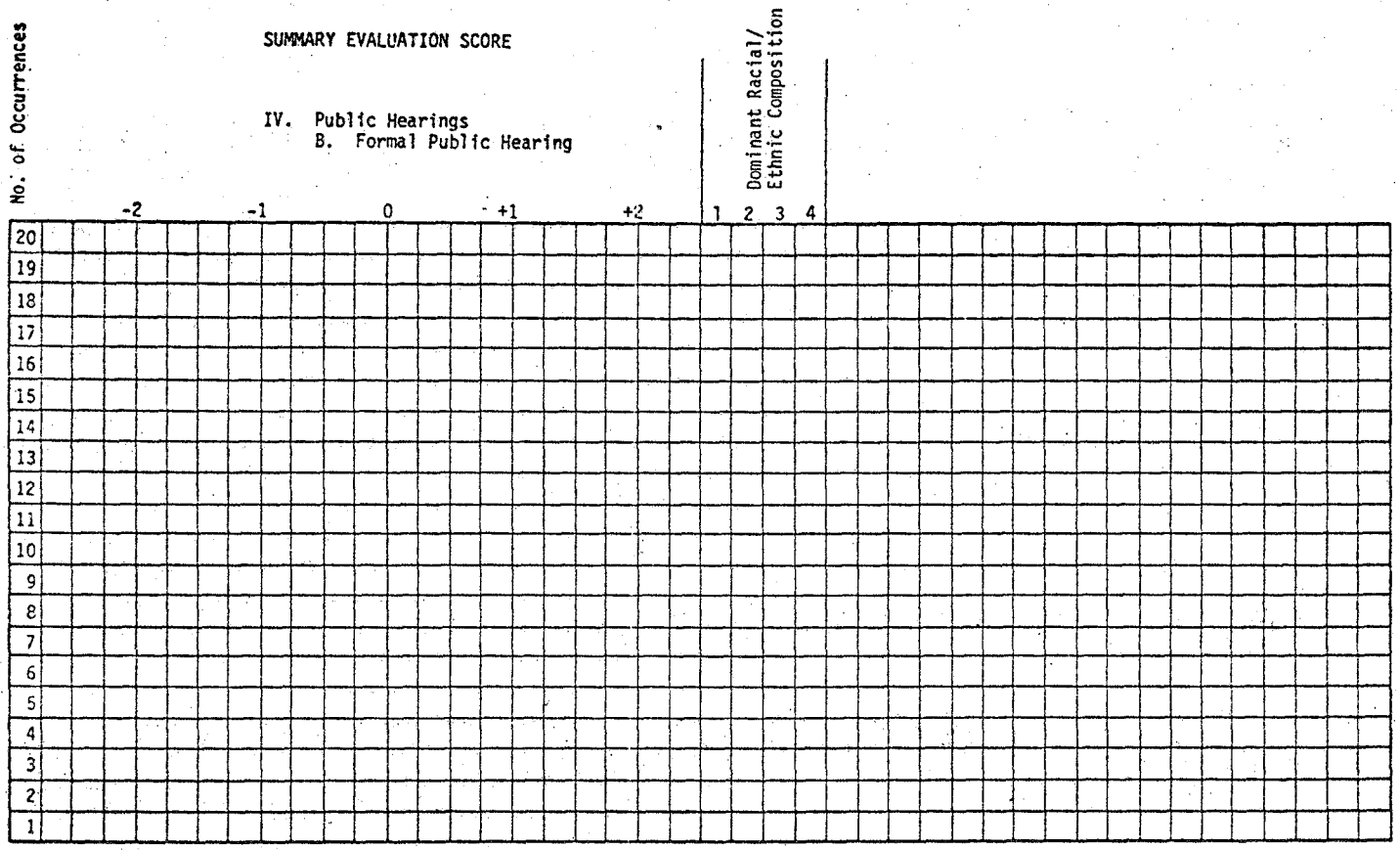


Figure C-13. Formal Public Hearing Summary Evaluation Form

SUMMARY EVALUATION FORM

