DRAFT

ACTION PLAN:

THE MINNESOTA HIGHWAY PLANNING AND DEVELOPMENT PROCESS

July 1973

A CITIZEN'S GUIDE

MINNESOTA DEPARTMENT OF HIGHWAYS

DRAFT

ACTION PLAN

MINNESOTA DEPARTMENT OF HIGHWAYS
HIGHWAY BUILDING
ST. PAUL, MINN. 55155

JULY, 1973

FOREWORD

The Minnesota Highway Department's Action Plan, prepared in response to the 1970 Federal-Aid Highway Act to ensure the consideration of social, economic and environmental effects in highway decisions, will serve as a guide for citizen and agency participation in highway proposals from the beginning of planning up to construction.

The four principles which form the basis for the Action Plan are:

Identification of potential social, economic and environmental effects of proposed projects

Interdisciplinary approach to ensure the integrated use of natural, physical and social sciences and the environmental design arts in planning and development of highways

Involvement of the public and Federal, State and local agencies in the decision making process

Alternative considerations including alternate modes of transportation, varying degrees of highway improvements and no improvement.

These principles are the substance of existing requirements for environmental statements, public hearings and study reports used in the decision making process. The Minnesota Highway Department has demonstrated its concern for these principles and is committed to their application.

Widespread agency and public participation was solicited in the development of this Action Plan. Approval by the Governor will ensure a high degree of inter-agency and inter-governmental cooperation. The Federal Highway Administration must also approve this Action Plan before the implementation date of November 1, 1973.

To document the Minnesota Highway Department processes and the opportunities for public participation in decision making, this Action Plan provides a description of the system planning process, the project development process, and the implementation of this citizen oriented program.

TABLE OF CONTENTS

Chapter 1
INTRODUCTION

A description of the background, purpose, and application of the Action Plan. The organization of the Action Plan is given.

Since 1921, the Minnesota Department of Highways has been responsible for roadways which provide safe and efficient movement of people and goods in a manner that effectively contributes to the social, economic and environmental welfare of the people.

In the early times, highway development emphasized improvement of sub-standard conditions. More recently, however, the values which influence highway decisions have been changed by an increased concern for the total environment, varied life styles, and the preservation of natural resources. When dealing with social and environmental effects that may be hard to quantify, people with different value systems may see the impacts of highway development in different ways. In order that these varied viewpoints may be considered, community participation has become an essential ingredient in highway planning and development. The Action Plan now in your hands has as its central purpose the provision for effective community participation.

BACKGROUND

In 1970 the Congress enacted legislation reflecting the concerns that the public feels left out of the decision making process, and that greater attention must be paid to social, economic and environmental effects of transportation proposals.

Section 109(h), Title 23, United State Code, as contained in Section 136(b) of the Federal-Aid Highway Act of 1970, Public Law 91-605, directed the Secretary of Transportation to develop guidelines designed to assure that factors of social, economic and environmental significance are fully

considered in highway related decisions. These guidelines were issued to the states by the Federal Highway Administration (FHWA) in Policy and Procedure Memorandum (PPM) 90-4, "Process Guidelines (Social, Economic, and Environmental Effects on Highway Projects)", Appendix B.

Recognizing the unique situation of each state, the guidelines aim to influence the method or process by which highway projects are developed rather than prescribe specific conditions or procedures. This approach requires each state to detail the process it will follow to make certain proper consideration is given to the full range of possible impacts of its highway projects. The detailing of each state's individual procedures is its Action Plan.

PURPOSE

The purpose of this Action Plan is to assure that adequate consideration is given to possible social, economic and environmental effects of proposed highway projects, and that the decisions on such projects are made in the best overall public interest.

To achieve this purpose, the Action Plan addresses four basic fundamentals:

1. The Department's competency to identify and objectively study social, economic and environmental effects of proposed projects. Other agencies may often assist, and special expertise may be hired on an as-needed basis, but the Department will possess the basic capabilities to perform studies.
2. The Department's utilization of an interdisciplinary approach in developing projects. The knowledge and viewpoints of a variety of disciplines will be used to identify and evaluate impacts.
3. The opportunities the Department affords for other agencies and the public to participate in the highway development process. The involvement of others is essential to identify clearly the relative importance of various impacts.
4. The Department's consideration of alternatives. Consideration of alternatives will allow other agencies and the public an opportunity to judge the options and compare the costs.

APPLICATION

The Action Plan applies to:

- All projects on any Federal-aid system for which plans, specifications and estimates are approved by the Federal Highway Administration,
- All processes that will be used for Federal-aid projects, including Secondary Road Plan projects, and
- System planning decisions, including those made in the urban transportation planning process established by Section 134, Title 23, United States Code (PPM 50-9, Appendix B), and to project development decisions.

Further, the Action Plan process and principles shall apply, to the extent feasible, to all highway-related projects for which the Minnesota Department of Highways is the implementing authority, regardless of funding sources.

In a case where highway construction is urgently needed because of a National emergency, a natural disaster or a catastrophic failure, the provisions described in the Action Plan will not apply to immediate restoration work. Such projects will be designated as "Emergency Relief" and will be determined by the Federal Highway Administration in conjunction with the Commissioner of Highways. However, for major permanent replacement work of this type, calling for study of alternatives,

development of plans, Right of Way acquisition, etc., the provisions of the Action Plan will generally apply.

The requirements of the process described in the Action Plan shall only be applied to the future development of on-going projects and to future projects. The requirements are not retroactive and shall not apply to any step or steps taken in the development of a project before the time of implementation of the parts of the Action Plan applicable thereto.

The Minnesota Highway Department will carry out all its functions including administration, highway planning and development, right-of-way acquisition, relocation assistance, and transportation facilities construction and maintenance in a manner to effectuate fully all provisions of Title VI of the U.S. Civil Rights Act of 1964, as supplemented by the 1968 Civil Rights Act, to the end that no person shall, on the ground of race, color, religion, sex or national origin, be excluded from participation in or be denied the benefits of, or be otherwise subjected to discrimination under any program of the Department. The Action Plan is to be carried out in full conformance with this policy. These non-discrimination provisions in the Plan are not in addition to the Department's policy but are in accordance with that policy.

DOCUMENT ORGANIZATION

This document does not describe detailed procedures or techniques for accomplishing tasks, but rather it describes the process, comprised of a series of activities, through which highway projects are planned and developed.

To acquaint the user of this Action Plan with the relationship and function of state agencies and the organization and function of the Minnesota Department of Highways, a brief description of functions is provided.

This is followed by the focal point of the Action Plan which is the planning and development process which shows the sequence of activities from highway system planning through the development of construction plans. These chapters describe the activities, opportunities for agency and public involvement, and decision making responsibilities which make up the process.

This in turn is followed by a chapter dealing with the development and implementation of this Action Plan. The steps taken to involve others in defining this process are described. The time schedule for implementing the requirements of this Action Plan, a description of the resources, and the assignment of responsibility for implementing and revising the process are also described.

The last section is the appendix containing a glossary of terms with which the reader may be unfamiliar, copies of pertinent laws and Federal Highway Administration directives which govern planning and development activities, Minnesota Department of Highways policy statements, and agreements with other agencies.

Chapter 2

AGENCY ORGANIZATION

An annotated listing of the state agencies that coordinate most closely with the Minnesota Highway Department in the functioning of the Action Plan. Minnesota Highway Department units most involved in the Plan are also listed and described.

In order to understand the role of the Minnesota Highway Department and other state agencies one must be familiar with the organization and function of these agencies.

STATE AGENCIES

The chart (Exhibit A) shows the organization of the executive branch of state government. The broad function of each agency is identified on this chart. The functions of those agencies with which the Highway Department coordinates most closely are described here in more detail.

Department of Aeronautics

Purpose. Encourage, foster and assist in development of airports and other navigation facilities. Assists in building airports by acting as an agent for Federal-aid, operates statewide navigational system, and enforces laws and regulations.

Coordination. As a transportation agency, is involved in statewide transportation.

Department of Agriculture

Purpose. Encourage and promote the development of agricultural and food industries. Enforce laws and regulations as related to agricultural and food production.

Coordination. Transportation systems have an effect on development and distribution of agricultural and food industries; therefore their needs and priorities must be considered.

Minnesota Pollution Control Agency (MPCA)

Purpose. Deals directly with all state pollution problems. Reflects and acts in the interest of all state agencies as well as the public and other interests directly concerned with pollution and waste disposal.

Coordination. As necessary, MPCA is contacted for permits where a pollution problem may occur.

Department of Economic Development (DED)

Purpose. Develops, promotes and stimulates optimum economic growth either directly or through liaison with the private sector and all levels of government. Emphasis is placed on development and expansion of business and industry, publicity and promotion, the tourist and travel business and economic research.

Coordination. Transportation systems have an effect on economic development therefore economic needs must be considered.

Department of Health

Purpose. Administer and enforce State human health laws and regulations.

Coordination. Human health is a necessary consideration both in development of transportation systems and the effects of these systems.

Minnesota Historical Society (MHS)

Purpose. Collects and preserves those items and records which make possible an accurate interpretation of the history of Minnesota through a broad range of dissemination techniques.

Coordination. The MHS is involved in MHD considerations from the route location stage to review of the final plans. The MHS provides information for consideration of historical, archaeological and paleontological sites.

Department of Natural Resources (DNR)

Purpose. Promotes the wise use and management of the state's natural resources, forests, game and fish, land, minerals, state parks and waters.

Coordination. The DNR is involved in MHD consideration of plans. The DNR also provides input to the Environmental Impact Statements and grants permits where necessary.

State Planning Agency (SPA)

Purpose. Develops long range plans and programs for the orderly growth of state government. Assists the Governor and the Legislature in resolution of major policy and program issues. Engages in functional planning for resources, health, drug abuse and transportation.

Coordination. MHD assists and cooperates in transportation related areas of comprehensive statewide planning program.

Department of Public Safety

Purpose. Conduct service and enforcement activities as related to driver licensing and motor vehicle registration and inspection. Provide surveillance and enforcement of traffic laws on interstate and trunk highways. Prepare and carry-out emergency operation plans. Assist local agencies in criminal investigations.

Coordination. As an enforcement and safety agency Public Safety is directly involved with transportation.

Department of Public Service

Purpose. Conducts semi-judicial hearings and issues orders in matters appropriate to regulation of railroads, bus, truck and telephone companies, grain inspection, livestock and gain weighing and weights and measures.

Coordination. As a regulatory agency Public Service is directly involved with transportation.

Metropolitan Council

Purpose. Created for the purpose of coordinating the planning and development of the seven county metropolitan area.

Coordination. Consulted in the planning phase and during project development for coordination and guidance.

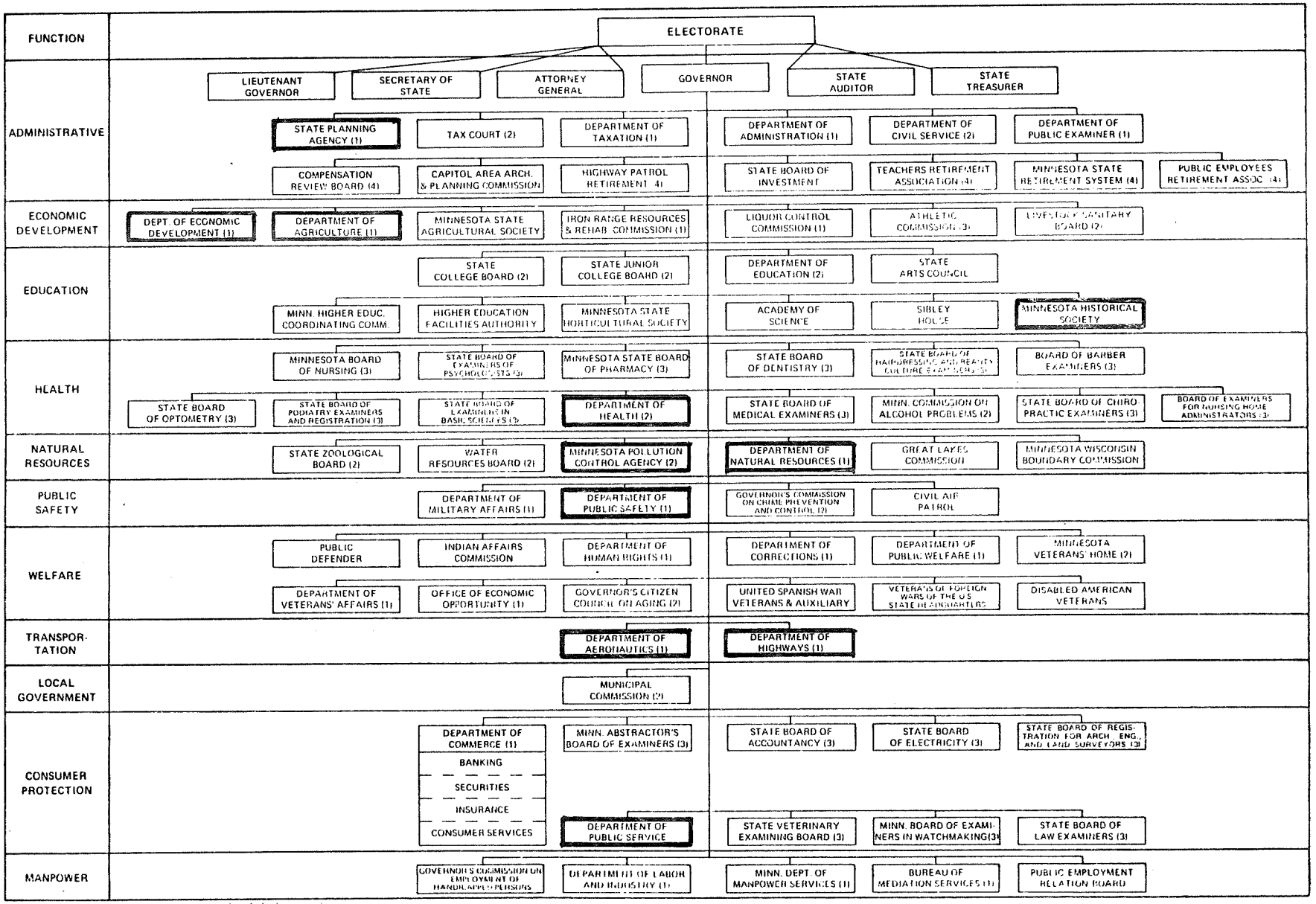
Environmental Quality Council (EQC)

One additional feature of the organization of state agencies worthy of emphasis, is the Environmental Quality Council which serves as a Governor's advisory group.

The Director of the State Planning Agency is the chairman with the top executive of the Minnesota Pollution Control Agency, Department of Natu-

ORGANIZATION CHART - EXECUTIVE BRANCH
STATE OF MINNESOTA

JUNE 1972



1 Agencies headed by gubernatorially appointed single executives.
2 Agencies headed by gubernatorially appointed boards.
3 Professional licensing agencies, appointed gubernatorially.
4 Employee benefits

THESE AGENCIES, BOARDS, AND COMMISSIONS ARE SHOWN IN THE FUNCTIONS IN WHICH THE GREATEST NUMBER OF THEIR ACTIVITIES ARE LOCATED. HOWEVER, NEARLY ALL DEPARTMENTS HAVE ACTIVITIES IN MORE THAN ONE FUNCTION

Exhibit A

ral Resources, Department of Agriculture, Department of Highways, Department of Health and representatives from the Governor's Office, and three citizen members comprising the remainder of the Council. The staff of all state agencies serves as needed to execute the responsibilities of the Council.

The duties of the Environmental Quality Council include the review of state agency programs that affect the environment. A Citizens Advisory Committee has been established to advise the Council.

MINNESOTA DEPARTMENT OF HIGHWAYS

The chart (Exhibit B) shows the organizational structure within the Department. The primary functions and responsibilities of the Divisions, Districts and those offices most involved in highway planning and development are detailed below.

