

# Attitudes, Community Values, And Highway Planning

MARGARET T. SHAFFER, Century Research Corporation, Arlington, Va.

Gaining citizen acceptance of highways is one of the most difficult assignments for the highway planner. Legislators have underlined "community values" for special consideration in highway planning; however, there is little agreement about the nature of community values or how to measure them. Of the various procedures used to identify community values, the attitude survey is one of the most frequently utilized. In practice, opinions are often measured, instead of attitudes. Opinions are simple views, judgments, or beliefs having to do with specific situations. By their nature they are inherently unstable and are open to influence and change by social pressure. The use of opinions as a tool, therefore, has little predictive value.

Attitudes, however, are considered more basic and complex than opinions; they relate to rather abstract elements such as time, convenience, aesthetics, and education. An attitude is a learned predisposition to behave in a consistent manner in a given situation; as such, attitudes are more enduring than opinions. Hence, attitude assessment is a more reliable basis for prediction of terminal action than opinion study.

A variety of techniques exists within the social sciences for attitude assessment. Several of these projective techniques can be adapted for use in predicting behavior of those affected by the location and construction of new highways.

Through the use of projective techniques, attitudes toward basic concepts within the community can be established. From these attitudes, community values can be determined. The reaction to a given aspect of a projected facility can be predicted reliably by knowing the relative importance of attitudinal factors.

●GAINING citizen acceptance of highways is one of the most difficult assignments for the highway planner. Route selection, in particular, provokes much community resistance. Frequently, as soon as alternative routes are made public, community groups become action groups bent on using the most vocal methods to prevent or delay the proposed highway. These delays and preventive actions are expensive both in time and money. In addition, they lower the public image of the highway department.

Public hearings, one of the usual methods for airing objections, often become "gripe sessions" encompassing many issues, some of which are only peripherally related to the highway in question. The statements expressed at these hearings may or may not accurately reflect the true feelings of the people concerned. An individual who has had a recent unpleasant experience on a highway may use the hearing as a place to air his hostility toward highways in general.

## COMMUNITY VALUES IN PLANNING

Officials are becoming aware of the disparity between the expressions of feeling presented at a public hearing and the true feelings of the people. As a result, they are attempting to consider what they call "community values" in the planning process. This is evidenced by a recent statement by Frankland and Hill (1): "Community values are the single most important items in the determination of highway location or improvements."

However, there is wide disagreement among officials concerning just what a community value is and how one identifies the prevailing community values in a given situation. Frankland and Hill (1) continue: "... few researchers have attempted to define the concept. Lawmakers have insisted that community values be considered in highway planning; but, they have not told highway administrators what a 'community value' is."

The dilemma must be faced; officials must consider the values of the people in the community through which the new highway will pass, yet few officials agree on what constitutes these values or how they should be measured.

The problems created by attempts to determine community values are demonstrated by the following examples. One method is set forth by the U. S. Bureau of Public Roads (2): "In a democratic society people's values about public expenditure are largely weighted through the political process. The technician has the responsibility for developing alternatives that take these values into consideration and then helping to evaluate the alternatives."

David Loeks (3) presents a simple definition of community values: "... that quality of a thing which individuals or society feels is worth acquiring, protecting and conserving."

In determining community values, Davidoff and Reiner (4) point out that there are several types of studies which may be used: market analyses; public opinion polls; anthropological surveys; public hearings; interviews with informed leadership; press content analyses; and studies of current and past laws, administrative behavior, and budgets.

Voorhees (5) distinguishes between studies and procedures when he proposes that there are three types of procedure that are applied in land-use and transportation studies for measuring values: "focus groups, rating panels, and attitude surveys."

The California Division of Highways (1) has attempted to identify these values in practice, and has found:

...that the public's conception of values is vague and all-embracing. We have found the public reacting in a conflicting manner in similar route selection hearings. And, in attempting to compile an itemized list of those "things" included as community values, we find that the list would include nearly every activity known to man. And we could not say that some of the items on the list would be more "important" than others, since we have found that "important" values are only such under given circumstances—they may be "unimportant" in other, even similar, circumstances.

Although there are many situational ramifications to community values, there are underlying motivating characteristics which determine what individuals value and, in turn, influence community values. These factors are known as attitudes.

### ATTITUDES DEFINED

Unfortunately, many persons have used the term, attitudes, to describe any and all types of expressions of need, desire, motivation, and even interest of human beings. This is unfortunate because, properly used, the term implies an analysis on a more basic level. Attitudes are enduring, learned predispositions to behave in a consistent way toward a given class of objects or situations. As such, attitudes are very difficult to change. An opinion, on the other hand, is simply a belief, view, or judgment. It is open to reevaluation, hence is more fleeting and more amenable to change than an

attitude. Therefore, these two words are definitely not synonymous, and should not be used interchangeably. Most "attitude studies" have actually investigated opinions. The difference is mainly one of degree. Attitudes should be considered as more basic, more complex, and more motivating than opinions.