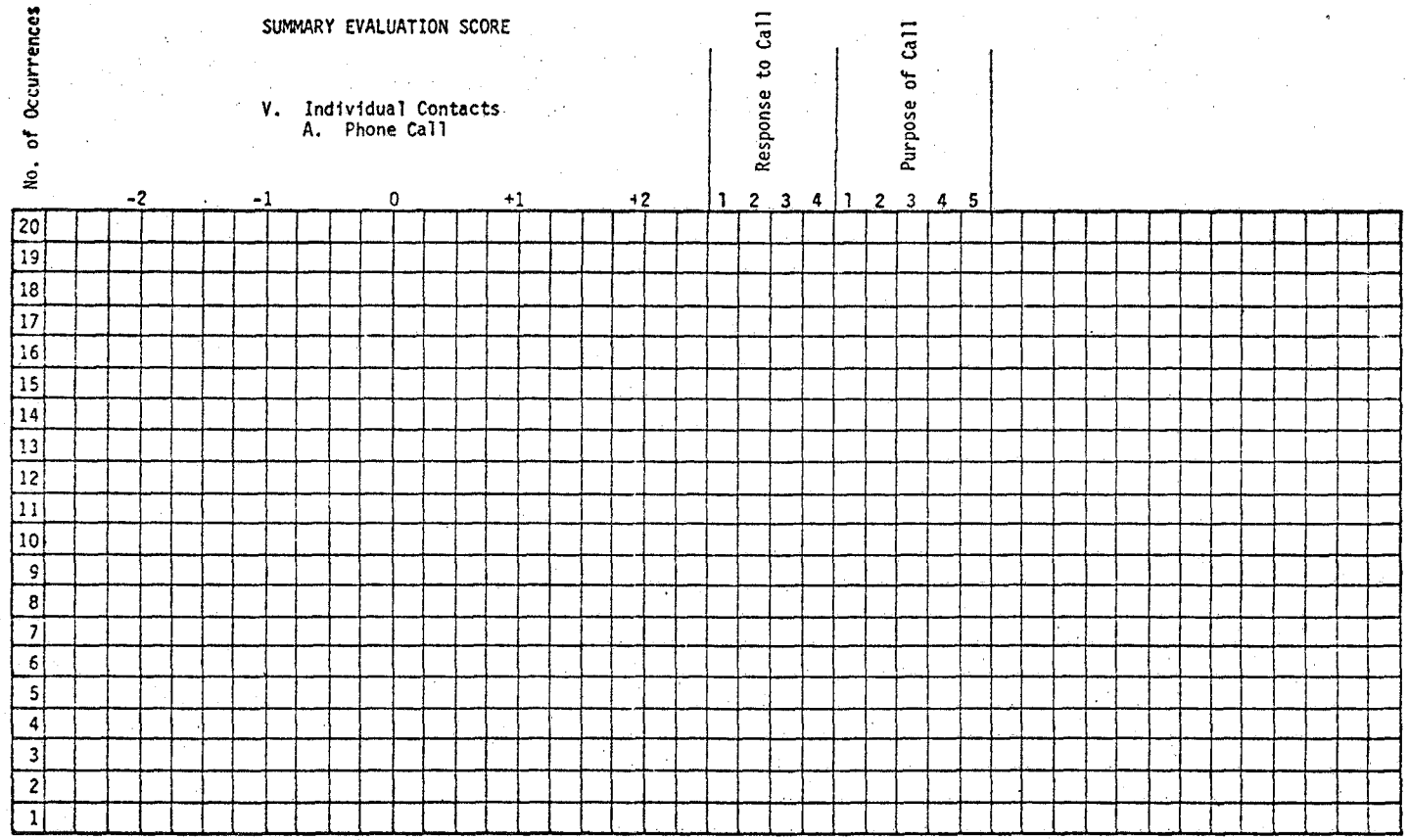


Figure C-14. Phone Call Summary Evaluation Form

SUMMARY EVALUATION FORM

