

Framework for Involving Local Citizens in a Small Urban Area's Transportation Planning Process

John Lichtenheld, Straam Engineers, Inc., Portland, Oregon
James Etmanczyk, Wisconsin Department of Transportation, Madison

This paper presents a framework developed for involving citizens in transportation planning efforts in a small area. The paper describes the steps involved in the citizen participation process, provides a critique of the process, and outlines recommendations based on the results of the process.

The importance of involving the users of a system in planning the design of that system is well documented (1-4). Although effective citizen involvement does not always guarantee public acceptance of a project or plan, the absence of any citizen involvement in the planning process is an almost sure guarantee that a plan or project will meet strong citizen opposition and may, as a result, be difficult to implement.

The basic problem for most planning agencies today is how to effectively involve citizens in the planning process. There is no universally accepted method of citizen participation but rather a variety of individually tailored formulas, ranging from participatory tokenism to computerized sophistication (5, 6). Sophisticated citizen participation techniques, such as the Delphi method and interactive graphics, are a problem for small cities because they lack the necessary staff to implement these more costly and time-consuming techniques.

PURPOSE

This paper outlines a framework for incorporating citizen participation in the planning process based on one small community's trial-and-error attempts. This framework could have widespread applicability in planning improvements to any aspects of a community's environment where manpower and financial resources are limited. If public involvement is to work, it must allow a two-way communication between the planner and the public. It must serve to

1. Educate the public as to the complexity of the planning process and make the citizen familiar with existing conditions and future projections. If nothing else, the citizen participation effort should make the citizen aware that a coherent process is involved in planning future improvements and that decisions are not completely ad hoc.
2. Act as a sounding board for new ideas and alert the planner to possible problems at a stage where plans can be modified.
3. Allow free flow of information and comment between the planner and citizen by providing a forum for discussion; this would allow the presentation of new ideas from the citizens, which could be further evaluated by the planner.

BACKGROUND

The state line area transportation study (SLATS) was initiated in the fall of 1974. The purpose of this study was to develop a long-range transportation plan. The

study area is located in south-central Wisconsin on the state line between Wisconsin and Illinois. The principal cities involved in the study are Beloit, Wisconsin, and South Beloit, Illinois. The combined population of the area is 61 400 with an employment of 22 300; the land area is 368 km² (142 miles²).

SLATS was originally set up under two committees, a policy committee and a technical committee. The policy committee is composed of representative public officials from the county, city, and towns, as well as officials of state and federal transportation and planning organizations. The policy committee reviews and approves all recommendations made by the technical committee. The technical committee is composed of technical officials who are concerned with the area's transportation system. The technical committee is responsible for development and analysis of improvements and makes recommendations to the policy committee.

When SLATS was initiated, all citizen participation techniques applicable to a small urban area were reviewed (7). The most important criterion in this review was to define a process that would allow the study to remain in contact with the average citizen at all times. As a result, during the preliminary stages of the study a decision was made that, rather than establishing a committee composed of lay people, such as a citizens' advisory committee, a more effective means for involving local citizens in the study process would be a series of open-house and public information meetings. It was felt that a citizens' advisory committee soon loses its original intent because it changes a group of lay people into specialists, who then cease to represent the average citizen.

An initial policy on citizen participation adopted by the policy and technical committees led to the implementation of a program of public meetings, which was continuously modified and updated as the study progressed. The following schedule of open houses was established:

1. An initial open house to educate the public about SLATS and to display the preliminary improvement options,
2. A series of neighborhood open houses to address traffic problems and improvement options in particularly sensitive areas,
3. A second areawide open house for comments on the final group of four alternatives, and
4. A final open house or public hearing on the area's recommended transportation plan.

FORMAT

The open house or public information meeting concept used in the study grew out of a similar strategy used with some success by the Division of Highways, Wisconsin Department of Transportation. The public was invited to attend the open house at their own convenience during an established time frame that usually ran 6-7 h. No formal presentations were made during the meeting,

and no official transcript was taken and published. Information on the study was displayed via graphics, photographs, handouts, and reports. Members of the technical committee were available to answer questions and discuss proposed improvement options. Feedback from citizens was documented through the use of questionnaires for incorporation into the further evaluation of the improvements.