Administration Division

Service and support to the Department in the areas of personnel, audit, administrative services, electronic data processing, finance, electronic communications, project control and management assistance.

Government and Community Relations Division

Establishment and continuation of relationships in all areas of concern to the Department to ensure coordination, cooperation and approval of Department programs.

Office of Public Information. Development and continued effectiveness of the Department's public information program.

Design and Right of Way Division

Accomplishment of technical activities for highway construction projects.

Office of Right of Way. Direction and coordination of all operations for the acquisition of right of way needed for construction purposes.

Office of Bridge and Structural Design. All bridge and structural design activities including review and approval of all plans prepared by consultants.

Office of Environmental Services. Environment of the highway corridors both to motorists and the adjacent areas.

Office of Road Design. Design criteria, construction specification, preliminary plans, final plans and related agreements.

Office of Traffic Engineering. Development and administration of policies, standards and practices to promote the safe and orderly movement of vehicle traffic.

Operations Division

Effective and accurate execution of all construction contracts through inspection and testing, and maintenance of all facilities.

Research and Standards Division

Coordination of Department-wide research programs to ensure the greatest efficiency, lowest cost, and highest quality is achieved in all technical activity.

Transportation and Transit Planning and Programming Division

All planning and programming activities in the development of transportation systems.

Office of Transportation System Planning. Direction and coordination of transportation system planning studies and related activities.

Office of Program Planning. Direction of the activities required to develop, implement and publish construction programs.

District Offices

District operations in development, construction and maintenance of trunk and interstate highways.

Office of State Aid

All state-aid activities including review, approval and administration of Minnesota's State-Aid System.

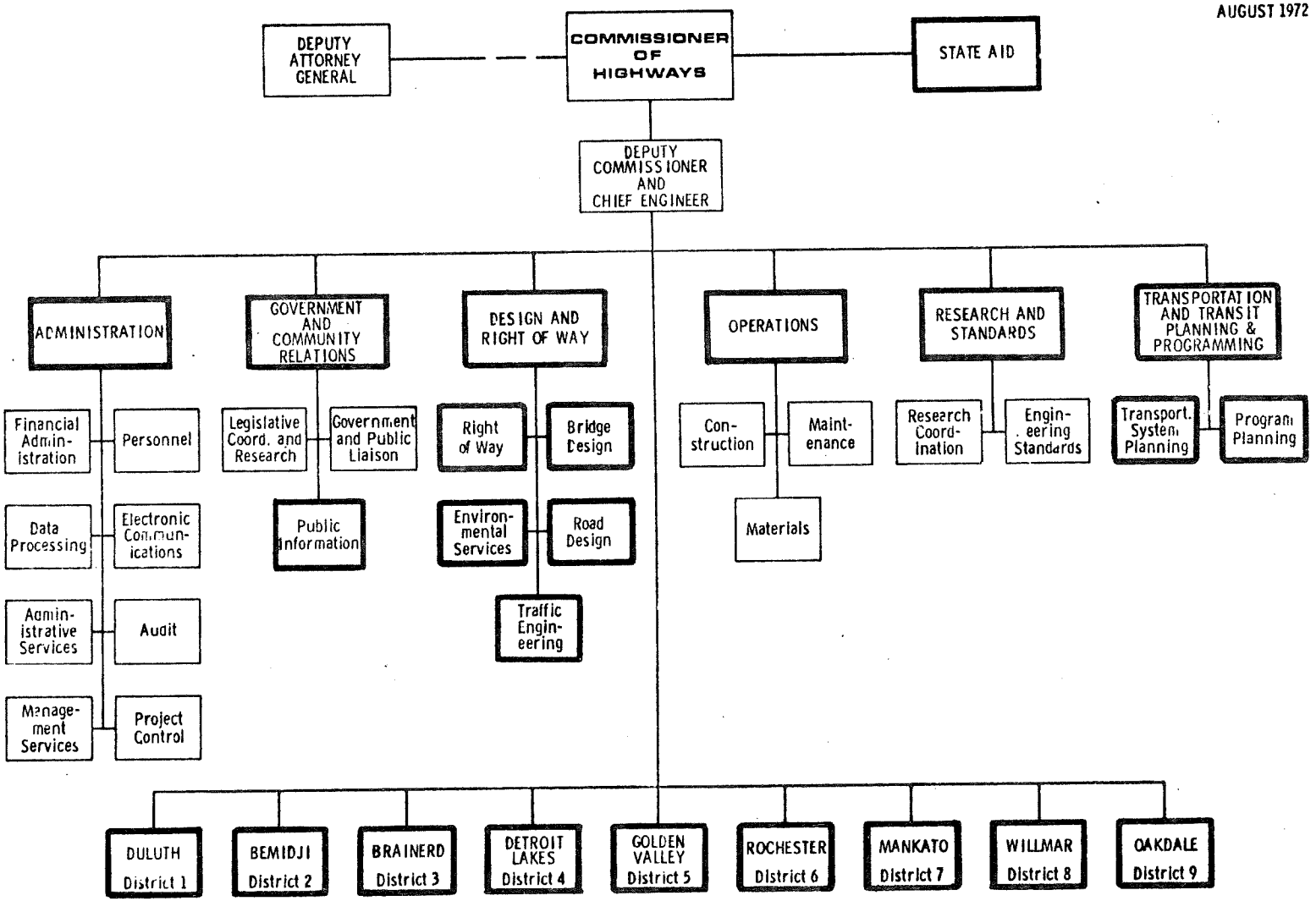
Not shown on the organization chart, are three additional functional units referred to in this Action Plan.

An assistant to the Deputy Commissioner (chief engineer) will be assigned responsibility for coordinating the implementation of all Action Plan activities.

An interdisciplinary resource unit will be organized to provide a central care unit having expertise in a wide variety of disciplines.

A Highway Plans Information Office will be created for the purpose of better dissemination of information to and improved communications with, the public.

AUGUST 1972



Ray Lappegaard
Commissioner

Exhibit B

Chapter 3

SYSTEM PLANNING

A detailed description of the activities and purpose of the systems transportation approach that will be used. Included are descriptions of the systems approach as applied to planning for:

The statewide level
The Metropolitan Twin-Cities Area
Other urban areas

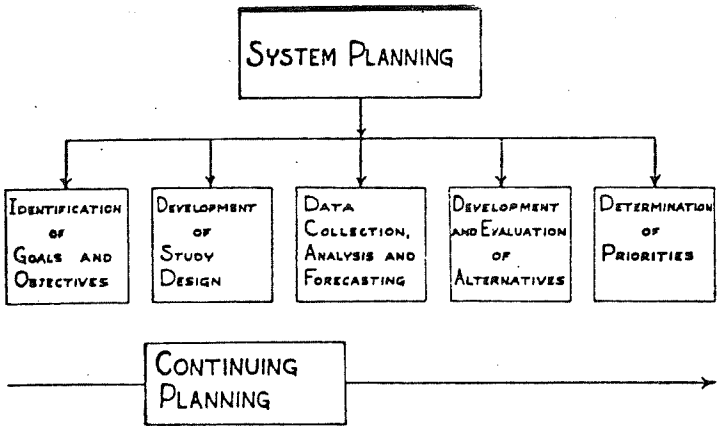
The activities that comprise the planning and development process lie at the heart of this Action Plan. The process is two-stage. The first stage, system planning, identifies the highway needs and assigns priorities to those needs. The remainder of this chapter describes system planning in detail. The next chapter, Chapter 4, provides an overview of public and agency participation in system planning, particularly for those readers who may not wish as much detail as this chapter provides.

The second stage of the planning and development process, project development, implements those needs identified in the first stage through further planning and the awarding of construction contracts. As in the first stage, ample provision is made for public participation in decision making. Chapter 5 describes the workings of this second stage.

The two-stage process is applied in a somewhat modified way to local roads in rural Minnesota. The application of the process to such local highway development is described in Chapter 6.

THE SYSTEMS APPROACH

Transportation system planning looks at the over-all transportation demands placed on the transportation system, forecasts future transportation demands, and develops generalized plans for providing safe, efficient, economical transportation facilities that are in the best over-all public interest. The transportation system planning process consists of the following general steps:



1. Identification of Goals and Objectives - the process whereby desirable statewide socio-economic, environmental, land use and transportation goals, objectives and policies are identified.
2. Development of Study Design - involves identification of the base data requirements, analysis, forecasting and evaluation techniques, and the agency responsibilities for developing the transportation system plan.
3. Data Collection, Analysis and Forecasting - the collection, analysis and forecasting of land use, socio-economic, environmental and transportation data.
4. Development and Evaluation of Alternatives - the development and evaluation of alternate transportation system plans.
5. Determination of Priorities - involves determining the relative construction priority of various routes or route segments recommended for improvement in the transportation system plan.
6. Continuing Planning - establishes the process for monitoring transportation system adequacy and periodically re-evaluating and revising the transportation system plan in response to changing public goals and/or changing socio-economic, environmental, or transportation related factors. Because forecasting transportation demands into the future is not an exact science, because implementation schedules cannot always be met, and because goals and objectives change over time, transportation system planning is a continuous process that monitors all aspects of the plan to permit changes in the plan when needed.

It is anticipated that the steps involved in initial organization and transportation plan development will require from 2 to 5 years for completion.

Cooperation and liaison with adjacent states will be maintained throughout the transportation system planning process to insure state-to-state transportation system plan continuity. Such cooperation and liaison will be particularly critical in the development and evaluation of alternate transportation system plans and, to a lesser degree, in the priority determination. The primary responsibility for maintaining liaison with adjacent states and insuring inter-state transportation system plan continuity will rest with the Transportation and Transit Planning and Programming Division of the Minnesota Department of Highways.

PURPOSE OF TRANSPORTATION SYSTEMS PLANNING

Transportation systems planning is the orderly and continuing collection and analysis of transportation and related social-economic and environmental data.

One purpose of transportation systems planning is to establish a transportation network capable of accommodating travel in an orderly, safe, efficient, and economical manner. Another purpose of system planning is to ensure the development of a transportation system which is compatible with society and its environment and that conforms with planned land development.

SYSTEM PLANNING

The American system of government results in a multiplicity of units of governments being responsible for providing portions of the transportation systems. Many of these units have overlapping responsibilities and unless unified coordination of planning is present, the various implementation plans may conflict with each other.

The quantity of work to be done, the complexity of the governmental responsibility involved, and the necessity of obtaining the best use of each tax dollar require that some technique be established to ensure that project development is initiated with forethought and careful investigation, that funds are committed to a project only after the consideration of the needs of other projects, and that future transportation demands are anticipated. Transportation systems planning is that technique.

To assure that the transportation plans will support better land use development and a higher quality of life, local, regional, and state, technical and political entities must be involved in the plan development process with effective citizen involvement. To accommodate a maximum degree of involvement, the planning will be performed at several area-wide levels with the aggregate of all the area-wide transportation plans being the total transportation plan. Because the complexity of transportation problems vary at different levels of planning and in different areas of the state, the system planning process is broken into three organizational patterns: (1) Statewide, (2) Metropolitan-Twin Cities Area, and (3) Other Urban Areas.

STATEWIDE TRANSPORTATION SYSTEM PLANNING

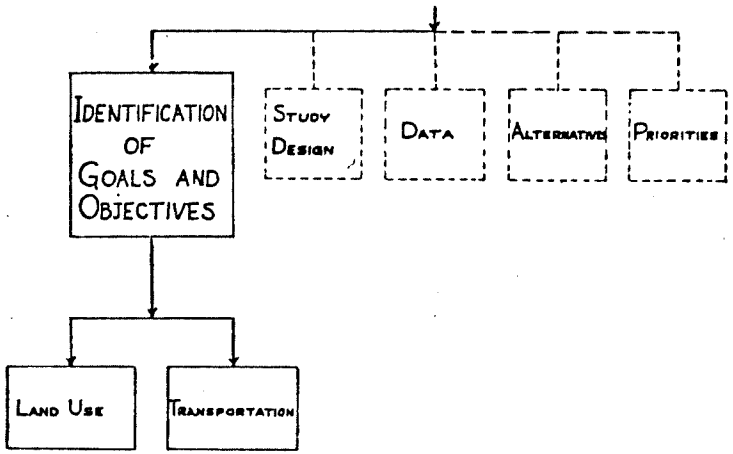
Statewide system planning will establish the major highway plan necessary to provide for interstate and the major intra-state transportation demands.

The Minnesota Highway Department has prepared a statewide highway system plan known as the Interim Service Level Plan. This is a plan for development of the trunk highway system which, when accomplished, would provide a completely adequate system. The Interim Service Level Plan is shown in Exhibit C. In addition, a high priority "Backbone System" has been developed. The Backbone System shows which routes in the Interim Service Level Plan will be improved in the next 30 years if no significant changes are made in the MHD's financial resources. The Backbone System is shown in Exhibit D. Until the new statewide transportation system planning process that follows has developed a new highway system plan, the current plans will be used as the basis for implementing highway projects.

To facilitate transportation system planning, a Technical Advisory Committee (TAC) will be established to assist the Minnesota Highway Department. The Technical Advisory Committee shall be comprised of one planner, engineer, or other professional from each of the following agencies or organizations: The State Departments of Highways, Aeronautics, Economic Development, Agriculture, Natural Resources, and Public Safety; the State Planning Agency, the Pollution Control Agency, the Public Service Commission, each established Regional

Development Commission, and the Twin Cities Metropolitan Council. The Technical Advisory Committee shall provide communication between all agencies and organizations involved in the study, and give guidance to the MHD planning staff.

Identification of Goals and Objectives



Transportation planning and land use planning cannot be separated. The land use pattern determines the spatial distribution of travel and the transportation system is a major determinant of the future land use pattern. The transportation goals and objectives must be consistent with the over-all goals of the state and should flow from the goals and objectives of the community as a whole. The State Planning Agency will be responsible for identifying the social, economic, environmental, and land use goals and objectives of the State to be used as a basis for developing statewide transportation goals and in guiding the transportation system planning process.

The Director of Transportation System Planning in the MHD will be responsible for developing preliminary statewide transportation planning goals, objectives and policies. He shall solicit comment from Federal, state, regional, metropolitan, and local planning, economic development, and natural resource agencies through meetings, letters, or telephone as appropriate. The MHD District Engineers shall assist the Director of System Planning by identifying regional, metropolitan, and local agencies and arranging for and assisting in meetings with these agencies.