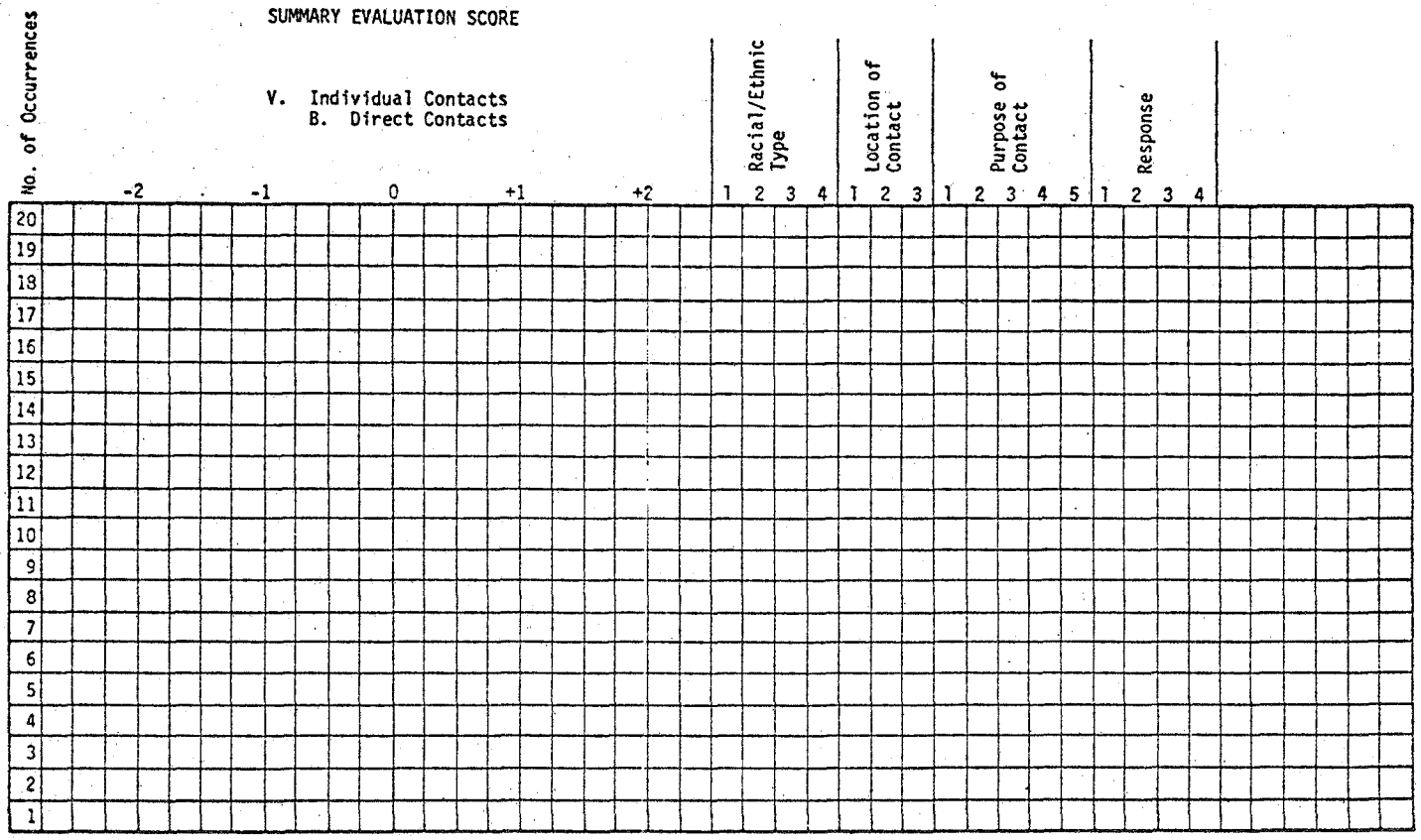


Figure C-15. Direct Contacts Summary Evaluation Form

SUMMARY EVALUATION FORM