INITIAL OPEN HOUSE

Prior to the first open house, citizen participation had been limited. Although all policy and technical committee meetings were open to the general public and publicized through the local media, only a few citizens attended the meetings. In addition, presentations were made at regularly scheduled public meetings of the city councils, plan commissions, and town boards. At these meetings each unit of government reviewed and approved the population and socioeconomic projections as well as the goals and objectives for the study area.

The purpose of the first open house was to inform the public of the area's transportation planning effort and to present a set of 24 possible improvements to the areas' street system over the next 24 years. Information was also provided on the projected growth patterns and future travel demand for the area.

A mailing list was compiled of public officials, civic groups, clubs, school boards, and news media. Individuals from each organization on the mailing list were sent an announcement of the open house two days prior to the event. A proposed mass mailing of announcements to a 5 percent sample of the population was considered but rejected because it was decided that more exposure could be obtained by contacting group leaders, who would in turn pass the information on to group members (1, pp. 71-89). An attempt was also made to get the local newspapers to run articles on the study during the week immediately prior to the open house. Unfortunately, the press did not give the event comprehensive coverage.

Procedure

The open house was held at a centrally located hotel. It was held on a weekday between the hours of 1:30 and 8:00 p.m. When individuals entered, they were asked to sign a guest book and were handed a questionnaire and a brief summary of the background and purpose of the study.

Graphics were displayed around the room so that individuals could progressively follow the major elements of the study on their own as they circled the room. The graphics depicted were in the following order:

1. The projected areas of major growth (i.e., population and dwelling units),
2. The number of trips in and out of the study area along the major arterials during the base year,
3. The projected internal trip demands for major areas [i.e., shopping center, industrial park, and central business district (CBD)],
4. The current traffic volumes on the street and highway network,
5. The future traffic volume projections on the street and highway network,
6. The network problem areas (as defined by current traffic accident data and future volume-to-capacity ratios),
7. A map of proposed improvement options,
8. Photographs of selected existing street sections that showed how far a widened or newly constructed facility would extend both in terms of its pavement and right-of-way width, and

9. A map of the proposed bus route system.

On the large map of all the improvement options, each improvement was numbered to correspond with a two- or three-page handout that described the improvement in greater detail. These handouts were placed nearby so that an individual interested in more details on a particular improvement could easily find that information. The handout described in detail each improvement's (a) location; (b) design; (c) volume of future traffic projected to be using the facility; (d) environmental, social, and economic impact; and (e) capital cost, including construction and right-of-way acquisition. Staff members were available to answer questions. In some cases small groups of people were taken through the presentation together.

An individual was expected to fill out a questionnaire after he or she had an opportunity to absorb the information and view the options. The questionnaire was modeled after a similar instrument used as part of the Dane County Area Transportation Study (8). It attempted to address people's preferences for future transportation policy direction as well as their comments on specific improvement options that would satisfy the area's future transportation needs.

Results

Approximately 75 people attended the open house, a somewhat lower turnout than anticipated. Possibly the most important result of the open house was that two alternate improvements were suggested by citizens in attendance. These proposals were incorporated into the study for further analysis. Some of the other more notable results follow.

Most of the attendance was during the first few hours. Attendance tapered off after 4:00 p.m. and then picked up somewhat after 7:00 p.m. The majority of those in attendance were from an area where an improvement was being considered.

Only 20 questionnaires were returned—a disappointing 27 percent rate of return. This low response could possibly be attributed to the length and detail of the questionnaire. Of those returned, very few were filled out completely (particularly those questions that were more policy oriented at the beginning of the instrument). Another possible reason for the low rate of response was our encouragement for people to complete the questionnaire at home. Once away from the open house, people's interest waned. A number of people took more than one questionnaire home for friends and family, which made it difficult to determine whether the survey results were representative of those in attendance, much less representative of the population as a whole.

A large amount of information was presented—too much for one person to absorb in a short period of time. The majority of people were most interested in the map display that showed all the improvement options being considered. The photographs of selected streets were an effective means of illustrating the potential extent of proposed improvements. The photographs were used in place of the usual cross-section drawings.

SUBAREA OPEN HOUSES

Sections of the study area were sensitive or controversial prior to the inception of the study or else became so when alternative solutions to the traffic problems were developed and presented. These sections were identified and designated as special subareas of the study. Special emphasis was placed on the development of alternative options for improving traffic flow in these

areas and involving local citizens in the development of these improvement options.