Although techniques which are used to elicit expressions of opinion are inadequate for determining attitudes, it must be conceded that opinion studies do represent an attempt to determine what people want and value. Why then, should highway planners be concerned with attitudes? The reasons lie in some of the weaknesses of opinion surveys.

#### WEAKNESSES OF OPINION SURVEYS

Some of the limitations inherent in the use of opinions and the merits of attitude appraisal are indicated in the following table.

Opinions	Attitudes
Strong social influence.	Little social influence.
Easily swayed.	Enduring motivating force.
Little predictive value.	Useful predictive data.
Opinion-action disparity.	Indicative of behavior.

Opinions are strongly influenced by social conformity and pressures. The organizations to which an individual belongs, the section of the town where he lives, his profession, and his religion all impose constraints on his opinions.

Most people feel a strong need to be socially acceptable in their particular "group." Although there are some individuals who do not succumb to such pressures, the majority will go along with group consensus even if they know the consensus is wrong. Hence, opinions, even when they are those of an individual, often reflect the beliefs of groups to which he belongs.

If group opinions are the ones expressed and these form "pressure groups," why should highway planners worry about what individuals actually think? The fact is that, although an individual may verbally express group consensus and endorse a new idea, when changes are involved which will affect him personally, he may disregard the group position and act on his own. This then becomes the crux of another problem with opinion surveys. What people say and what they do when confronted with real-life situations are not necessarily the same. Predicting behavior from an opinion survey often produces tenuous results. This is particularly true when behavior is being predicted in relation to facilities such as freeways with which citizens have had no previous contact or experience. In these situations, opinions have not proved to be a sound basis for predicting the use of the facility after it is built.

Another weakness of using opinions for behavioral prediction is that they are easily swayed. Being caught in a traffic jam on a particular morning easily influences one's opinion of freeways. However, what a person will do when the new freeway is built may or may not have been reflected in his previous opinions. Attitudes are almost point-for-point more useful for planning purposes, i. e., they are a more reliable basis for predicting behavior.

The identification of attitudes circumvents the problem of social conformity. Attitudes exist toward rather abstract elements such as time, comfort, convenience, cost, prestige, aesthetics, and education. The problem becomes one of defining the relative importance of these elements to different individuals, so that predictions concerning them may be made. By using techniques borrowed from the social sciences, the definition and significance of these abstract elements for the individual may be evaluated. For example, if a person had to choose between having trees or streetlights, which would he choose? Attitudes and values determine the choice. If time is of utmost importance to him, he will not use the six-lane Pogo Expressway if Smedley's Lane is

quicker. Similarly, if convenience is of primary importance, Lake Wazoo, which is accessible only by ski lift, will not be used as much as Colorful Springs, which can be reached by bus, plane, automobile, or train. Obvious as it sounds, the relative importance of factors such as comfort, convenience, cost, time, and prestige becomes vital in designing a system which will be used.

### SIGNIFICANCE OF SOCIOECONOMIC FACTORS

Socioeconomic factors differentiate groups of individuals. If it can be shown that specific groups respond in a similar manner to attitude items concerning such elements as time and prestige, and also that these groups behave in a particular manner when confronted with real-life situations, then a firm basis for making predictions is available.

### PROJECTIVE TECHNIQUES FOR ATTITUDE ASSESSMENT

Projective techniques are especially suited to identifying attitudes. They have been used in several pilot studies to identify basic motivations and to predict behavior.

The individual does not know what the "right" answer is in any of these techniques. This means that he is not able to give the response he thinks you want. This is one of the greatest advantages of attitude assessment over opinion surveys. The indirect approach provides a means to obtain valuable information which could not be obtained in any other way.

Projective techniques can be either constructive or destructive. Unless they are developed with caution, used with caution, and carefully interpreted, they can provide erroneous and misleading information. However, if used properly, they can aid in building a foundation on which sound planning decisions can be built.

#### Word Association Technique

The word association technique, which is fairly well-known, presents a list of words to the subjects as follows.

#### Word Association

- |                |       |
|----------------|-------|
| 1. Highway     | _____ |
| 2. Convenience | _____ |
| 3. Accident    | _____ |
| 4. Pretty      | _____ |
| 5. City        | _____ |

The subject is asked to respond with the first word that enters his mind. As an example, the word "highway" might elicit the neutral word "car." However, individuals with strong positive or negative attitudes toward highways may respond with the words, "pretty" or "dirty" or "noisy." Individuals who respond in this manner to "highway" might respond to "convenience" with the word "car" or "nearby." By looking at the responses to many words and seeing how they interact, it is possible to ascertain positive and negative attitudes. When the responses from this technique are studied in conjunction with responses from the sentence completion and the semantic differential techniques, some indications of basic attitudes evolve.