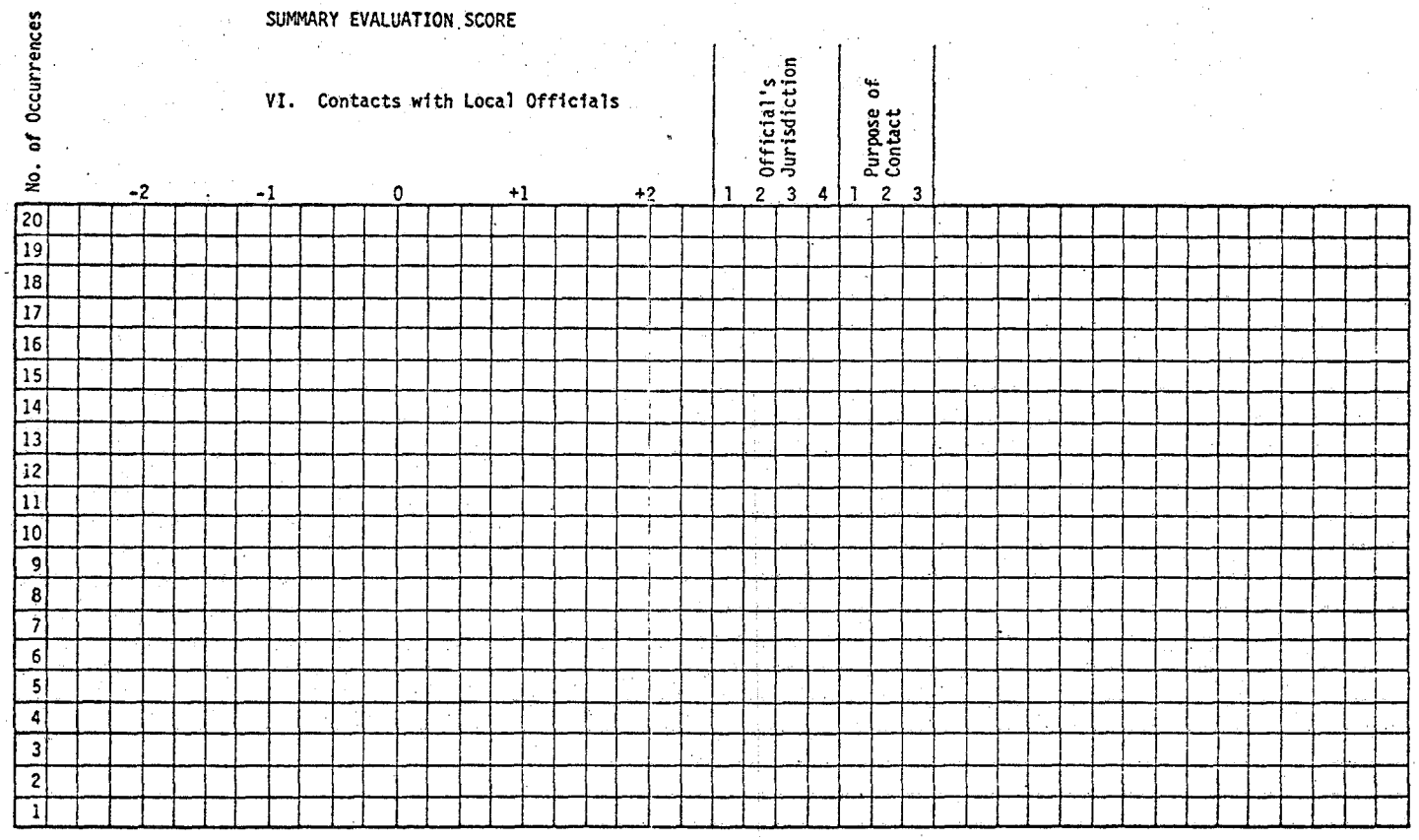


Figure C-16. Contacts With Local Officials Summary Evaluation Form