Two special subareas were identified, one residential and one commercial. One subarea was an older, established residential neighborhood in which widening had been proposed for two of the major streets. The other subarea involved streets within and around the central commercial district, an area that is declining as a commercial center. Each area was unique and a separate program was set up for each to involve its residents in the selection of improvements for that particular area.

Neighborhood

Traffic-flow patterns in this neighborhood have been the subject of controversy for many years. Previous debate had been over whether or not to widen two of the major streets within the neighborhood. As a result of suggestions from citizens in the first open house, two additional options for improving traffic flow were developed. The purpose of the neighborhood meeting was to provide citizens with the opportunity to review the options that had been developed and to provide them with the opportunity to make comments and suggestions.

Only groups and citizens on the mailing list who lived within the immediate area of the neighborhood were notified of the meeting. This time meeting notices were distributed two weeks in advance of the meeting. Neighborhood leaders were also contacted, and articles appeared in the local newspapers about the neighborhood meeting.

Procedure

The meeting was held early in the evening at a public school within the target neighborhood. The meeting was more formally structured than was the first open house. A more formal procedure was adopted because improvements in this area were highly controversial and we wanted to make sure that everyone was exposed to the same information on the improvements. A presentation was made, followed by a question-and-answer period, and then the meeting was scheduled to break into smaller groups. Those in attendance at the meeting were asked to sign a guest book and encouraged to fill out and return a questionnaire before leaving the meeting.

The purpose and format of the meeting was explained. Background information on future growth and travel demand projections were presented via slides of graphics taken at the previous open house. These included projected growth patterns, future travel demand, and future problem areas. Next, the four alternative options for helping travel patterns in the area were detailed. Included for each option was

1. An explanation of the improvement's design,
2. The impact the improvement would have on projected traffic volumes in the neighborhood,
3. The capital cost of the project, and
4. The effect of the improvement on the local environment, economics, and neighborhood.

After each of the proposals was explained in some detail, the floor was to be opened up for questions. A transition to a more informal meeting was scheduled to result by inviting people to view the graphic displays more closely and encouraging them to break up into smaller groups for discussions with staff members.

Results

Approximately 60 people attended the open house, of whom all but a few were from the immediate neighbor-

hood. Even before the meeting began, we realized that we were dealing with a very emotional issue and that the feelings of many of those in attendance were already running high. Unfortunately, the meeting did not proceed exactly as planned due somewhat to failures on our part.

The slide show of background information could have been eliminated. It took up much valuable time and answered too few of the questions in which those attending were interested. Because the slide presentation cut into our time, the meeting did not become productive until a late hour, after some of the people had left.

Our initial presentation may have reduced some tension and dispelled some preconceived notions if we had (a) assured people that we were looking at long-range problems and, therefore, long-range solutions (many were concerned that a decision had been made and that the improvements would be constructed immediately) and (b) emphasized that there were four options, all of which were feasible. We were able to show people that their suggestions and input did produce results. Two of the options we were reviewing for this area came from suggestions made by individuals at the first open house.

Since much of the meeting operated under a question-and-answer format, certain people in the audience tended to dominate the discussion. In some cases we found it necessary to benignly ignore certain individuals and give preference to those who had not been heard from previously.

Nearly everyone in attendance filled out and returned a questionnaire. This high rate of response could be attributed to our emphasis on completion of the questionnaire before leaving the open house and the brevity of the questionnaire.

Downtown

The downtown was one of the last subareas addressed. The Beloit downtown area is declining as a commercial center. Proposals for improving traffic patterns in the area needed to be flexible because the downtown merchants were also considering changes to make the area more attractive for shoppers.

Procedure

Two major options were developed for improving traffic flow in the central urban core. Since no single organization represented the interests of the downtown merchants, the proposals were presented individually and collectively to a cross-section of merchants for comment. Businesses represented included banks, automobile dealers, service stations, restaurants, and a downtown merchants' organization. In most cases an appointment was set up at the individual's place of business. At these meetings little background information was given on the area's transportation study; the discussion focused primarily on the options available in the central area. The impacts of each option were articulated in terms of how they would affect

1. Traffic patterns within the central core;
2. Safety, pedestrians, and parking within the central core;
3. Traffic patterns outside the urban core; and
4. Project costs.

Results

As a whole, the business community was opposed to any major changes in the downtown area. Since such a diverse group of merchants was represented, their per-

ceived needs conflicted. Shop owners were more in favor of a pedestrian-oriented plan; however, service stations, automobile dealers, and restaurants preferred an automobile-oriented plan. A number of strategic errors were made in the presentation of the proposals, which may have had some bearing on how well they were received.