#### Sentence Completion Technique

The sentence completion technique, as given in the following table, reveals strong positive or negative attitudes toward basic elements of a proposed facility.

### Sentence Completion

1. I wish the city would \_\_\_\_\_.
2. Highways are \_\_\_\_\_.
3. On vacation \_\_\_\_\_.
4. Old buildings should \_\_\_\_\_.

The individual is asked to finish the sentences in any manner which he desires. As with the word association, in general, his responses will fall into a pattern revealing basic attitudes. For example, if a subject finishes the first sentence, "I wish the city would not cut down trees," he reveals a different set of values from the subject who says, "I wish the city would cut taxes," or "I wish the city would get better roads." It must be emphasized that it is the combination of responses to many items—not just responses to one item—which reveals attitudes.

### Semantic Differential Technique

In the semantic differential technique, originally developed by Osgood, et al, (9), the subject scales each noun, such as city, bus, park, and highway, on a number of different dimensions each of which is described by a pair of adjectives (see following table).

<u>City</u>	
Active	/   /   /   /   /   /   /
	/ Passive
Strong	/   /   /   /   /   /   /
	/ Weak
Cruel	/   /   /   /   /   /   /
	/ Kind
<u>Highway</u>	
Sharp	/   /   /   /   /   /   /
	/ Dull
Fast	/   /   /   /   /   /   /
	/ Slow
Large	/   /   /   /   /   /   /
	/ Small

Some dimensions seem obviously related to the noun being scaled. Others are more obscure. The very obscurity of some relationships aids in differentiating attitudes, because it is the cluster of nouns described in a specific manner by specific adjectives and the groups of individuals that respond similarly that are revealing.

This technique was used for a study in the area of recreation conducted by E. H. Heath at the University of Illinois. The study dealt with assessment and comparison of the attitudes of adults and youth in a bicultural setting in Albuquerque, N. Mex. Significant differences were found between the attitudes of Spanish-American and Anglo-American subjects relating to recreational needs. Sapora (6) says of this study that these are "... differences which appear to have definite value in program planning and particularly in understanding values and apparent recreation program needs of two different cultural groups." He goes on to point out that: "Although further statistical analysis than that developed by Heath is needed to provide more conceptually independent measures of attitudes, the approach to learning more about recreational interests, habits, and attitudes using the semantic differential appears to have excellent promise."

The same technique was used in a pilot study of the effect of a "fear arousing" safety film on physiological, attitudinal, and behavioral measures (7). The experimental treatment of subjects was evident in examining the differences in the semantic differential responses before and after the film.

### ANALYSIS

In the analysis phase, responses to attitude items are correlated with socioeconomic characteristics (e. g., income, education, occupation, and family size). It is then determined whether people with certain characteristics who hold certain attitudes behave in specified ways significantly more often than people with other attitudes. Attitudes toward time, comfort and convenience, for example, can be translated into a prediction of the individual's use of a time-saving highway or rapid transit. Similarly, knowledge of attitudes toward convenience and money can be very helpful in predicting use of a proposed shopping center. The interaction of many attitudes toward many aspects of a facility determines an individual's behavior toward that facility, and consequently his constellation of values. During the analysis phase conflicting attitudes are dealt with. Some relative weightings of the importance and strength of attitudes can be assigned. These cannot be treated as physical measures, only as gross relative factors which are indications of the relative importance, to an individual or group, of certain aspects of community life.

The attitudes then become a basis for determining the community values which exist in a given set of circumstances in a given community. If time is a highly valued element and aesthetics is not, this fact can be a very important indication of what will be accepted and what will be rejected. Obviously, in a given community there will be individuals who hold different community values. However, it is likely that people of similar socioeconomic characteristics will hold similar community values. Thus, the presentation of a highway plan to a given group can be oriented toward their particular values. This can be a significant factor in reducing resistance.

### THE FUTURE

Studies of attitudes as they relate to highway acceptance and rejection are now under way. In the future, the techniques will be refined, and some indications of their predictive ability will be established. If these techniques prove as valuable as present evidence indicates, then further development and refinement will be warranted. In addition, and most important, they will provide a valuable tool for highway planners. This tool could be used by planners in selecting locations of routes. The attitudes identified by this tool can be used as an indication of community values and as a basis for prediction of use. A continued and expanded research program designed to investigate all possible facets of the application of attitude studies to highway problems is needed. Only then will the ultimate possibilities of these potentially valuable techniques be established.

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