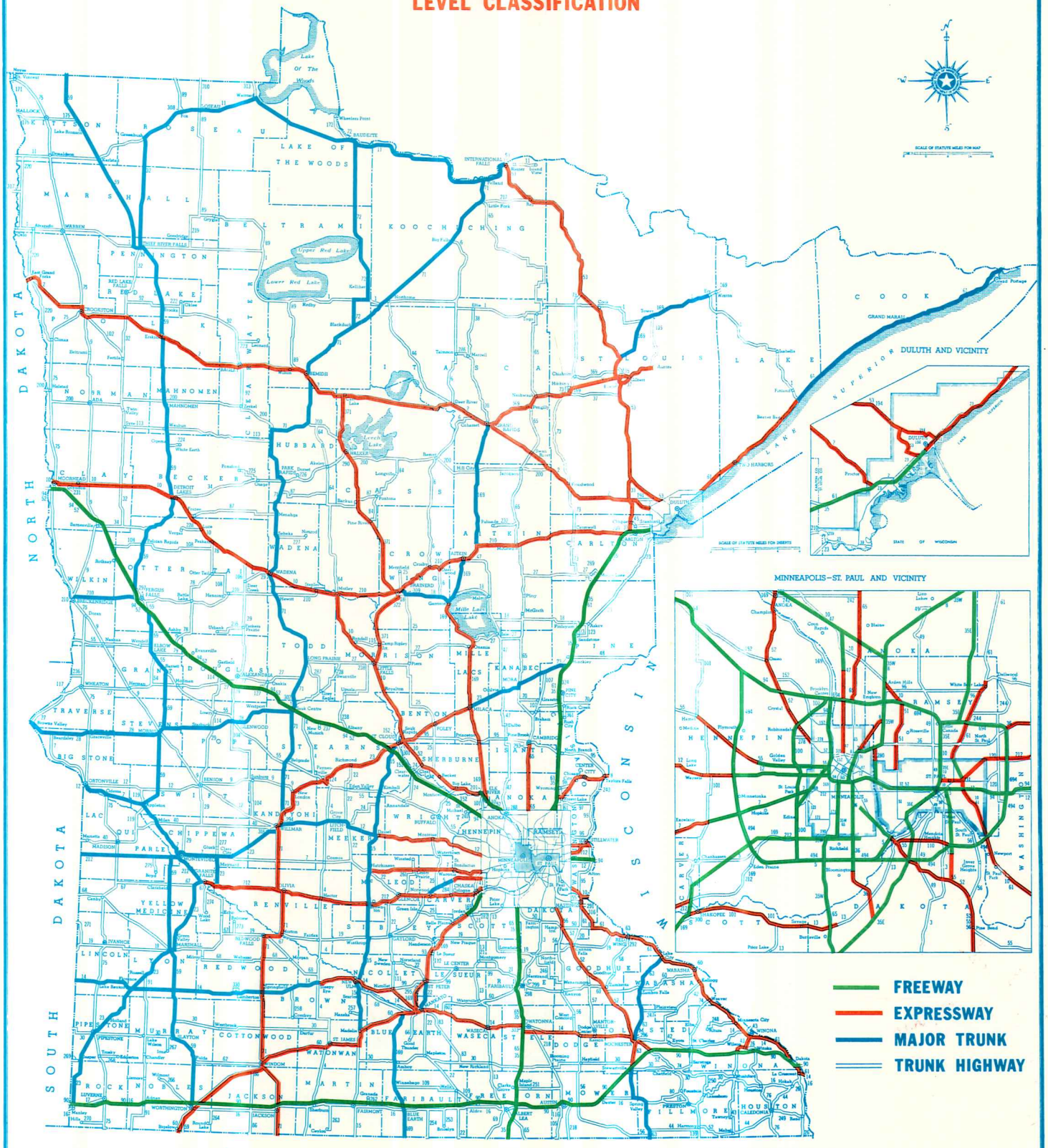
The Twin Cities Metropolitan area and other large urban areas throughout the state, through their Metropolitan planning staffs, will provide valuable input to the development of statewide transportation planning goals and in development of the statewide system plan. The planning done within the framework of continuing, cooperative, comprehensive (3C) transportation planning programs in these cities will be coordinated with statewide transportation system planning.

The Regional Development Commissions will provide similar input on the regional level. This input will help insure compatability between state, regional and local transportation planning goals, objectives and transportation system plans.

The Technical Advisory Committee will review the preliminary goals and objectives and give their recommendation for revisions, deletions, and additions. Formal meetings will be called for this purpose to permit the members of the committee to discuss the matter among themselves and to get

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS

INTERIM SERVICE LEVEL CLASSIFICATION



JULY 1972

Base Map Prepared By the [illegible] and Transit Planning And Programming Division Revised January 1, 1972

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS

MAJOR TRUNK HIGHWAYS
"BACKBONE SYSTEM"
PROPOSED CONSTRUCTION
GROUPED BY PRIORITY

FREEWAY - EXPRESSWAY (ADEQUATE)
FRWY-EXPRWY SCHED. THRU '73
TWO LANE FACILITY (ADEQUATE)

1ST PRIORITY...$813.4 OUT. $511.4 METR. $302.0
2ND PRIORITY...$409.6 OUT. $256.9 METR. $ 152.7

INTERSTATE
$ IN $1,000,000'S
INCLUDES R/W & ENGR.

SCALE OF STATUTE MILES FOR MAP

DULUTH AND VICINITY

MINNEAPOLIS–ST. PAUL AND VICINITY

SCALE OF STATUTE MILES FOR INSERTS

I O W A

JULY 1972

Base Map Prepared By Transportation And Transit Planning And Programming Division Revised January 1,1972

information from MHD staff on any items that need clarification.

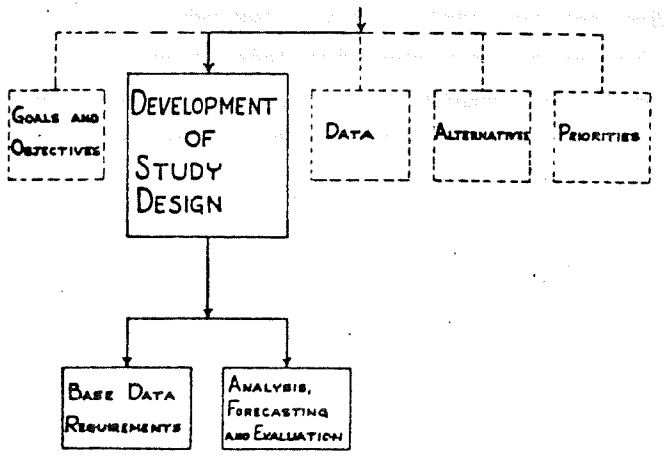
The Director of System Planning working with the District Engineers and the Regional Development Commissions will conduct a series of meetings throughout the State to explain the preliminary transportation goals and objectives. All agencies, organizations, and individuals will be given an opportunity to comment on and suggest revisions, deletions, or additions to the preliminary goals and objectives. Written comments will also be solicited.

The Director of System Planning will, after taking all comments into consideration, give the TAC a written recommended set of goals and objectives and a summarization of the disposition of comments received as a result of the public meetings.

The TAC, after considering the information presented, will prepare a written report giving the details of any unresolved disagreements amongst TAC members.

The Commissioner of Highways after considering the staff prepared report, the TAC report, and the comments received from the public will adopt tentative transportation goals and objectives which will be published in a report. This report will be made available to interested agencies, organizations and individuals.

Development of the Study Design



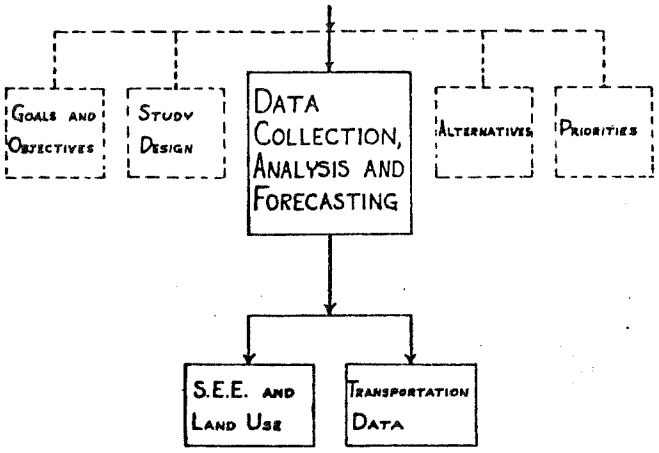
The Study Design describes the overall technical framework for planning, and the data requirements, data analysis and forecasting procedures to be used in the statewide transportation system plan development process.

The Director of System Planning is responsible for drafting a Study Design and coordination with other MHD Divisions and Districts. Discussions between the MHD Interdisciplinary Resource Unit and the TAC will be held as the draft Study Design is being developed. The draft Study Design will discuss social, economic, environmental and transportation base data requirements; as well as the analysis, forecasting, and evaluation techniques and agency responsibilities necessary for comprehensive statewide transportation planning. As an example, the Department of Natural Resources may be responsible for providing park and recreation development plans, attendance forecasts, and related data which will provide valuable input into the transportation

system planning process with regard to summer vacation and recreation travel demands. In like manner, other state, regional and local agencies may provide population, employment, and other social, economic, or environmental data and forecasts necessary for comprehensive transportation system planning.

The Director of System planning will formally present the Design Study Draft to the TAC. Based upon the results of the review by the TAC the Director of System Planning will develop a final Study Design draft. This final draft will then be presented to the TAC for final review and recommendation to the Commissioner of Highways for his approval and adoption. The adopted Study Design will be made available to interested agencies, organizations, and individuals.

Data Collection, Analysis and Forecasting



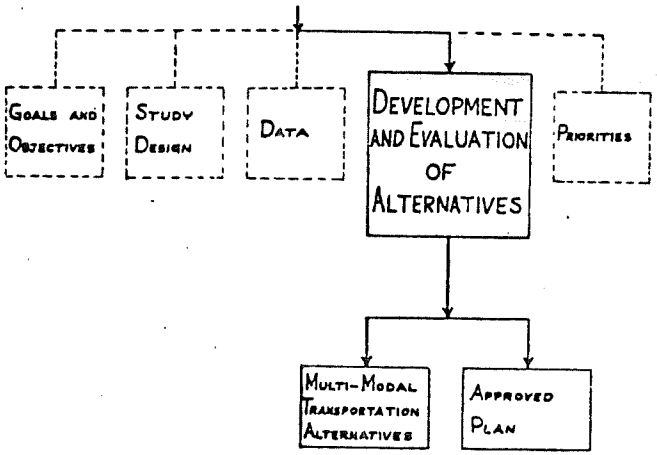
The Office of System Planning in conjunction with the MHD District Offices is responsible for the collection or development of data as defined in the Study Design.

Available statewide land use, economic development, and environmental plans as well as projections of social and economic data based on such existing plans is necessary base data for the development of comprehensive long-range statewide transportation plan. In the event that such a plan does not exist, the Interdisciplinary Resource Unit of the MHD will develop necessary data based upon existing social, economic and land use trends in the state. Such data will be developed in close cooperation, and with the advice of, the TAC.

The Office of System Planning shall prepare travel forecasts using accepted travel forecasting techniques as defined in the Study Design. The forecasted travel will then be assigned to the highway network consisting of all existing routes plus the new or improved routes that are under construction or scheduled for construction in the near future (the "do-nothing" alternative will be considered). The traffic assignment process will result in a 20 to 25 year traffic forecast on all rural segments of the state trunk highway system. The Office of System Planning will prepare a comprehensive report describing the travel forecasting and assignment process as well as the land use and social, economic, and environmental data and forecasts upon which the travel forecast is based.

The Director of System Planning will present the data forecasts to the TAC for the purpose of review and comment. A series of statewide public meetings will be scheduled with the cooperation of the Minnesota Department of Highways District Offices and Regional Development Commissions for the purpose of explaining the forecasts.

Development and Evaluation of Alternative Statewide Highway System Plan



The process of developing a long-range statewide highway system plan involves an evaluation of a number of alternate highway system plans to determine which alternate plan or combination of plans best satisfies the state's anticipated transportation needs. As a first step in this process, the Office of System Planning working with the Interdisciplinary Resource Unit will analyze the social, economic, environmental land use, and transportation impact of the "do-nothing" alternative. Based upon computerized traffic assignments to the "do-nothing" alternative, certain highway system improvement needs are likely to be identified. Such needs will then provide a basis for development of alternate highway system improvement plans.

The Office of Systems Planning will develop a number of alternate concepts for statewide highway system improvement. These will be presented to the TAC for additions, deletions, or modifications. Following development of a series of alternate highway system plans, a series of public meetings will be held statewide. These meetings will be held for the purpose of obtaining public reaction and advice regarding possible alternate system plans.

Following development of the broad range of highway system plans and after initial TAC and public reaction to these planning alternatives, the Office of System Planning working with the Interdisciplinary Resource Unit and with intra-departmental review and advice, will perform a preliminary evaluation of the alternatives. Those alternate highway system plans that appear to best meet statewide social, economic, environmental, land use and transportation goals and objectives will be retained. The Office of System Planning will obtain travel forecasts for these alternatives and will prepare a comprehensive report describing the travel forecasting and traffic assignment process. This report will include the characteristics and anticipated effectiveness of each of the alternate highway system plans in terms of meeting the statewide social, economic, environmental land use, and transportation goals and objectives, and will also include highway construction cost estimates and the capabilities of the MHD to finance each of the highway system plans.

The report will be presented to the TAC for review, and a series of public meetings will be held statewide to present the evaluation of the alternatives.

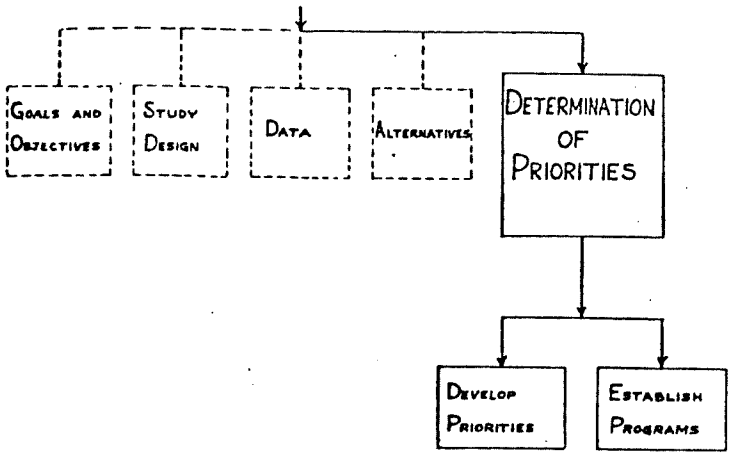
Based upon the comments received from the TAC and the statewide public meetings, the Office of System Planning will prepare a semi-final statewide

highway system plan report which will recommend the preferred alternate highway system plan and final transportation goals and objectives.

The semi-final report along with the comments and recommendations of the TAC and the public will then be presented to the Commissioner of Highways for his review and approval.

Following approval by the Commissioner of Highways, the Office of System Planning will prepare a final report presenting the final statewide transportation goals and objectives and the approved statewide highway system plan. The report will be made available to interested agencies, organizations, and individuals.

Determination of Priorities



The Office of Program Planning in the MHD will develop a general framework for priority evaluation. The procedure may consider social and economic impact, road user impact, existing road conditions, cost-effectiveness, environmental effects, recreational usage, and other pertinent factors in priority evaluation. The Office of Program Planning working with the Interdisciplinary Resource Unit, the District Offices, and with intra-Minnesota Department of Highways review and advice, will develop a proposed procedure for quantifying and balancing these factors.

The Director of Program Planning will then present the proposed procedure to the TAC for review. Based upon the comments and suggestions received from the TAC, the Office of Program Planning working with the District Offices, and with the review and advice of other divisions within the MHD, will develop generalized highway construction priorities. The preliminary construction priority recommendations will be presented to the TAC and a series of public meetings held statewide for the purpose of obtaining reaction to the priority evaluation procedure and the generalized highway construction priorities.

A Construction Priorities Report describing the application of the priority evaluation procedure will be prepared by the Office of Program Planning and presented to the Commissioner of Highways for approval and adoption. This report will be made available to interested agencies, organizations and individuals.

The Office of Program Planning will then prepare a detailed, preliminary short-range (at least 5 years) construction program and an intermediate-range (at least 10 years) planning program based upon the priorities established. After receiving preliminary approval by the Deputy Commissioner

of Highways, copies of the proposed programs will be forwarded to the appropriate state and regional A-95 clearinghouses for review and comment. The final recommended program will be submitted to the Deputy Commissioner of Highways for approval and adoption. Following adoption, a final report will be prepared describing the short-range construction and intermediate-range planning programs. This report will be made available to interested agencies, organizations and individuals.

Not included in the construction priorities program are projects to correct hazardous road conditions and non-recurring maintenance projects. The nature of these projects is such that they are programmed separately on a one to three year improvement schedule. (Safety Improvement Program and a Non-Recurring Maintenance Program).