An article in the local press on one of the two options had inaccurately stated that it had been recommended. A week after the article appeared, we were finally able to schedule a meeting with the downtown merchants. This gave the merchants plenty of time to organize against the proposal before we felt they had heard all the facts. Some of the individuals were not interested in hearing about the proposals. They stated emphatically that they were against any improvement and gave us little or no opportunity to present the options completely.

We had no strong merchants' organization with which to work in developing the improvement options. Even if we had been able to get their endorsement, there was no guarantee that the individual members would give their support.

Although many of the fears expressed by the merchants in opposition to the improvements were not substantiated by the facts, we realized that the improvements would fail unless they had the support of the merchants. Furthermore, if an unacceptable improvement were instituted, it would merely serve as a scapegoat for future problems in the area.

SECOND OPEN HOUSE

Once the policy and technical committees had developed a final set of four alternatives, a second areawide open house was held. The objective of this meeting was to inform citizens of the progress of the study and to obtain their comments on their choice among the final four alternative future transportation systems. The results of the citizen input from this open house would be used by the technical and policy committees in the recommendation of one of the four alternatives to the local units of government.

Procedure

The format of this open house was similar to that of the first. The meeting was held at the same place on a weekday between the hours of 1:30 and 8:00 p.m. An announcement, similar to the first, was sent out two weeks in advance of the meeting. By this time our mailing list had grown to more than 250 individuals and organizations in addition to the news media. Press coverage of the open house was much more extensive than that given to the first open house.

Graphics consisted of a map of each of the final four alternatives and the improvements unique to that alternative. Each of the four maps contained the year-2000 projected traffic volumes, both with and without the improvements for that alternative. In addition, a one-page summary sheet of each alternative was available. These summary sheets outlined street, transit, bicycle, and rail improvements.

Street and Highway Improvements

Number of kilometers widened and number of kilometers of new facility
Areas of major change in traffic volume (either increases or decreases)
Primary environmental, social, and economic benefits and negative impacts

Other Transportation Improvements

Increased transit ridership
Provision of better bicycle routes
Reduced rail-automobile conflicts
Increased vehicle occupancy

At the entrance, individuals were asked to sign a guest book and given a questionnaire, which they were asked to fill out and return before leaving. Tables and chairs were set up off to the side so that people had a comfortable place to complete the questionnaires. Coffee and pencils were provided.

The four large maps (one of each alternative) were displayed as the focal point of the meeting. Handouts that summarized the alternatives were available next to the maps. Technical committee members were present to answer questions, provide information, and explain the alternatives in detail.

Results

Approximately 70 people attended this open house, about the same number as had attended the first open house, although more extensive publicity was given to the second areawide meeting. Attendance was sporadic and slow during the afternoon. It fell off almost completely during the supper hour (4:00-6:00 p.m.), but almost half those attending arrived between 6:00 and 8:00 p.m.

More than half the people attending the open house lived within the subarea addressed at the neighborhood open house. Most of the others were also from an area affected by the study. Although there were some new faces at this open house, most of the people in attendance had also shown up at the previous two open houses.

Fifty-two questionnaires were returned, a 73 percent rate of return. Almost all of the questionnaires returned were completely filled out. The provision of a place for people to return their questionnaires before leaving, as well as tables, chairs, coffee, and pencils, encouraged them to fill out and return the questionnaires.

CONCLUSION

The framework outlined for including local citizens has proved most effective as a means of incorporating citizens' input during the development phase of the planning process. This method was successful in involving the segments of the population that were directly affected. It did not involve a large segment of the indirectly affected public. We could have surveyed areawide opinions to obtain this segment's input, but due to fiscal and time constraints a survey was not possible.

The citizen participation process outlined here and used in the development of the alternatives

1. Opened the process to public scrutiny,
2. Disseminated information on the process, and
3. Incorporated citizens' suggestions and proposals.

RECOMMENDATIONS

The open-house procedure is most effective at the developmental phase of planning. The procedure provided us with a means of disseminating information, sounding out proposals, and developing new proposals. It is important that citizen input be obtained before major decisions are made. People react as much to the decision-making process as to the decision. If citizen participation is to work, it must be included throughout the study, not just at the end. Credibility is increased when you can show that citizen feedback does produce results. Two options that we had not previously considered were incorporated into the study after they had been suggested by citizens attending the first open house.

