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WASHINGTON STATE HIGHWAY DEPARTMENT RESEARCH PROGRAM  
REPORT

**25.0**

**SOCIAL FACTORS  
IN  
TRANSPORTATION PLANNING**

**EXECUTIVE  
SUMMARY**

RESEARCH PROJECT

HR-527

JUNE 1976

PREPARED FOR  
WASHINGTON STATE HIGHWAY COMMISSION  
IN COOPERATION WITH  
U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

SOCIAL AND ECONOMIC PLANNING SECTION  
PLANNING, RESEARCH AND STATE AID  
DEPARTMENT OF HIGHWAYS

1. Report No. DOH 25.0		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle SOCIAL FACTORS IN TRANSPORTATION PLANNING EXECUTIVE SUMMARY				5. Report Date June, 1976	
				6. Performing Organization Code	
7. Author(s) Social and Economic Planning Section Washington State Department of Highways				8. Performing Organization Report No.	
9. Performing Organization Name and Address Washington State Highway Commission Department of Highways Highway Administration Building Olympia, Washington 98504				10. Work Unit No.	
				11. Contract or Grant No. HR - 527	
12. Sponsoring Agency Name and Address Washington State Highway Commission Department of Highways Highway Administration Building Olympia, Washington 98504				13. Type of Report and Period Covered Final - Executive Summary 10/1/72 - 6/30/76	
				14. Sponsoring Agency Code	
15. Supplementary Notes					
16. Abstract  This report presents a summary of the research project which resulted in the following guideline reports.  25.1 DEVELOPMENT AND IMPLEMENTATION OF COMMUNITY INVOLVEMENT PROGRAMS  25.2 IDENTIFICATION AND MEASUREMENT OF SOCIAL FACTORS IN TRANSPORTATION PLANNING  25.3 CONDUCTING SURVEYS CONCERNING TRANSPORTATION  25.4 OPERATION OF INTERDISCIPLINARY TEAMS  25.5 TEAM SCHEDULING AND MANAGEMENT					
17. Key Words Community Involvement, Social Factors, Socio-Economic Surveys, Inter-disciplinary Team Operation and Management			18. Distribution Statement		
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No. of Pages 6	22. Price

# SOCIAL FACTORS IN TRANSPORTATION PLANNING

## EXECUTIVE SUMMARY

During the last decade changing values and priorities of modern America have greatly affected transportation planning. Greater concern about protecting and improving the quality of life and maintaining a viable economy has made it necessary to analyze the social and economic impacts of all types of developments in more detail. Citizens have become more involved in the transportation planning process and various groups which were not active in the formulation of legislation and policies concerning transportation have now become quite adept in injecting their concerns in the decision-making process. The role of the planner and the decision maker have become more complicated and difficult.

The objective of this research effort was to develop guidelines that would enable professional personnel and citizens to identify and measure social impacts more adequately and provide a systematic approach for the consideration of such impacts in the decision-making process. Five documents containing guidelines which address related but different parts of the total analytical and decision-making process are described in this summary. These guidelines have been developed for three major areas of concern: (1) identification and analysis of social impacts and the development of procedures for efficient and economical collection of necessary data; (2) planning and implementation of effective community involvement programs and (3) the operation, scheduling and management of interdisciplinary teams. The guidelines developed through this research project cover important aspects of the total process from data gathering to decision-making thereby providing a means by which adequate information can be obtained and analyzed from various sources and then considered carefully in seeking solutions to transportation problems.

Guidelines for the Identification and Measurement of Social Factors  
in Transportation Planning

The purpose of these guidelines is to provide assistance in identifying and evaluating the social impact of transportation systems on both a regional and community or neighborhood level. With the increased emphasis on human factors in transportation planning, in part mandated by such federal statutes as the National Environmental Policy Act of 1969 and the Intergovernmental Act of 1968, it is necessary that a systematic approach to gathering social data and developing normative standards be developed.

To measure social impacts, existing social conditions must be identified and described within the region, the community, and the neighborhood immediately adjacent to the transportation facility. The time frame includes significant historical developments, the present and anticipated future changes. Within this time frame, primary and secondary social impacts are identified and measured. The guidelines contain a classification of types of impacts. In the first phase of analyzing impacts, the social structure of the community is examined and then the relationship between the social structure and the project is determined. The problems encountered in measuring social impacts are discussed and the efforts made to maximize the use of factual data and minimize the use of speculative opinions. The analytical approach described above is applied to basic social factors as an example of the method which can be followed for numerous primary and secondary impacts.

Guidelines for Conducting Surveys Concerning Transportation

The purpose of these guidelines is to provide specific assistance to those responsible for planning and implementing transportation surveys as a

tool to obtain the opinions of citizens and gather relevant social and economic data to measure impacts. Interdisciplinary teams working on major transportation projects in Washington State have utilized surveys as a vital tool in their community involvement programs and analytical reports. To insure the proper application of this device, the theoretical as well as the practical aspects of the survey process are discussed, including the relative merits of different techniques, questionnaire design, and examples of various transportation surveys. These guidelines seek to present this information in a manner that will enable persons having responsibility for project development and social scientists to undertake surveys cooperatively in an efficient manner.

The importance of careful measurement of attitudes is emphasized in each of the various steps involved in organizing and administering surveys.

Guidelines for the Development and Implementation of Community Involvement Programs.

The purpose of these guidelines is to assist interdisciplinary team members and project managers who have the responsibility for the development and implementation of community involvement programs. It has been the experience of interdisciplinary teams working on Washington State Highway Department transportation projects that to insure a successful community involvement program, the program must be tailored to meet the needs of each community. In addition to determining the form the involvement program should take, the community characteristics also determine how extensive the involvement program should be. These factors as well as methods to disseminate information and obtain citizen input, types of community groups which should be incorporated into the planning process, and ways to improve the success of public meetings

are all discussed with the hope of providing some guidelines for implementing an effective, multi-faceted approach to community involvement.

#### Guidelines for the Operation of Interdisciplinary Teams

The purpose of these guidelines is to assist interdisciplinary team members and project managers to carry out their responsibilities in an effective and efficient manner. Interdisciplinary teams in the Department of Highways have the responsibility to (1) conduct indepth studies; (2) develop and implement community involvement programs; and (3) develop departmental recommendations for solutions to transportation problems. Experience has indicated that interdisciplinary teams are effective in developing solutions that are responsive to the needs and desires of the public and include well balanced designs. Various problems occur in the operation of interdisciplinary teams. This report addresses a number of these problems and provides procedural guidelines for team operation. Included is a discussion of the roles of the team; the responsibilities of the team members, the chairman, and project engineer; the integration of the study plan into the team's operations; and ways to improve interaction among team members.

The objective of the guidelines is to present procedures and suggestions based upon experience in the State of Washington that will improve the effectiveness and efficiency of the interdisciplinary teams and integrate the efforts of such teams into the decision-making process.

#### Guidelines for Team Scheduling and Management

The purpose of these guidelines is to provide some assistance to interdisciplinary teams and project managers in the scheduling and coordination of interdisciplinary teams. Because of the unique requirements of scheduling and managing the activities of an interdisciplinary team, a number of more

traditional techniques of project control have been inadequate because their basic logic of task ordering is time sequentiality. Since many of the activities of an interdisciplinary team can be carried on simultaneously or at any given time within the project's period, it is essential that the organizational system used reflect this. The system developed in this document, team program logic, does just that. The application of this method to both individual team members and the overall project is discussed to facilitate the adoption of this system.