The Safety Improvement Program is a schedule of non-capital improvement projects. The primary intent of the program is to detect and correct specific highway locations and/or elements which have been identified as hazardous based on accident analysis, potential for reducing the number and/or severity of accidents, and the cost of improvements. Projects, designed to correct hazardous roadway elements or characteristics with accident potential and projects to increase capacity or improve serviceability are included in the Safety Improvement Program. (Subject to need and availibility of funds).

Priority for inclusion into the program is given to the following types of projects:

1. Locations where a high accident rate exists
2. Correction of hazardous elements based on accident potential
3. Upgrading of railroad/highway grade crossings
4. Correction of skid-prone locations
5. Traffic signals

The MHD District Engineer shall identify and select projects for the Safety Improvement Program. The projects are submitted to the Traffic Engineer for review and concurrence and the Director of Program Planning for inclusion in the Safety Improvement Program. The program is scheduled on a one year basis.

Funding is indicated as a major consideration in the development of a program. The Deputy Commissioner allocates annually the funds for the Safety Improvement Program based on an analysis of needs for the various improvement programs.

The Non-Recurring Maintenance Program involves non-routine maintenance work that is generally beyond the planned capability of the Department's own maintenance forces and lends itself well to competitive bidding procedures. These projects are accomplished with state funds, since they are maintenance oriented, and as such, do not qualify for Federal-aid. The type of work accomplished under this program includes bituminous resurfacing, reconditioning, seal coating, maintenance emergencies and bridge improvement. The program is developed from a list of projects recommended by the District Engineers. The projects included in the

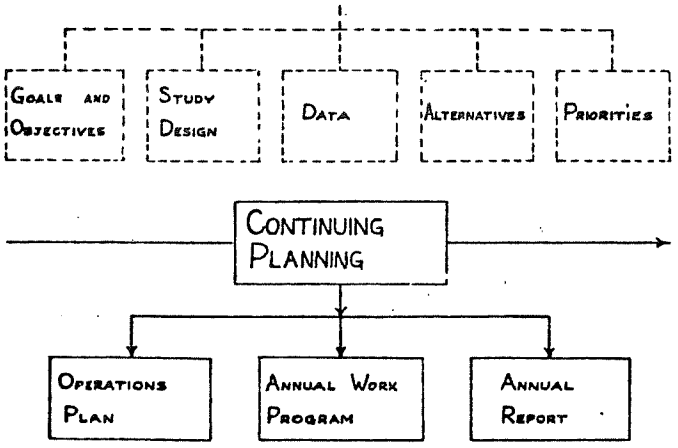
program are selected on a statewide basis in order to equalize and improve the general highway conditions throughout the state.

The Director of Program Planning is responsible for developing and issuing the various programs.

These programs are scheduled for a three-year period but are updated and re-issued yearly. Emergency projects are added to the program as they occur.

It should be noted that funding is a major consideration in the development of this program. The Deputy Commissioner decides the amount of funds to be allocated annually for the Non-Recurring Maintenance Program based on analysis of needs in the various areas.

The Continuing Planning Program



An Operations Plan describes a proposed continuing transportation planning process and identifies MHD and other agency responsibilities for carrying out the continuing planning process. The Director of System Planning, working in cooperation with the Divisions in the Department and the TAC, will develop an Operations Plan. The continuing planning process involves several activities, including:

- Surveillance - the maintenance of current land use, social, economic, environmental, and transportation data to provide a basis for measuring transportation system performance and adequacy. Examples of data collected might include population, employment, land use and travel information.
- Service - the ability to provide needed planning data and assistance to local units of government, and other agencies responsible for transportation plan implementation. This would include those agencies both in the public and private sectors involved in community development and transportation plan implementation programs.
- Reappraisal - the process of periodic plan review and possible revision based upon findings developed in the annual surveillance programs or in the Project Development Process. When significant changes in technology, land use, social, economic factors, or travel patterns occur, a full re-examination of the transportation system plan should take place.
- Procedural Development - the development, refinement and improvement of the statewide transportation system planning process and technical procedures involved in the process.

The Operations Plan will then be presented to the Commissioner of Highways for approval and adoption. Following adoption, the Operations Plan will be made available to interested agencies, organizations, and individuals.

An Annual Work Program will compliment the Operations Plan by describing in detail the continuing planning activities and Construction Program to be carried out each year. Prepared by the

Office of Program Planning, working with the District Offices and other Divisions of the MHD, the Annual Work Program will be presented to the TAC and the A-95 agencies for review and comment then sent to the Commissioner of Highways and Federal Highway Administration (FHWA) for concurrence. The Annual Work Program will be made available to interested agencies, organizations, and individuals.

An Annual Report describing statewide transportation planning progress and accomplishments will be prepared by the Office of System Planning with the review and assistance of other MHD Divisions. This report will be made available to interested agencies, organizations, and individuals. It will contain progress reports on specific activities and projects discussed in the Operations Plan and Annual Work Program. It is also a status report on planning and construction projects contained in the short-range construction and intermediate range planning programs.

METROPOLITAN-TWIN CITIES AREA SYSTEM PLANNING

The Federal-Aid Highway Act of 1962 requires that all Federally-aided highway projects in urban areas of more than 50,000 population be based on a continuing, comprehensive transportation planning process carried on cooperatively by States and local communities. This process is commonly called 3C planning (continuing, comprehensive, cooperative).

Comprehensive means that economic, population, and land use planning must be included with the transportation planning. Also the transportation planning must consider all modes of transportation both public and private for both persons and goods.

Continuing means that data on land use and transportation must be kept current to permit re-evaluation of the transportation plan when conditions vary from the original forecasts.

Cooperative means there will be a formal procedure between the State highway agency and the local governing bodies for carrying out the 3C planning which assures that the plan is responsive to the needs and desires of the local communities as well as the State highway agency's programs.

The 3C planning process in the Metropolitan Twin Cities Area differs from the process in the other urbanized areas of Minnesota because of State legislation that has created and given specific authorities to the Metropolitan Council and the Metropolitan Transit Commission.

ORGANIZATIONAL DEVELOPMENT

To understand the organizational structure for carrying out the 3C planning process, it is first necessary to know the responsibilities and composition of the various agencies involved in the process.

Metropolitan Council (MC)

The MC was created as an administrative agency to coordinate the planning and development of the 7-County Metropolitan Area (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties). MC is specifically charged with preparing and adopting a comprehensive development guide consisting of policy statements, goals, standards, programs, and maps. The comprehensive development guide shall encompass the physical, social, and economic needs of the metropolitan area including such matters as land use, parks and open space, airports, highways, transit, public hospitals, libraries, and schools.

The MC consists of 15 members appointed by the governor. The metropolitan area is divided into 14 districts with one council member being a resident of and representing each district. The 15th member of the council is the appointed chairman. The MC has the authority to hire staff, contract for the services of consultants, and appoint persons to advisory committees.

Metropolitan Transit Commission (MTC)

The MTC was created by the Legislature as a public corporation and a political subdivision of the state to provide adequate public transit within the 7-County metropolitan area. The MTC has the power to plan, engineer, construct, equip, and operate transit systems. The MTC is specifically charged to develop a plan for a complete, integrated mass transit system for the metropolitan area.

The MTC consists of 9 members. The governor appoints one member who serves as chairman. The other 8 members represent 5 specified territories and are elected by the local officials within each territory. The MTC has the authority to hire staff, contract for the services of consultants, and appoint persons to advisory committees.

Counties and Municipalities

The counties and municipalities of the metropolitan area have legislative authority to conduct comprehensive planning for their respective areas subject to MC review. The counties and municipalities have primary responsibility for implementation of transportation improvements and maintenance of county and municipal roads and streets.

3C Planning Organization (Transportation Planning Program)

On April 10, 1969, the MC and MHD entered into a formal agreement stipulating that the MC will serve as the policy body for metropolitan transportation and land development plans and programs and incorporate them into the Metropolitan Development Guide. The MC agreed to provide the necessary administration of committees, staff, and consultants. As part of this agreement a management committee, policy advisory committee, technical advisory committee, and a staff unit were established.

Management Committee. The Management Committee includes the Chairman of the MC, the Chairman of MTC, the Commissioner of Highways, an elected

county official named by the Metropolitan Inter-County Council, and an elected municipal official named by the Metropolitan Section of the League of Minnesota Municipalities. The Chairman of the MC serves as chairman of the committee and the Transportation Planning Director serves as secretary.

The duties of the Management Committee are:

- Adopt work programs for metropolitan transportation system plan and program pursuant to recommendations of the MC.
- Set policy for staff units.
- Coordinate policies of participating agencies.
- Make reports and recommendations to the MC and operating agencies.
- Study and recommend legislative changes relating to implementation of transportation plans for the metropolitan area.

The relationships of the Management Committee to other committees and units are:

- Set policy for staff units.
- Consult with Technical Advisory Committee.
- Consult with and receive reports from Policy Advisory Committee.
- Report to MC and operating agencies. Items approved by the Management Committee shall be submitted to the MC for review and approval and inclusion in the Metropolitan Development Guide.

Policy Advisory Committee (PAC). The membership of the PAC consists of elected officials, one from each of the seven counties, two from each of the central cities, and four from suburban municipalities.

The PAC may create sub-committees augmented by persons having a special expertise or interest in a particular subject under discussion.

The Policy Advisory Committee's duty is to review and advise on policy recommendations and plan reports of the Staff Unit as submitted to the Management Committee.

The relationships of the Policy Advisory Committee to other committees and units are:

- Receive policy recommendations and plan reports from Staff Unit.
- Make advisory reports to Management Committee.
- Consult with the Technical Advisory Committee.
- Keep the governmental unit they represent informed of plan progress.

To date, the Policy Advisory Committee has not functioned effectively. Discussions are in progress that may lead to combining the Management Committee and Policy Advisory Committee into a Transportation Board with generally the same duties as the current Management Committee.

Technical Advisory Committee (TAC). The membership of the TAC consists of:

- A county engineer or planner from each of the seven counties.
- The city engineer and planning director from each of the central cities.
- Four suburban planners or engineers.
- A representative from the MHD.
- Representative from the MTC.
- Representative from the MC.
- Representative from the State Planning Agency.
- Representative from the Federal Highway Administration.
- Representative from the Urban Mass Transportation Administration.
- Representative from the Department of Housing and Urban Development.

When appropriate, this committee may be augmented by technical personnel from other public and private agencies that may be affected by the

Transportation Plan.

The Technical Advisory Committee's duties are to consult on a regular basis with the Staff Unit regarding the work program, proposals, engineering techniques, engineering studies, work assignments.

The Technical Advisory Committee's relationships with other committees and units are:

- Advise counterparts on the Policy Advisory Committee.
- Furnish technical advise to the Policy Committee when requested.
- Consult with the Staff Unit on a regular basis.

Staff Unit. The Staff Unit consists of the following personnel:

- Transportation Planning Director.
- Full-time staff (technical and clerical within MC).
- Contributed staff.
- Participating agency personnel completing assigned work in their own office.

The Transportation Planning Director has the following duties:

- Responsible for carrying out the transportation program objectives and for directing the staff and consultants working on the program.
- Consult with TAC.
- Prepare work program proposals.
- Prepare transportation plan reports.
- Submit reports to Management Committee and PAC.
- Provide staff support for Management Committee, PAC, TAC.

The Staff Unit's relationships to the committees are:

- Receive direction from the Management Committee.
- Report to the Management Committee.
- Report to the PAC.
- Consult with the TAC on a regular schedule.

Interdisciplinary Resources

The MC's staff has a wide variety of disciplines that become involved in transportation planning. This expertise by council departments is as follows:

Community Services. This department is heavily involved in the preparation of the informational material and its distribution. During the system planning process, this department held a large number of community meetings.

Comprehensive Planning Department. This department includes economists, general planners, public administrators, and demographers. In system planning the principal input from this department is assistance in preparation of reports and maps. This department performs the same purpose in other functions and, therefore, ensures that transportation plans reflect other functional plans. Representatives have served on corridor study task forces.

Environmental Planning Department. This department consists of sanitary engineers, a water resource specialist, air and noise specialists, parks and open space specialists, soil specialists and general environmental planners. This staff reviews transportation system proposals and is particularly involved in the referral process, reviewing the transportation proposals from the environmental standpoint.

Human Resources. This department includes specialists in housing, criminal justice, health, aging, manpower resources and cable T.V. The Human Resources staff critiques system planning work and reviews the transportation referrals when

appropriate. In corridor studies personnel from Human Resources participate on task forces where appropriate.

Transportation Department. Personnel in this department are generally available for all types of transportation planning work in the metropolitan area. Included are general planners, civil engineers, urban designers and public administration specialists. The staff of this department generally are on all major corridor study task forces and are able to reflect not only transportation viewpoints but viewpoints of other Council departments and disciplines.

Additionally, the interdisciplinary resources of the MHD, MTC, Counties and Municipalities are available to augment the MC expertise when necessary.

THE SYSTEMS APPROACH

The organizations of the Metropolitan Twin-Cities Area carry out essentially the same systems approach as used in the statewide transportation systems, that is, (1) identification of goals and objectives, (2) development of study design, (3) data collection, analysis, and forecasting, (4) development and evaluation of alternatives, (5) determination of priorities, and (6) continuing planning.

Identification of Goals and Objectives

The MC is responsible for establishing goals and objectives for the metropolitan area. These goals and objectives are spelled out in the Metropolitan Development Guide which includes a section on transportation. The goals and objectives are stated primarily as policies to guide the transportation system development.

The Transportation Planning Director of the MC's Transportation Planning Program Staff Unit is responsible for developing preliminary transportation planning goals and objectives in cooperation with the interdisciplinary resource personnel. To the maximum extent feasible, the social, economic, environmental, land use, and transportation goals and objectives of the various metropolitan and local planning agencies will be incorporated into the metropolitan area transportation goals and objectives. The metropolitan area transportation goals and objectives shall conform to the State and National goals and objectives.

The Transportation Planning Director shall solicit comment on preliminary goals and objectives from federal, state, metropolitan and local planning agencies through meetings, letters or telephone as appropriate.

The Technical Advisory Committee, the Policy Advisory Committee, and the Management Committee will review the preliminary goals and objectives and give their recommendations for revisions, deletions, and additions. This matter will be addressed at formally scheduled meetings open to the public to permit the public and the news media to observe the procedings.

The Transportation Planning Director will recommend the preliminary transportation goals and objectives to the Metropolitan Development Guide Committee, a seven member sub-committee of the MC.

The Metropolitan Development Guide Committee will receive the Transportation Planning Director's recommendation at a scheduled meeting open to the public. After preliminary approval of the transportation goals and objectives, the Metropolitan Development Guide Committee will conduct a series of public meetings to receive comments from local governmental officials and the general public.

After taking into consideration all comments received at the public meetings, the Metropolitan Development Guide Committee will prepare a report recommending the transportation goals and objectives for the area and include a summarization of the disposition of comments received as a result of the public meeting.

After considering the Metropolitan Development Guide Committee's report, the Management Committee's and interdisciplinary personnel's unresolved concerns, and comments received directly from the public, the MC will adopt tentative transportation goals and objectives which will be published in a report. The report will be made available to interested agencies, organizations, and individuals.

Development of the Study Design

The Transportation Planning Director, is responsible for developing a draft study design. Discussion with the TAC will be held as the draft is being developed.

The draft study design will discuss social, economic, environmental, land use, and transportation base data requirements, as well as analysis, forecasting, and evaluation techniques and agency responsibilities necessary to develop a comprehensive transportation plan.

The Transportation Planning Director will formally present the draft study design to the TAC, the PAC, and the Management Committee for review. After considering the committees' recommendations, the Transportation Planning Director will submit the study design first to the MC for concurrence and secondly to the MHD for approval. Before approving the study design, the MHD will obtain FHWA concurrence. The approved study design will be published with copies made available to interested agencies, organizations, and individuals.