The most effective way to disseminate information about a meeting is by word of mouth. Contacting neighborhood leaders, local officials, and civic organizations brought out more people than all the newspaper notices

and articles combined. Develop a mailing list of interested parties, civic leaders, organizations, and officials. People who express an interest in the study should be added to the list. Providing a place for people to write their name and address at the bottom of the questionnaire was one of the most effective means we found in expanding our mailing list. A guest book for people attending the open house to sign their name and address provided a useful record for documenting attendance and for analyzing the areas represented at the meeting.

We found large photographs of street sections to be more visually effective than engineering cross-sections in showing people what impact a proposed improvement would have on an area. The more information that can be reduced to graphics, the better. An open house is probably the best means of conveying the information in an easily understandable form.

Presentations to a group should be short and direct. Breaking a study into subareas or groups means presenting information that only pertains to that particular area of the study.

Questionnaires are a useful means of recording citizen feedback, but it is important that they be short yet open ended enough to allow suggestions. People are most likely to take the time to fill out and return a questionnaire if tables, chairs, pencils, and coffee are provided in a quiet corner. Results of the open house questionnaires could possibly be biased due to the limited number of people attending and their proximity to an improvement.

REFERENCES

1. Citizen Participation in Transportation Planning. HRB, Special Rept. 142, 1973, 142 pp.
2. Citizen's Role in Transportation Planning. TRB, Transportation Research Record 555, 1975, 52 pp.
3. Social, Economic, and Environmental Factors of Transportation. HRB, Highway Research Record 356, 1971, 174 pp.
4. M. C. Perfater. Citizen Participation and the Role of the Public Hearing. Virginia Highway and Transportation Research Council, Charlottesville, 1975.
5. D. Jordan and others. Effective Citizen Participation in Transportation Planning: Volume 2—A Catalog of Techniques. Arthur D. Little, Inc., San Francisco, 1976.
6. Application of Interactive Graphics in Citizen Participation. TRB, Transportation Research Record 553, 1975, 49 pp.
7. R. Yukubouski. Citizen Participation in Transportation Planning—A Selected Biography. Planning Division, New York State Department of Transportation, Albany, 1973.
8. Toward a New Transportation Plan. Dane County Regional Planning Commission, Madison, WI, 1976.

Publication of this paper sponsored by Committee on Citizen Participation in Transportation Planning.

Pricing in the Planning of Transportation Facilities

William Vickrey, Department of Economics, Columbia University, New York

If proper pricing according to marginal cost principles can be implemented, important improvements in the planning of investment are possible. In cases of daily or seasonal fluctuations in demand, less capacity will often be necessary. In some cases the optimum time for making an investment will be advanced (chiefly in new projects), but in others (particularly in additions to capacity) investment may be deferred. When future demand is uncertain, reductions in planned capacity may result by reason of the better adaptation to alternative developments that are possible with pricing. Where there are externalities, proper pricing methods or effluent charges applied according to eventual results can provide better planning of investment in pollution-abatement facilities or modifications than are likely to result from the imposition of standards.

Ideally, the development of an efficient transportation system (or any system that has large fixed costs) calls for an initial decision about the pricing policy to be followed after the facility is in place. If one does not know what pricing policy is to be applied after the facility is ready for service, and hence what the pattern of use is likely to be, an efficient facility cannot be designed. This does not mean that the actual level or pattern of prices must be decided in advance but, rather, what methods are going to be used to determine the prices that will produce the best results. The policy may dictate a pattern and level of pricing considerably different from what might

have been chosen had a firm commitment been required at the time the project was started. The nature of the project should take into consideration alternative possible states of the market for the service, together with their probabilities, and the corresponding pricing and utilization patterns that would result from the application of the prescribed policy to these various possible future circumstances.

IMPLICATIONS OF A SHORT-RUN MARGINAL-COST-PRICING POLICY FOR PLANNING

In this paper, I will maintain that the appropriate pricing policy calls for pricing related to a relevant marginal cost. In some cases this will be a short-run marginal cost, as in cases where the price can be varied on short notice. Where a capability for varying prices from moment to moment would either be expensive or would be ineffective in influencing the pattern of usage, it may be appropriate to vary prices only at substantial intervals. Where, for whatever reason, prices are to be kept fixed for some time, the appropriate marginal cost is one calculated with respect to a time horizon that corresponds to the period during which the price under con-