SUMMARY EVALUATION FORM

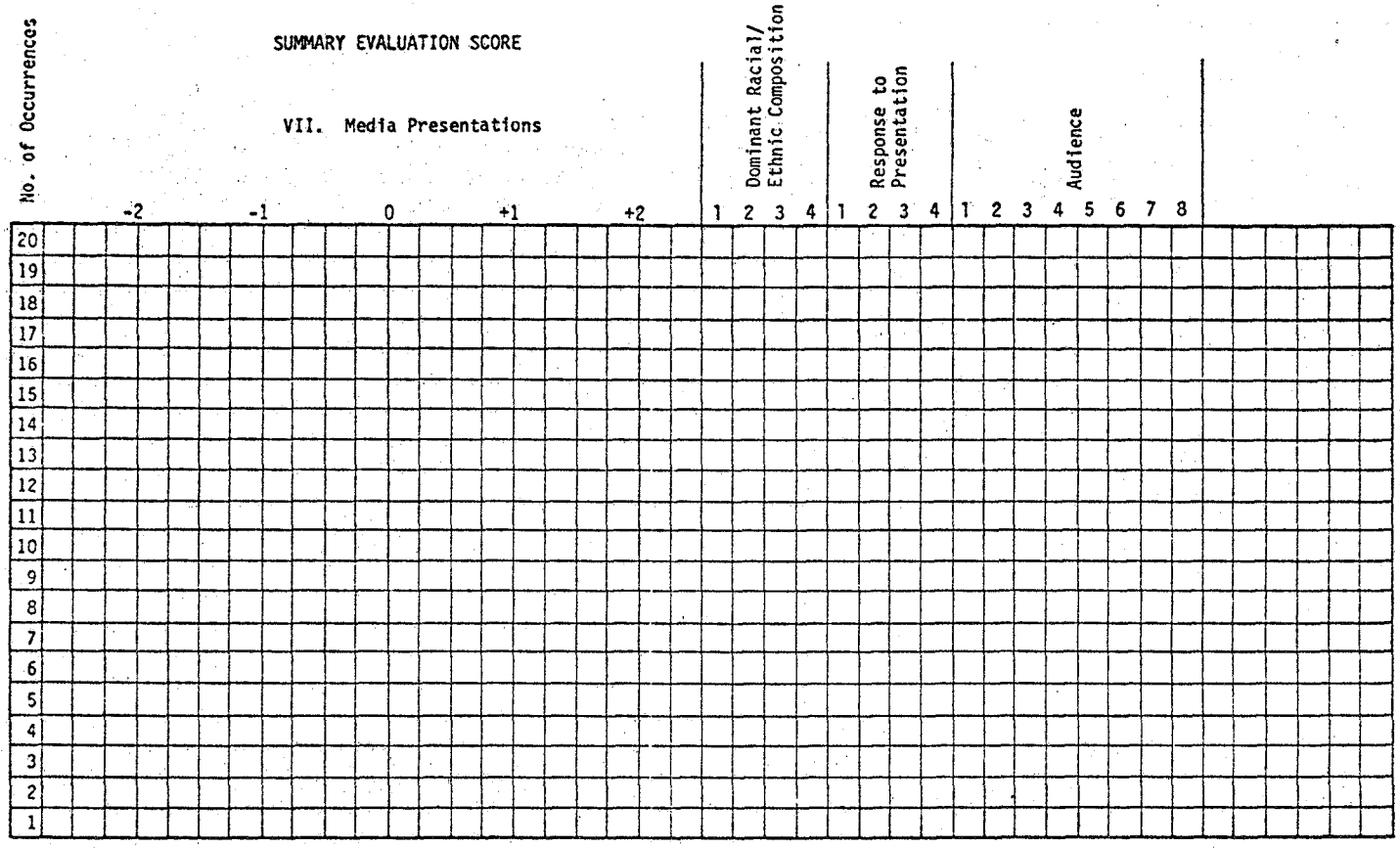


Figure C-17. Media Presentations Summary Evaluation Form