Data Collection, Analysis, and Forecasting

The MC is responsible for developing land use, social, economic, and environmental plans for the metropolitan area. Local agencies have also developed plans covering some of these topics. These plans and the data on which they are based must be incorporated into the transportation planning process.

The Transportation Planning Director is responsible for collecting and analyzing these plans and data, determining what additional data, analysis, and forecasts are needed, and coordinating the collection of the additional data.

An inventory of existing transportation facilities including the demands placed on them is essential base data for development of a comprehensive transportation plan. It is also essential to correlate present transportation demands to present land use, social, economic, and environmental condition in order to have a basis for relating future

transportation demands to the land use, social, economic, and environmental forecasts.

The Transportation Planning Director will present travel forecasts to the TAC, PAC, and Management Committees for their review and comments. After considering the committees' recommendations, the Transportation Planning Director will prepare a preliminary report of the forecast data for presentation to the public for information and comment at informal public informational meetings.

The Transportation Planning Director will prepare a final report, including the disposition of significant public comments, for review and approval by the Management Committee and the MC. The approved report will be made available to interested agencies, organizations, and individuals.

Development and Evaluation of Alternatives

The Transportation Planning Director is responsible for the development and evaluation of alternatives. The process of selecting a long-range comprehensive system plan involves development and evaluation of a number of alternate systems to determine which alternate plan or combination of plans best satisfies the anticipated future multimodal transportation needs. The long-range comprehensive transportation plan which is ultimately adopted by the MC must be financially and administratively feasible as well as responsive to the transportation needs within the framework of the adopted transportation, social, economic, and environmental goals and objectives.

The first alternative system to be considered is the "do-nothing" system. This alternative assumes that no further improvements will be made to the transportation system beyond those already under construction or programmed for construction in the near future. The forecasted travel is assigned to the "do-nothing" system and is analyzed in terms of meeting the established social, economic, environmental, and transportation goals and objectives. The Transportation Planning Director will prepare a comprehensive report detailing the results of this analysis. This report will be presented to the TAC, PAC, and Management Committee for their review and comment.

If the "do-nothing" system meets all the established goals and objectives, this system is presented to the MC and the public as the recommended plan. The plan is then either adopted by the MC or the planning process is recycled back to establishing new goals and objectives.

If the "do-nothing" system does not meet all the established goals and objectives, the Transportation Planning Director working in cooperation with the interdisciplinary personnel, and the TAC, PAC, and Management Committees will develop alternate transportation systems.

The Transportation Planning Director will first present the alternatives to the TAC, PAC, Management Committees and the MC for their review and comments and secondly to the public for purposes of receiving public reaction and advice regarding possible alternate systems or possible revisions in goals and objectives.

The Transportation Planning Director working with the interdisciplinary personnel and the committee structure will make a preliminary evaluation of all new alternatives recommended by the

committees or the public. The alternatives that the preliminary evaluation show to be most likely to meet the goals and objectives and to be financially realistic will be tested and evaluated in detail.

The Transportation Planning Director will prepare a draft report describing the travel forecasting and assignment process, land use, social, economic, and environmental forecasts upon which the travel forecasts are based, characteristics and anticipated effectiveness of each alternate plan, estimates of the cost to construct each alternative, and an analysis of financial resources available to implement each plan.

The draft report will be presented to the Technical and Policy Advisory Committees, the Management Committee, and the MC for review. The Transportation Planning Director will present the alternate system plans and their evaluation to the public at informal public meetings in the metropolitan area. All agencies, organizations, and individuals will be given an opportunity to comment and suggest revisions to the alternate transportation system plans. The opportunity to present comments in writing will also be afforded.

Based upon the comments received from the committees as well as reaction received as a result of the public meetings, the Transportation Planning Director will make necessary revisions to the draft report and will recommend a preferred transportation system plan and final transportation goals and objectives.

The revised (semi-final) report will be presented to the TAC, PAC, and Management Committee for final review and comment.

The semi-final report, along with comments and recommendations of the Management Committee and the public, will be presented to the MC for their review and approval.

Following approval by the MC, the Transportation Planning Director will prepare a report presenting the final metropolitan area transportation goals and objectives and the approved metropolitan area transportation system plan. The report will be made available to interested agencies, organizations, and individuals.

Determination of Priorities

The Transportation Planning Director will develop generalized construction priorities that also take into consideration non-quantifiable factors such as coordination with non-transportation developments.

The generalized priorities will be presented to the TAC, PAC, Management Committee, and MC for their review and comment. The Transportation Planning Director will hold informal public meetings describing the priority evaluation procedure and the ensuing generalized priorities to obtain citizens' comments and recommendations.

After considering the citizens' recommendations, the Transportation Planning Director will prepare a Construction Priorities Report describing the priority evaluation procedure, its application, and the recommended generalized priorities. The report will be presented to the TAC, PAC, and Management Committee for their review and comment. The report together with any Management Committee members' comments will be presented to the MC for their

review and approval. Copies of the approved report will be made available to interested agencies, organizations, and individuals.

Based upon the priorities established in the Construction Priorities Report, each implementing agency will develop its construction program.

Continuing Planning

Because social, economic, environmental, and land use development cannot be precisely forecast, and because the public's goals and objectives are not static, the transportation system planning process must be a continuing process that monitors, reviews, and updates the plan to reflect changes. The first Twin City Metropolitan Area Transportation Study was started in 1958 and the area has had some form of a continuing transportation planning program going since that time. The metropolitan area's continuing transportation planning program will be based upon the guidelines established by the Federal Highway Administration. These guidelines require (1) an operations plan, (2) an annual unified work program, and (3) an annual report.

Operations Plan. The Transportation Planning Director working with the TAC, PAC, and Management Committee is responsible for developing the operations plan which describes the comprehensive, cooperative, and continuing transportation planning process. The plan assigns agency responsibilities for carrying out that process and defines the committee structure and responsibilities. The plan will address the following major elements:

- Surveillance - the maintenance of current land use, social, economic, environmental, and transportation data to provide a basis for measuring transportation system performance and evaluating the accuracy of the original forecasts.

- Service - provide needed transportation planning data and assistance to local units of government and agencies responsible for transportation plan implementation as well as other public or private agencies involved in community development and implementation programs. As part of this activity the implementing agencies will be given a report on each project when it first enters the project development phase which will cover the following items:
  - The justification for the project including the consequences of the "no build" alternative.
  - The social, economic, and environmental concerns that were identified in the system planning phase.
  - The multi-modal considerations that must be incorporated into or that have influence upon the project.
  - The restraints within which the project can be developed without necessitating a system planning re-analysis; that is, define the service level latitudes and the geograpnic limits within which the facility must be located.

- Reappraisal - the process of periodic plan review and possible revision based upon the data developed in the surveillance program or in the project development phase.

All changes in the comprehensive transportation plan will be accomplished following the procedures previously explained for initially developing a plan.

- Procedural Development - the refinement and improvement of the comprehensive transportation system planning process includes technical

procedures to provide a better basis for making future planning decisions.

The operations plan will be presented to the TAC and PAC for their review and comments, to the Management Committee for their approval, and to the MC for their concurrence. Before approving the operations plan, the MHD will obtain FHWA concurrence. Copies of the approved operations plan will be made available to interested agencies, organizations, and individuals.

Annual Unified Work Program. The U.S. Department of Transportation requires all urbanized areas to develop an annual unified work program if they will be requesting Federal planning funds. The Annual Unified Work Program is based on the Operations Plan and must itemize all transportation and transportation-related planning activities anticipated during the year, regardless of funding source. It also must identify the agency responsibilities and the estimated cost of each activity.

The Transportation Planning Director will annually coordinate the preparation of a unified work program for review by the TAC, PAC, Management Committee, and MC. The unified work program will then be sent to the FHWA for their concurrence. Copies of the approved unified work program will be made available to interested agencies, organizations, and individuals.

Annual Report. The Transportation Planning Director will prepare an Annual Report describing the major metropolitan area transportation planning and implementation accomplishments for the previous year and the anticipated accomplishments in the coming year. Copies of the report will be made available to interested agencies, organizations, and individuals.

Implementation Planning. Implementation planning is an intermediate planning level between transportation system planning and project development. It includes corridor or sub-area planning and preliminary engineering. Implementation planning activities begin with the products of comprehensive planning and result in facility locations, service levels, and implementation scheduling in sufficient detail to begin project development. Implementation plans and programs should be consistent with the Metropolitan Development Guide's policies, system plan, program, and recommended procedures.

Implementation planning often requires cooperative interaction among several agencies. Projects are initiated by state, metropolitan or local governmental units with responsibility for implementing various elements of the metropolitan transportation system. For example, the MHD would initiate an implementation study to determine the location, design concepts, and scheduling for a major highway within a specific corridor. Other operating agencies affected by the proposed highway improvements would be given a chance to participate in the implementation planning study. The MC would also participate because of the direct tie of such planning to the guidelines included in the Metropolitan Development Guide.

Implementation planning projects do not clearly fall within the purview of a single major operating agency. An example might be an implementation study undertaken to refine the guidelines for

transportation improvements within a corridor or sub-area where the prescribed improvements are multi-modal in nature or are intermeshed with development issues not solely the responsibility of any one agency. An administrative procedure has been developed to undertake these types of sub-area implementation studies jointly. A management board or team is formed with the participation from all affected agencies. A lead agency is agreed upon and a chairman is usually appointed from the lead agency. A technical task force is formed to coordinate technical input to the planning project and make technical recommendations to the management board. In most cases, citizen advisory committees will also be formed to advise the management board on issues of concern to affected citizens.

Implementation planning studies also serve to provide feedback for revision of the transportation section of the Metropolitan Development Guide. Feedback is necessary because comprehensive transportation planning is often carried on at a general level with the understanding that plans will be refined through more detailed studies. In sub-areas of the region additional enphasis is placed on specific local issues and on the goals and values of neighborhoods and communities immediately affected by proposed improvements.

TRANSPORTATION SYSTEM PLANNING IN OTHER URBAN AREAS

In addition to the Twin Cities, there are 8 other urban areas in the state which have had a comprehensive transportation and land use plan. Three of these areas are over 50,000 population, and therefore, are required by Federal law to maintain a comprehensive, cooperative, continuing (3C) planning process. These three are Duluth-Superior (Superior, Wisconsin), Fargo-Moorhead (Fargo, North Dakota) and Rochester-Olmsted County. All three areas have an established and recognized Council of Governments (COG) which is responsible for establishing and maintaining the 3C planning process. The locations of the eight urban areas are shown in Exhibit E. A brief description of the urban study areas will be given followed by the detailed transportation systems planning process for the three (3C) urban areas.

Duluth-Superior

The Head of the Lakes Council of Governments (HOTL-COG), created in 1968, encompasses the political units of the City of Duluth, the municipality of Proctor and the townships of Grand Lakes, Canosia, Rice Lake, Lakewood, Duluth, Herman, and Midway in Minnesota and the City of Superior, the municipalities of Oliver and Superior and the township of Parkland in Wisconsin. However, for purposes of detailed transportation planning, the study area has been somewhat reduced.

HOTL-COG is recognized as the official planning agency, required by Section 134, Title 23, U.S.C., by the two states and the local political subdivisions through formal agreements.

HOTL-COG is also the Metropolitan Review Agency for plans and projects that have area-wide implications within the purview of U.S. Office of Management and Budget (OMB) Circular A-95. OMB A-95 requires that the MHD enter into agreement with regional agencies for review of highway proposals. The agreement executed with the certified clearinghouse review agencies can be found in appendix C.

The planning responsibilities, duties, and functions of the COG are documented in their Operations Plan adopted June 21, 1972 is on file with HOTL-COG.

Through mutual agreement between the states, Minnesota is the prime coordinating agency.

Fargo-Moorhead

The Fargo-Moorhead Metropolitan Council of Governments, created in 1972, includes the Standard Metropolitan Statistical Area (SMSA) of Cass and Clay Counties, which include the City of Moorhead and the municipality of Dilworth in Minnesota and the City of Fargo and the municipality of West Fargo in North Dakota. Its prime responsibility is 3C planning and the coordination of development activities in the area. The council is recognized as the agency to undertake metropolitan planning provided for in Section 134, Title 23, U.S.C. by the two states and the local political subdivisions through agreements.

The Council is also the metropolitan review agency for plans and projects that have area-wide implications within the purview of OMB Circular A-95.

The planning responsibilities, duties, and functions of COG are documented in their Operations Plan approved in 1973, on file with the Metropolitan Council in Fargo, North Dakota.

Through mutual agreement between the states, the State of North Dakota is the prime coordinating agency.

Rochester

The Rochester-Olmsted Council of Governments (ROCOG), was created in 1971, representing an organization of the villages and townships in Olmsted County including the City of Rochester. The village of Pine Island and the cities of St. Charles and Chatfield, which are just outside the Olmsted County boundary are also part of the ROCOG. For the purpose of detailed planning, however, the study area will be limited to the City of Rochester and the four townships of Cascade, Haverhill, Marion, and Rochester.

ROCOG is recognized as the official agency to undertake metropolitan planning provided for in Section 134, Title 23, U.S.C. by the State and the local political subdivisions through agreements.

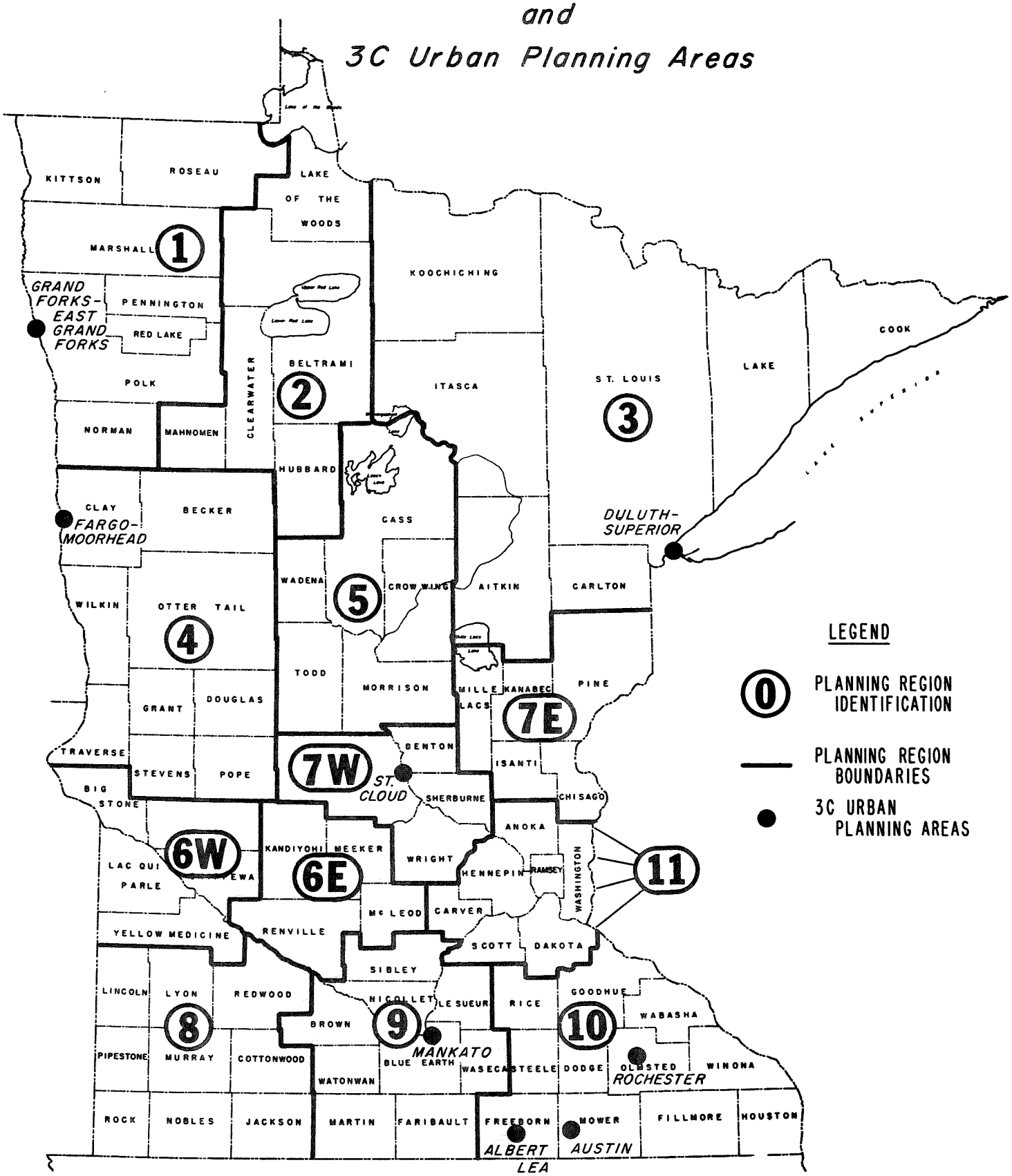
ROCOG is also the metropolitan review agency for plans and projects that have area-wide implications within the purview of OMB Circular A-95.