SUMMARY EVALUATION FORM

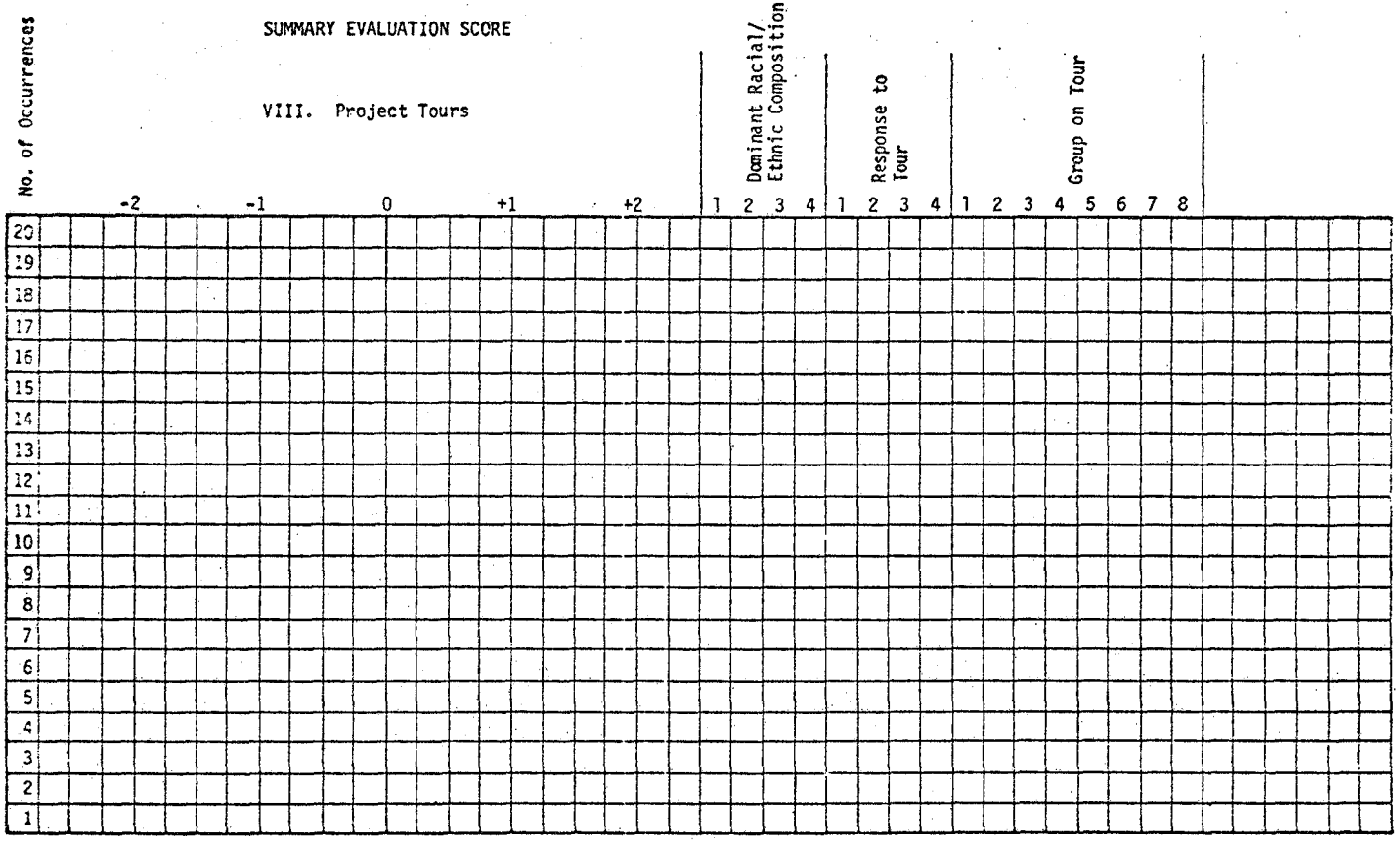


Figure C-18. Project Tours Summary Evaluation Form