The planning responsibilities, duties, and functions of the COG are documented in their Operations Plan approved in 1973, on file with ROCOG.

St. Cloud Metropolitan Area

A comprehensive study was completed in 1972 in the St. Cloud Metropolitan Area which includes the area of Minden and Sauk Rapids Townships of

Regional Commissions and 3C Urban Planning Areas



Benton County; Haven Township of Sherburne County; LeSauk and St. Cloud Townships of Stearns County; the City of St. Cloud and the Villages of Sauk Rapids, Waite Park, and Sartell.

The St. Cloud Metro Area is not a 3C study area at present, however, because of the anticipated growth in this area a limited Continuing Operations Plan will be established.

Other Small Urban Study Areas

Comprehensive land use and transportation studies have also been conducted in the following areas: Albert Lea (1968), Austin (1967), Mankato (1968), and Grand Forks-East Grand Forks (Grand Forks, North Dakota) (1965).

The continuing phase of the planning process in these areas has not been formalized. However, the base year social and economic data has been kept current in several areas by the local planning staff. Although not mandatory, but because of their population size, it would be desirable to establish a limited continuing operations plan. The MHD Director of System Planning will advise and assist the area with technical support and services.

The 3C Planning Process

As previously stated, there are three 3C study areas: Fargo-Moorhead, Rochester, and Duluth-Superior. Although individual planning procedures may differ somewhat among the areas, the overall planning process is much the same as the statewide process. This planning process includes: Identification of Goals and Objectives, Development of Study Design, Data Collection, Analysis and Forecasting, Development and Evaluation of Alternatives, Determination of Priorities, and Continuing Planning.

A major step in the development of a transportation system planning process is the establishment of an organization capable of evaluating transportation requirements and the land use, social, economic, and environmental impacts of transportation facilities. The following structure will be established to provide the capability.

- Policy Committee (the official COG)
- Technical Advisory Committee (TAC)
- Citizens Advisory Committee (CAC)
- Study Director

Policy Committee. The Council of Governments (COG), as defined in each study area, will be the Policy Committee with the responsibility for identifying public policies involved in the transportation system planning process and the resultant plans and programs.

The membership consists of the highest selected, appointed, or salaried officials, or their designated representatives from each of the local participating agencies or units of government. The chairperson of the Citizens Advisory Committee, the Study Director, and the MHD Director of System Planning may be non-voting or ex-officio members of the COG. It will be the COG's responsibility to review and act upon the recommendations of the Federally-funded local highway and street projects proposed within the study area. The COG will provide the overall guidance in the transportation system planning process and will select a Study Director and adequate staff to perform the necessary

work items of the study.

Organizations and individuals to be represented on the CAC will be recommended for appointment by the COG.

The COG plays an important role in the transportation system planning process. Early in the study they adopt the transportation goals and objectives and ultimately adopt a Comprehensive Transportation Plan for the study area that will be:

- financially and administratively feasible,
- responsive to the transportation needs of the study area,
- compatible with the social, economic, and environmental goals of the study area,
- compatible with the statewide transportation system plan.

The COG will meet on a regular basis (monthly or otherwise designated). The meetings will be open to the public.

Technical Advisory Committee (TAC). The TAC provides the COG and the CAC with technical guidance and advises them on all transportation related matters.

The TAC is comprised of technical professionals from agencies or organizations participating in the study or involved in the implementation of the recommendations resulting from the study. The CAC chairperson, or an appointed representative, should be a non-voting or ex-officio member. It will be the responsibility of the TAC to develop and determine the technical procedures to be utilized in conducting the study and to work with the Study Director and staff in the accomplishment of the procedures. The TAC will also be responsible for instructing and informing the CAC on all phases of the planning process by having an appointed member attend all CAC meetings. The TAC will meet on a monthly or otherwise designated regular basis. The public should be invited to attend these meetings.

Citizens Advisory Committee (CAC). A Citizens Advisory Committee (CAC) with members from a wide variety of occupations, residing in diverse locations in the study area, representing various income, age, and minority groups and containing members of both sexes will be formally appointed by the study director based on the recommendation of the COG. Individuals and organizations concerned with the transportation system planning process shall nominate the prospective citizen committee members.

A chairperson will be elected by the CAC who may be a voting member of the COG. A member of the CAC should be a non-voting or ex-officio member of the TAC.

It will be the responsibility of the CAC to recommend transportation goals and objectives to the COG. They will also be responsible for reviewing all phases of the transportation system planning process and transportation proposals and plans and making appropriate recommendations to the COG.

The CAC will be kept advised of all aspects of the transportation system planning study and will assist in informing the public concerning the transportation system planning process.

A member of the TAC will attend each CAC meeting. The meetings should be held on a monthly or otherwise designated regular basis. The public will be invited to attend these meetings.

Study Director. The COG will select a Study Director and reasonable staffing complement to coordinate the activities necessary in the comprehensive, cooperative, and continuing (3C) transportation planning process. The Study Director is responsible for obtaining citizen input and involvement through informal public meetings, advertising publicity, newsletters, etc.

Identification of Goals and Objectives. The COG is responsible for adopting the social, economic, environmental, and land use goals and objectives that are used as a basis for guiding the transportation system planning process.

The Study Director, assisted by the MHD District Engineer and the MHD Director of System Planning, will solicit input for the goals and objectives from those planning, economic development, and natural resource agencies, etc., which have a vested interest in the study.

Through public meetings all agencies, organizations, and individuals will be given an opportunity to comment on and suggest revisions, deletions, or additions to the goals and objectives. The opportunity to make comments in writing will also be afforded.

The COG after considering the recommendations of the TAC, the CAC and public comment will adopt transportation goals and objectives which will be published in a report. The report will be made available to interested agencies, organizations, and individuals.

Development of the Study Design. The Study Director, in cooperation with the MHD District Engineer and the MHD Director of System Planning, will be responsible for developing a Study Design. The Study Design will be reviewed by the TAC and the CAC then sent to the COG for adoption. Following adoption by the COG the Study Design will be made available to interested agencies, organizations, and individuals.

Data Collection, Analysis, and Forecasting. The Study Director will be responsible for the collection and analysis of existing land use and social, economic, and environment data. In close cooperation with the COG, TAC and CAC, the Study Director will analyze land use, social, economic, and environmental trends of the study area and develop forecasted land use and social, economic, and environmental data.

The Study Director will be responsible for coordinating the activities of the MHD, the COG Study Staff, and local traffic or transportation agencies in the collection of data necessary to determine existing travel characteristics and behavior. The MHD Director of System Planning will be responsible for preparing travel forecasts based on the transportation data collected.

The Study Director, with the assistance of the MHD Director of System Planning, will prepare a preliminary report of the forecast data to be presented to the public and will schedule public meetings to obtain citizen input.

The Study Director will prepare a final report incorporating the comments received as a result of the public meetings, for the review and approval of the TAC and COG. Upon approval the report will be made available to interested agencies, organizations, and individuals.

Development and Evaluation of Alternate System Plans. The long-range comprehensive transportation plans and the interim capital improvements plan which will ultimately be adopted by the Policy Committee must be financially and administratively feasible, as well as responsive to the transportation needs of the area.

A computer assignment of forecast travel will be the basis for the selection of alternate transportation systems. Delineation or definition of the alternate transportation systems to be tested and evaluated will be the responsibility of the Study Director and the MHD Director of System Planning, working in close cooperation with the TAC and CAC.

The "Do-Nothing" alternative (assuming that no further additions will be made to the existing system) and the alternate transportation systems will be evaluated first on the basis of gross travel demand considerations, thus eliminating those alternative transportation systems which cannot be justified by travel demand.

The "Do-Nothing" alternative and those alternative transportation systems surviving the first screen will then be subjected to a detailed analysis in terms of satisfying the areas's anticipated transportation needs and meeting the adopted transportation, land use, social, economic and environmental goals and objectives.

The Study Director, working with the TAC, CAC, and COG, will be responsible for the evaluation of the alternate transportation systems plans. Through public meetings all agencies, organizations and individuals will be given an opportunity to comment on and suggest revisions to the alternate transportation systems. The opportunity to present comments in writing will also be afforded.

The Study Director will prepare a Development Guide incorporating comments received as a result of the public meetings. The TAC and CAC, after reviewing the Development Guide and the disposition of comments, will recommend final transportation goals and objectives and preferred transportation systems plan to the COG.

The COG will formally adopt final transportation goals and objectives and a Comprehensive Transportation Plan. The Study Director will publish the Developmental Guide. The Development Guide will include the proposed thoroughfare locations, proposed land use plans and community facilities in order that it may be used as a guide for future development within the study area. The Development Guide will be made available to interested agencies organizations, and individuals.

Determining Priorities. The Capital Improvement Program (CIP) is a long-range spending plan for capital expenditures in relationship to need and ability to pay. The CIP is divided into three major sections. The first section is generally a Capital Budget including those CIP items for the 1st year. The second part of the CIP includes those capital improvements to be undertaken during the 2nd through 6th years. The third part is termed Capital Needs List and includes all those capital improvement projects to be accomplished after the first five years to complete the implementation of the Comprehensive Transportation Plan. Generally, the Needs List is divided into two

groups: those projects which appear to be financially possible and those which, though required to implement the Comprehensive Transportation Plan, do not appear to be financially feasible within the time span of the Capital Needs List.

Besides providing the means of implementing the Comprehensive Transportation Plan, the CIP also sets forth a procedure for local officials to annually review the capital needs of the community and to assign priorities. This annual review of priorities provides for flexibility in the accomplishment of future area transportation projects.

Because the 3C areas are multi-jurisdictional, it will be the responsibility of the Study Director to obtain a Capital Budget and a Capital Improvements Schedule from each governmental unit and other agencies participating in the study. The several Budgets and Schedules will be incorporated with the Capitals Needs List and presented to the Policy Committee, TAC, and CAC for review and comment.

Based on the Committees' revisions, the Capital Improvements Program will be presented to the public through informal public meetings scheduled by the Study Director and the MHD District Engineer

The final priority determination, however, is the responsibility of the implementing agencies on a project basis in the Project Development Phase.

The Continuing Planning Process. The continuing transportation planning program will be based upon the guidelines defined by the Federal Highway Administration.

The Study Director, in cooperation with the MHD District Engineer and the MHD Director of System Planning, will be responsible for developing an Operations Plan.

The Operations Plan will describe a comprehensive, cooperative, continuing planning process, assign agency responsibilities for carrying out that process, and define the committee structure. The activities of the process will include the following elements:

- Surveillance - the maintenance of current land use, social, economic, environmental, and transportation data to provide a basis for measuring transportation system performance and adequacy. The Study Director will be responsible for the maintenance of the land use, social, economic, and environmental data; the MHD District Engineer will be responsible for coordinating the activities of the MHD District Office, the COG Study Staff, and local traffic or transportation agencies in the collection of transportation data.
- Service - the ability to provide needed transportation planning data and assistance to those responsible for the implementation of the Comprehensive Transportation Plan as well as other public or private agencies involved in community development and implementation programs. This service will be the responsibility of the Study Director and the MHD District Engineer.
- Reappraisal - the systematic sequence of activities directed at keeping the transportation planning process a valid and effective program. The Study Director will coordinate the activities involved in the reappraisal phase of the transportation systems planning process.
- Procedural Development - refinements and improvements of technical procedures are necessary to the transportation systems planning process if better estimates of future conditions are to be developed.

The Policy Committee, the CAC, and TAC will review the Operations Plan. The Study Director,

with the assistance of the MHD District Engineer, will conduct public meetings for the purpose of obtaining input from the general public. Incorporating all revisions and comments, the Study Director will develop a final Operations Plan. The TAC and CAC will review the final report. The Operations Plan will then be sent to the COG with recommendation for adoption. After being adopted by the COG and concurred on by the MHD and FHWA, the report will be published and made available to interested agencies, organizations, and individuals

All transportation and transportation-related planning activities anticipated within the study area during the year, regardless of funding source, will be detailed in the Annual Unified Work Program. Agency responsibilities and estimated costs to accomplish these activities will also be detailed in the report.

The Study Director, in cooperation with the MHD Director of System Planning, will prepare a report for review by the TAC, CAC, and COG. The Annual Unified Work Program will be sent to the Federal Highway Administration for review and concurrence. The Study Director will prepare a report describing the Annual Work Program. This report will be made available to interested agencies, organizations, and individuals.

An Annual Report describing area wide transportation planning progress and accomplishments for the previous year will be prepared by the Study Director. The report will be made available to interested agencies, organizations, and individuals It will include progress reports on specific projects and activities discussed in the Operations Plan and the Annual Unified Work Program as well as a status report on planning and construction projects contained in the Capital Improvement Program.

RESPONSIBILITIES FOR SYSTEM PLANNING ACTIVITIES

The Assistant Commissioner for Transportation and Transit Planning and Programming is primarily responsible for all statewide planning activities. The actual development of the system is assigned to the Director of the Office of System Planning and the priority and programming activities are assigned to the Director of the Office of Program Planning. The District Engineers assist throughout the process, but especially in the area of public involvement.

The Metropolitan Council is the agency with prime responsibility for development of the Twin Cities area transportation system plan. The plan is developed through the 3C (comprehensive, continuing, cooperative) transportation planning process. Fulfillment of the Cooperative aspect is accomplished through participation in the process. This participation comes at three levels: (1) Minnesota Highway Department, (2) other agencies, and (3) public. Each play a unique role but all share in the responsibility for achieving a balanced decision making process.

The multiplicity of units of government contained within the Metropolitan Council's area of responsibility makes it impossible for any one individual to make all the decisions necessary in the transportation system planning process. The MC is the final authority for overall metropolitan

transportation system planning. However, the MC is not an implementing or operating organization. The implementation and operation of transportation facilities is the responsibility of various agencies such as the MHD, the MTC, the individual counties and municipalities, and the Metropolitan Airports Commission. As a result, the authority for decision making and the attendant responsibility for implementing the decisions is shared by the various agencies involved in the planning process.

However, the MC is the decision making authority for the transportation system planning process.

Because the cities, counties, MTC, MHD, FHWA, UMTA, and HUD all contribute financially to support the transportation system planning process, they are each responsible for monitoring the process to assure that the funds are being used wisely and that the process will produce a technically sound and publically accepted transportation system plan.

The multiplicity of units of government involved in other urban areas varies, but is similar to the Metropolitan area in the respect that it is unlikely that any one individual can make all the decisions necessary for the Transportation System Planning process. As a result, the authority for decision making and the attendant responsibility for carrying out the effects of the decisions is shared by the various agencies involved in the study.

However, the Councils of Government, where they exist, are a responsive decision making authorities for the planning process. The Study Director, as the agent of the COG, is assigned the responsibility for carrying out the planning process. The MHD District Engineer, the MHD Director of System Planning, and the MHD Interdisciplinary Resource Unit assist and advise the Study Director in carrying ou the planning process.

Chapter 4

PARTICIPATION IN TRANSPORTATION SYSTEM PLANNING

An overview of who will and can participate in transportation system planning and where, when, and how the participation will take place. Special attention is given to public participation.

Participation in the Transportation Systems Planning process is addressed at three levels:

- Minnesota Highway Department (MHD)
- Other Agencies (Federal, State, Regional, and Local)
- Public

Each play a unique role, but share in the responsibility for achieving a balanced decision making process.

The principles that guide the involvement for each level center around the opportunity for the expression of views regarding system planning.

At least three characteristics of participation are worth noting:

- All participants should feel their interests are represented
- informal as well as formal interaction should take place
- the opportunity to choose the depth of involvement should be available.

The following sections will provide an overview of where, when and how this opportunity to participate is presented.

MINNESOTA DEPARTMENT OF HIGHWAYS

Although the Transportation and Transit Planning and Programming Division plays the major role in system planning, participation is not limited to the Division. Intra-departmental communication and cooperation between the various Divisions and District Offices within the MHD will be emphasized throughout the system planning process.

Effective system planning must recognize the human and natural resources which exist in any given study area, how these resources relate to the environment, the sensitivity of each of these

resources to transportation activities, and the probable consequences of the impacts of transportation and related development. Therefore, personnel from the Interdisciplinary Resource Unit will play an important role in system planning. They will provide identification, expert analysis, and evaluation of social, economic, environmental and land-use related impacts. They will work with the Transportation and Transit Planning and Programming Division and the Technical Advisory Committees, assist in preparing reports, and participate in public meetings.

The District Offices will participate in all system planning activities and provide valuable information, particularly during the evaluation of alternatives and the priority determination phases. All Divisions and particularly the Design and Right of Way Division will contribute to the system planning process and in turn will be kept informed of progress.

The Minnesota Department of Highways participation in the Metropolitan Twin-Cities Area transportation system planning process is primarily through the Metropolitan Council's (MC) Management Committee and Technical Advisory Committee, plus the daily contacts by the MHD's Metropolitan Planning Coordinator (Office of Systems Planning). The Commissioner of Highways is a member of the Management Committee.

The MHD is officially represented on the TAC by the Assistant Commissioner for Transportation and Transit Planning and Programming. The two metropolitan area District Engineers or their representatives and the MHD's Metropolitan Planning Coordinator and Transit Liaison Chief (Office of System Plannning) attend most of the meetings. The TAC occasionally appoints special committees to study specific problems and report back to the TAC with a recommendation. MHD personnel from the Transportation and Transit Planning and Programming Division and District Office are frequently appointed to these committees.

The MHD Metropolitan Planning Coordinator is responsible for coordinating MHD transportation planning activities with other agencies in the Twin Cities metropolitan area and for providing technical guidance to the planning efforts. In this capacity he provides coordination and liaison between the MHD and the MC, provides technical expertise to comprehensive transportation planning studies, participates in the formulation of transportation system development criteria, develops procedures and guidelines for technical aspects of transportation planning studies, and initiates research projects for improving the quality of transportation planning studies.

The Minnesota Department of Highways participation in other urban area system planning is primarily through the 3C planning process and representation on the Technical Advisory Committees. The MHD District Engineers and System Planning Director assist in planning activities such as developing study designs, collecting and forecasting travel data, preparing reports and conducting public meetings. The interdisciplinary resources of the MHD may also participate on a as-needed basis.

OTHER AGENCIES

Federal, state, regional and local agencies participate in the systems planning process.

Federal

The Federal Highway Administration (FHWA) primarily participates in a continuing review of the processes and procedures used in developing highway systems plans to ensure compliance with Federal requirements, as appropriate. The Federal Highway Administration will monitor future system planning to ensure compliance with the Action Plan. The FHWA reviews highway system plans to ensure that the plans meet all relevant Federal guidelines and directives and formally approves annual work programs. The Technical Advisory Committee of the Metropolitan-Twin City area includes three Federal agency representatives (FHWA, Urban Mass Transportation Administration and Department of Housing and Urban Development). Other Federal agencies may become involved through public meetings or through direct contact by a planning agency seeking information or advice. The major concern of many Federal agencies is to ensure that environmental effects and local and regional concerns are considered in the highway system planning process.

State

Several state agencies whose functions relate to a significant degree with transportation participate in the system planning process. Those agencies represented on the Technical Advisory Committees (TAC) are contributing the viewpoint and technical expertise unique to their agency throughout the planning activities. The Minnesota Department of Highways TAC includes the Department of Aeronautics Economic Development, Agriculture, Natural Resources, and Public Safety, the State Planning Agency, the Pollution Control Agency, and the Public Service Commission. The State Planning Agency is also represented on the Metropolitan-Twin Cities areas TAC with the MHD. State agency participation is also reflected through the Environmental Quality Council (EQC) review of transportation proposals. Informal day-to-day contacts between the MHD and other state agencies also contribute to planning considerations. Those state agencies not represented on the TAC or EQC having a less direct interest in transportation planning may participate in systems planning through public meetings or direct contact by a planning agency seeking information or advice.

Regional Agencies

Because of the responsibilities the various Regional Development Commissions throughout the state have for planning and development coordination within their respective regions,(Exhibit E) it is essential that the Commissions be kept informed of highway system planning progress and offered the opportunity to provide input into the system planning process commensurate with their desire and capacity to do so.

Each of the organized Regional Development Commissions is represented on the MHD Technical Advisory Committee. In this way, they can participate in developing transportation goals and objectives and in the technical procedures and products of the system planning activities. Those Regional Development Commissions which are

recognized A-95 clearinghouse agencies also have the opportunity to review highway programs derived from the system planning process. Regional Development Commissions and other regional planning agencies are encouraged to participate in the system planning process. Participation may be accomplished through the public meetings, contribution of resources to the planning activities, or direct contacts with the highway planning agency.

In the Metropolitan-Twin Cities Area, the Management and Technical Advisory Committees both include representation from the Metropolitan Transit Commission and the Metropolitan Council.

In other urban areas the Regional Development agencies should participate in system planning through representation on the Technical Advisory Committees and through the public meetings.

Local Agencies

Local agency participation in the highway system planning process is through the Regional Development Commissions, regional planning agencies, and direct representation at public meetings. Local planning goals and objectives as well as detailed land use and development plans of local communities will be considered in the development of statewide transportation goals and objectives in the development of a statewide highway system plan.

In the Metropolitan-Twin Cities Area, local representation is reflected on several committees. The Management Committee includes one elected county official and one elected municipal official. The Policy Advisory Committee is comprised of one representative from each of the 7 counties, and 6 representatives from municipalities in the metropolitan area. The Technical Advisory Committee includes 8 municipal and 7 county representatives.

Additionally because the TAC, Management Committee, and the MC meet at open regularly scheduled meetings, any agency can send representatives to any or all of the meetings.

In other urban areas the emphasis is again upon participation through representation on Technical Advisory Committees and through public meetings.

Consultants

Consultants may be used to assist in completing one or more phases of the highway system planning process. The assistance of consultants may be required if the volume of activities or time constraints in the highway system planning process exceed the capacity of state personnel to achieve unassisted. The assistance of the specialized expertise often available through consultants may also be required in the evaluation of certain unusually complex problems in system planning. Consultants, as needs dictate, may include private individuals and firms or college and university personnel.

PUBLIC

Citizens and community participation can strengthen the planning process and influence transportation decision making. For public participation to be effective, officials and professionals must be open and energetic in obtaining citizen involvement and the citizens must be active in accepting the offered opportunity for involvement in the planning process.

The public may participate to a degree of its own choosing. Opportunities are afforded for participation through representation on committees and through public meetings. Public participation is encouraged throughout the system planning process.

The Minnesota Department of Highways District Engineers, the Regional Development Commissions and regional planning agencies will assist in public involvement programs by identifying concerned groups and individuals, arranging for meeting facilities, publicizing meetings and encouraging citizens to participate. The MHD Central Office and each District Office will have a Highway Plans Information Unit which is available to respond to public inquiries and to communicate with the public on a day to day basis. All public meetings concerning the transportation system planning process will be given widespread publicity and invitations will be extended to all known interested organizations.

Opportunities for public involvement in statewide system planning are afforded at the public meetings which will be held at various locations throughout the state to discuss goals and objectives, to explain the base data used and the forecasting procedures. The purpose of public meetings is to obtain reaction and advice regarding possible alternate transportation system plans, and to obtain reaction to the priority evaluation procedures and the generalized highway construction priorities Many opportunities also exist for informal meetings with elected officials and interested groups.

Copies of the planning reports developed at the various stages of system planning are made available to all interested parties.

The Metropolitan Council's public involvement process for transportation planning in the Twin City area is best exemplified by a description of the process carried out during 1972 for systems planning. The steps were:

- Council debate and decision on the issues to be resolved;
- Development of a schedule and calendar for discussion of these issues and wide dissemination of that calendar to all known interested parties or anyone else requesting the schedule;
- Creation of a transportation issues mailing list;
- Receipt of all the staff papers and Council actions by persons on mailing lists;
- Open public meetings with an effort to get full press coverage;
- Debate of all issues in public and presentation of all staff reports in public;
- Consultant critique of staff proposals in public at meetings;
- Presentations by invitation by interested private citizens and agency representatives at regular meetings;
- Public hearings on preliminary answers to issues;
- Public hearings on preliminary plan proposals;
- Printing and distribution of approximately 5,000 copies of the draft plan;
- Official public hearing on the plan;
- Detailed review of hearing by staff and recommendations forwarded to committees;
- Final adoption following revision based upon public hearing.

In metropolitan implementation planning, public involvement varies from citizen advisory committees to the use of public forums.

The MTC conducts a relatively extensive community involvement program on each of its

Implementation Planning and Product Engineering projects. Each study design contains a task entitled Community Involvement. Upon project initiation, the MTC, in conjunction with the other project sponsors, organizes a community advisory committee, generally consisting of representatives of the local municipalities and community organizations. The purpose of these committees is to periodically review and critique project progress, direction, and content and to provide that community liaison and input needed to assure that the project thoroughly considers local community needs and desires. Upon familiarizing themselves with the projects' purpose, these committees are then involved in the review of each project task and frequently provide local input. Most project tasks result in an Interim Report, the drafts of which are reviewed by the Committee.

In addition to these project-oriented community involvement programs, the MTC also has a 41-member Advisory Committee on Transit (ACT). Five members are selected by each of the eight Transit Commissioners, and the chairman is selected by the Chairman of the Commission. The Commission will seek the Advisory Committee's advice on the substantive general issues and some of the more important specific projects. On occasion, the Advisory Committee on Transit will select issues of primary interest to a number of members and will advise the Commission on the subject.

The MTC also utilizes press releases and newsletters to disseminate information to the general public, and meetings of the Commission and its committees are open to the public. These meeting agendas include provision for the public to be heard; if an organization or an individual contacts the Commission prior to a meeting, the presentation is formally placed on the agenda.

The emphasis throughout system planning is placed on opportunities for public involvement. The public must respond if the process is to be meaningful. The more responsive the public is, the more encouraged highway officials will become that public participation can be an effective tool in planning.

Chapter 5

PROJECT DEVELOPMENT

A description of the Project Development phase of highway development that begins with identification of a project from System Planning and concludes with the awarding of a construction contract. The major steps of project development are:

- Project Path Selection
- Location Study
- Design Study
- Construction Plans and Right of Way Acquisition

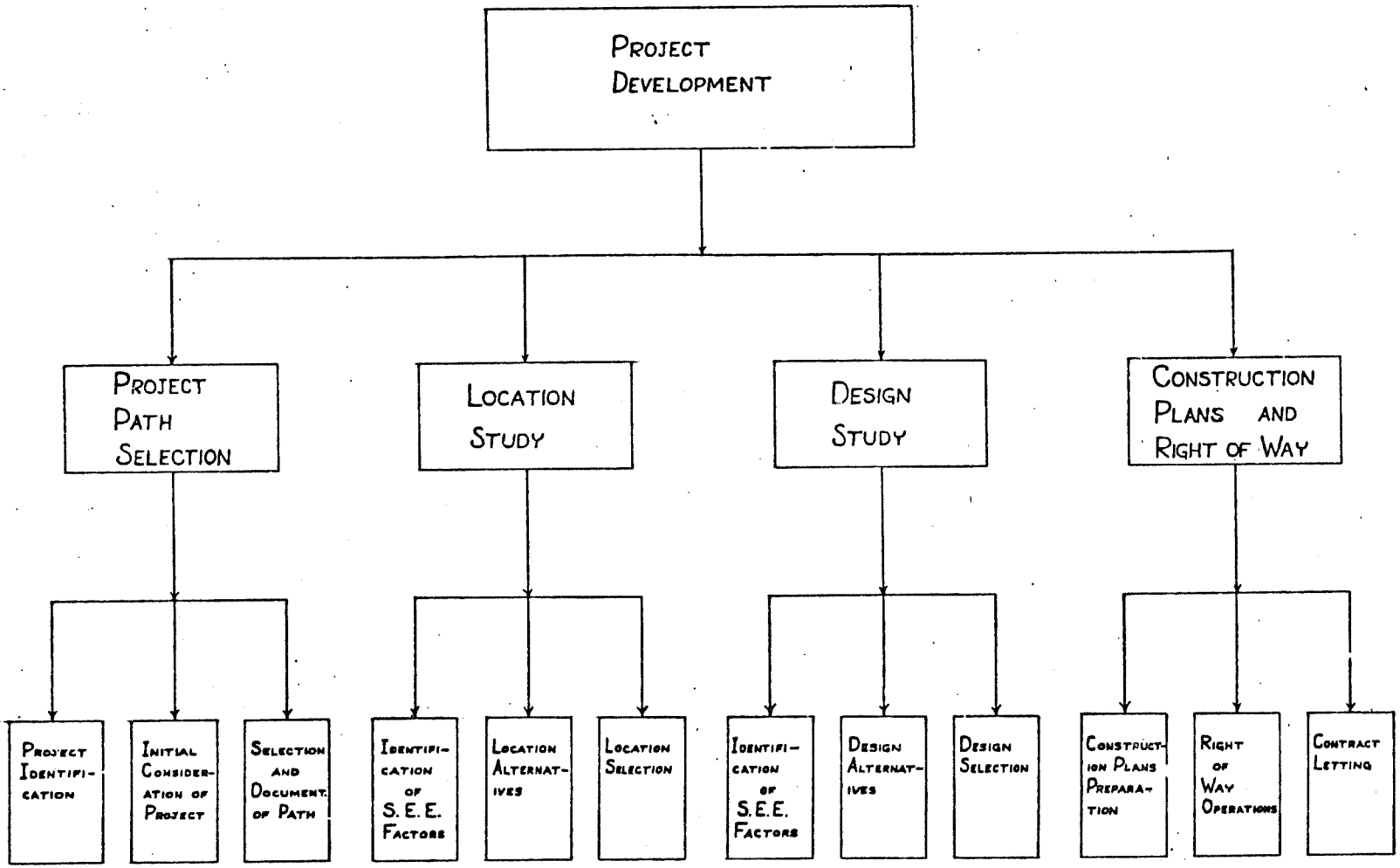
Project Development can be defined as the implementation of the planning needs identified in System Planning and the refinement of those needs into a specific plan. This stage begins with identification of a project from System Planning and concludes with the awarding of a Construction Contract. The modern highway decision process relates to generating location and design alternatives for the highway facility, predicting the consequences, evaluating those consequences, and selecting the appropriate alternative.

Project Development consists of 4 major activities. These include:

1. Project Path Selection which is a determination of the depth of study appropriate to the project.
2. Location Study which is the determination of the highway route location. Proposals involving improvements to existing facilities may require minimal or no location study dependent upon the nature of the proposed modifications.
3. Design Study which more explicitly defines the proposed development in terms of location, access controls, right of way requirements, etc.
4. Construction Plans and Right of Way which is the development of detailed plans on which the construction will be based and the acquisition of necessary right of way on which to construct the project. The degree of complexity of construction plans varies widely from project to project.

Each of these major activities is subdivided into 3 lesser tasks for a total of 12 as shown on the following page.

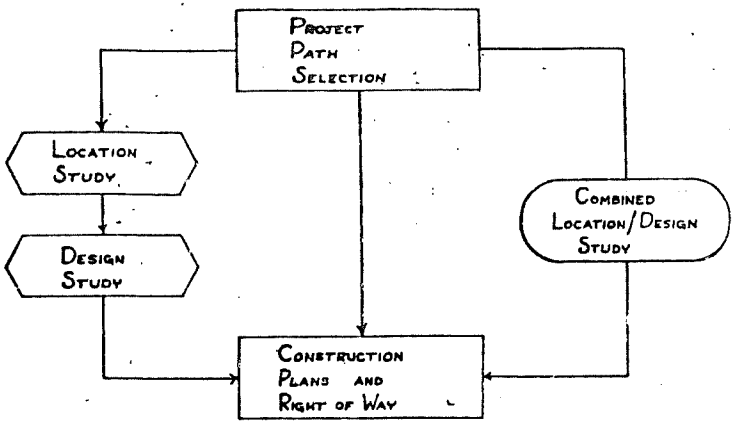
The activities and tasks comprising Project Development may be combined to define three Project


PROJECT DEVELOPMENT
PROJECT PATH SELECTION
LOCATION STUDY
DESIGN STUDY
CONSTRUCTION PLANS AND RIGHT OF WAY
PROJECT IDENTIFICATION
INITIAL CONSIDERATION OF PROJECT
SELECTION AND DOCUMENT. OF PATH
IDENTIFICATION OF S.E.E. FACTORS
LOCATION ALTERNATIVES
LOCATION SELECTION
IDENTIFICATION OF S.E.E. FACTORS
DESIGN ALTERNATIVES
DESIGN SELECTION
CONSTRUCTION PLANS PREPARATION
RIGHT OF WAY OPERATIONS
CONTRACT LETTING

Development Paths. These paths are:

1. Separate Location and Design Studies.
2. Combined Location-Design Studies.
3. No Location-Design Studies.

Each path begins with the Project Path Selection activity and concludes with the Development of Construction Plans and Acquisition of Right of Way. Which of these paths is used is determined by the complexity of the project, its objectives, and its possible impact. Project development is the responsibility of the District Engineer.

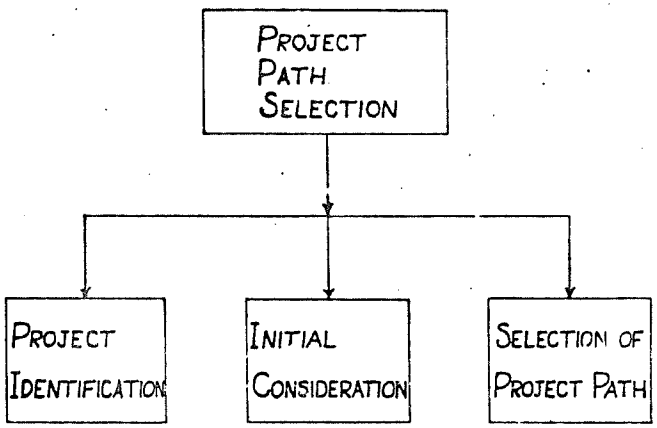


(For those projects crossing state lines the District Engineer and Chief Engineer shall communicate with the responsible parties in the adjoining state to make the determination as to who shall develop the project).

It is the purpose of this chapter of the Action Plan to:

1. Define the method by which a particular Project Development Path is selected.
2. Describe each of the development paths indicating what activities occur, at what points decisions are made, and where opportunities for participation occur.
3. Describe the broad responsibility and authority for decision making.

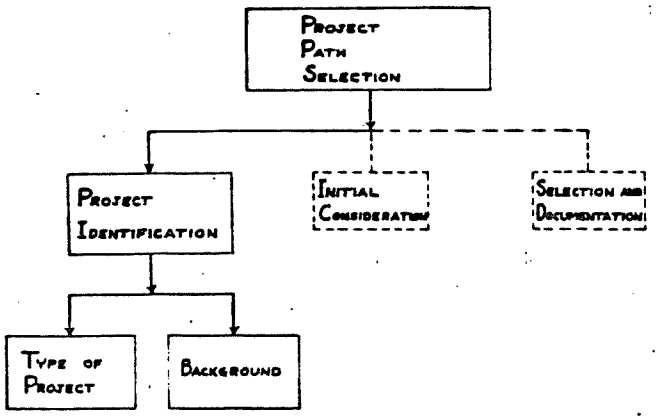
PROJECT PATH SELECTION



Project Path Selection is defined as the method by which a development path is chosen for any particular highway project. It provides an orderly transition from the broad based concepts of System Planning to the concerns of the specific area in which the highway is to be constructed. This activity consists of 3 tasks each designed to accomplish a particular input to the selection of one of the development paths. The tasks are:

1. Identification of the Project.
2. Initial Consideration of Project Impacts.
3. Selection of a development path and the documentation of that decision.

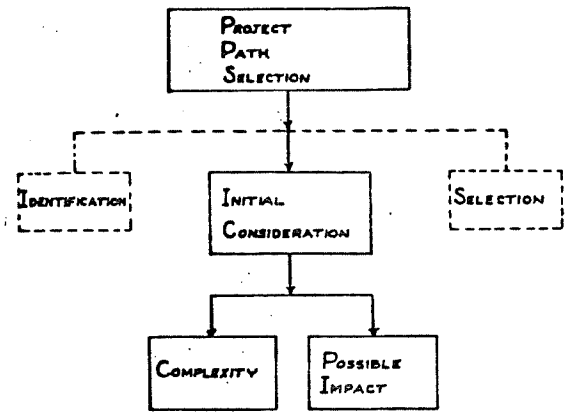
Project Identification



The task of identifying a particular project for further consideration consists of reviewing the programs developed and established during System Planning and collecting the background material prepared in the Systems Plan development. The Office of System Planning will provide documentation covering the justification for the project, (including the consequences of the "no build" alternative), the social, economic, and environmental concerns, mass transit and/or non-highway transportation mode plans that influence the highway project, and the geographic limits within which the facility should be located.

The tasks of project identification are the responsibility of the District Engineer.

Initial Consideration of Project Impacts



The objective of this task is to conduct an initial survey to acquire a base of social, political, transportation, economic, environmental, and institutional data, and concerns surrounding the project, and to develop an understanding of potentially affected interests. The District Engineer shall solicit and consider the views of the State's resources, recreation, regulatory, and planning agencies, and of those Federal agencies and local public officials and agencies, including A-95 Clearinghouses, and public advisory groups which he knows or believes might be interested in or affected by the proposed project. To ensure timely public awareness and understanding of project development, interested persons and private groups shall be given opportunity to express their views early enough to influence the decision regarding what course of study is to be followed.

To guide the identification of the appropriate project development path, a proposed project shall be surveyed on two levels: First, in terms of

overall complexity and, secondly, in terms of its potential identifiable impact. Complexity may be addressed by using the following guides:

- A project on new location utilizing entirely new right of way.
- A project on an existing location requiring additional right of way involvement.
- A project on an existing location requiring no additional right of way.

Each of these guides provides a strong indication as to the depth of study which a project might require. For example:

- A proposal to construct a new highway on new location might require the entire sequence of activities including a Location and Design Study and Construction Plan and Right of Way.
- A proposal to improve an existing roadway by widening the shoulders, making horizontal and vertical curve improvements, and resurfacing the road without acquiring significant amounts of right of way or having significant social, economic, and environmental impacts would not necessarily require a Location Study but would require a Design Study.
- A proposal to resurface an existing facility without modification to the roadway might require neither location or design studies. The Project Path Selection activity would indicate in this case that the direct preparation of construction plans would be most appropriate.

The project is then surveyed to identify possible areas of impact. This includes the identification of whether a project is located in an urban or rural area, and documentation of identifiable social, economic,environmental, transportation, political, institutional, and special interest concerns.

The techniques, nature, and degree of participation used in collecting information in these areas will in large measure be determined by the nature of the project being surveyed. Although project complexity will be identified primarily by using Highway Department expertise, identification of areas of possible impact shall be accomplished using Federal, state, and local agencies, special interest groups, the public, as well as Highway Department expertise.

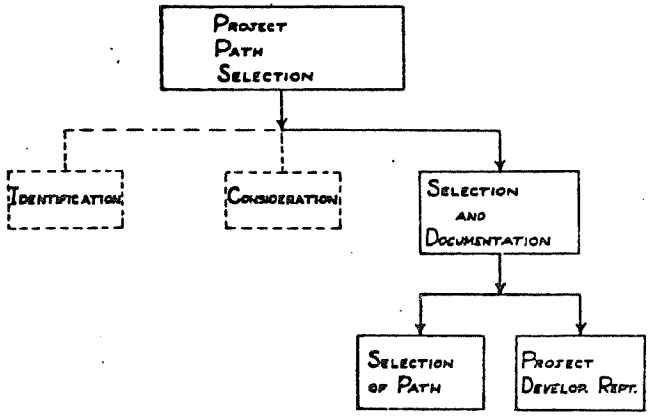
Input to this process maybe accomplished using a variety of techniques ranging from the publication of a notice in the news media that a project is being considered, to the holding of public meetings, to the establishment of advisory committees for a special project.

In addition to surveying the project's complexity and potential areas of impact, the District Engineer shall review any new factors which may dictate reconsideration of the project through System Planning. Factors which might dictate this reconsideration include:

- The length of time since Systems Plan development and project identification.
- A change in the scope of the project from that originally identified (e.g., from 2 lane to 4 lane, etc.).
- Substantial expressed public opposition.
- Other previously unidentified considerations unknown because they were not fixed until specific project consideration.

Should the District Engineer at this point identify the need to recycle the project into System Planning he will document this decision and make it known through the appropriate news media.

Selection and Documentation of Project Development Path



Based on the background developed in project identification and consideration of the project in terms of complexity and impact the District Engineer shall select a project development path. Either:

1. Separate Location-Design Studies
2. Combined Location-Design Studies
3. No Location-Design Studies

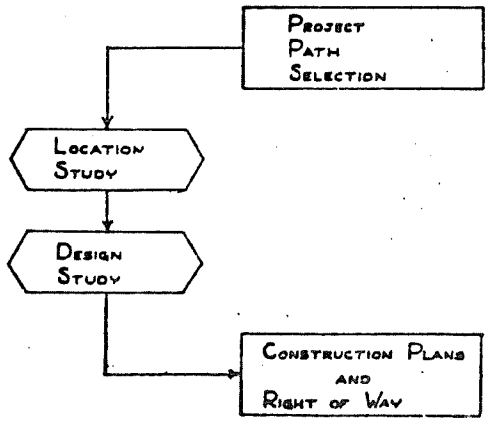
This selection shall then be documented in a Project Development Report. The Report will -

1. provide background information regarding:
   - the identification of the project
   - the justification for the project
   - major concerns identified in System Planning
   - the development criteria applicable to the project.
2. document the proposed development path including:
   - a broad schedule of activities
   - any specialized study techniques which may be employed
   - the assignment of responsibilities for completion of the proposed studies and
   - the limits within which the studies will be conducted.
3. document how and why the particular process path was selected including:
   - who was involved in providing information to the decision and
   - how this information may have affected the decision that was made.

In the case where the decision is made to proceed to the development of Construction Plans directly, the Project Development Report will be expanded to include a section dealing with the pertinent design considerations and an assessment of Social, Economic, and Environmental Impact. (Requirements in this case are presented in the Section on the No Location-Design Study).

Upon completion of the Report, notice of its availability will be made known through the appropriate news media.

SEPARATE LOCATION-DESIGN STUDIES



The Project Development Path requiring Separate Location-Design Studies represents the series of activities and depth of treatment reserved for

the most complex type of project having the greatest potential impact. Generally, this path would be used on the development of a project on a new location and requiring new right of way.

The range of activities included in Separate Location-Design Studies represent basically a process of continuing refinement. In other words, the same basic steps are followed in the Location Study and Design Study, but the scope of the material and data reviewed reaches greater and greater detail as the study moves from Location Activities to Design Activities.

Since this project development path represents the most complex situation of study development it encompasses all the possible activities which might be associated with project development in its purest form.

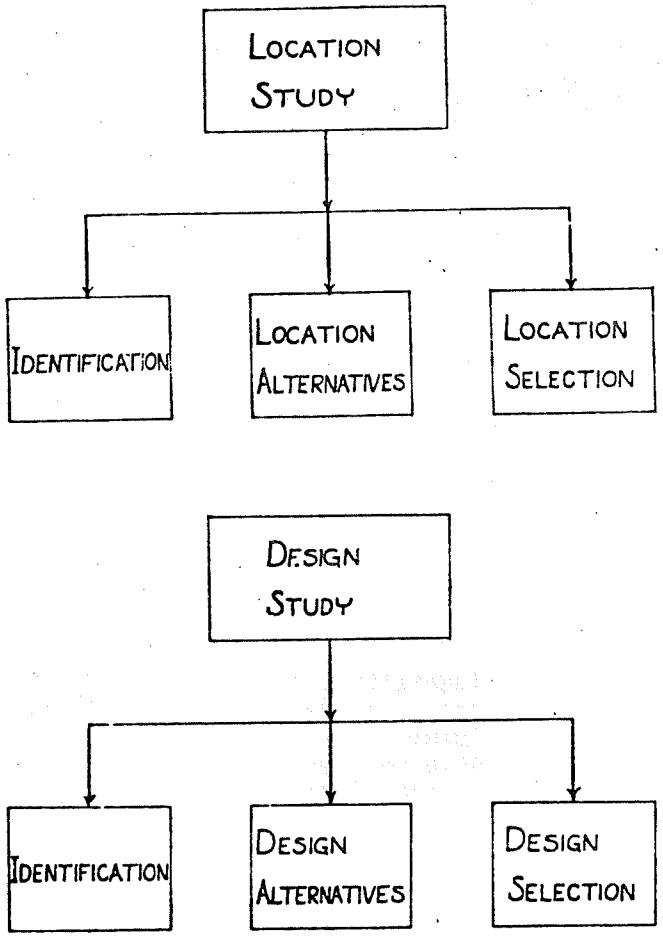
The other studies (Combined Location-Design Studies and No Location-Design Studies) are, therefore, combinations and modifications of the activities, and tasks presented here.

Separate Location-Design Studies is divided into two basic activities:

1. The Location Study which is the series of steps used to determine the basic route (or location) a highway will follow.
2. The Design Study which determines the shape of the proposed highway in terms of horizontal and vertical alignment, access control, and right of way requirement,etc.

Each of these activities is then further divided into 3 additional tasks. These tasks are repeated in differing scales in the Location and Design Study. They include:

1. The identification of social, economic, environmental and engineering factors which effect the selection of location or design alternatives.
2. The selection of location or design alternatives and the analysis of these alternatives for possible impact.
3. The formalized selection and documentation of an appropriate alternative.



Following the completion of these activities and tasks, a project would be advanced for Construction Plans Development and Right of Way Acquisition.

The responsibility for completion of the various activities and decisions within these studies rests with the District Engineer.

LOCATION STUDY

The Location Study is that activity which is used to determine the route a highway will follow. It begins after the identification of a generalized highway corridor (through System Planning) and concludes with the recommendation of a specific route location.

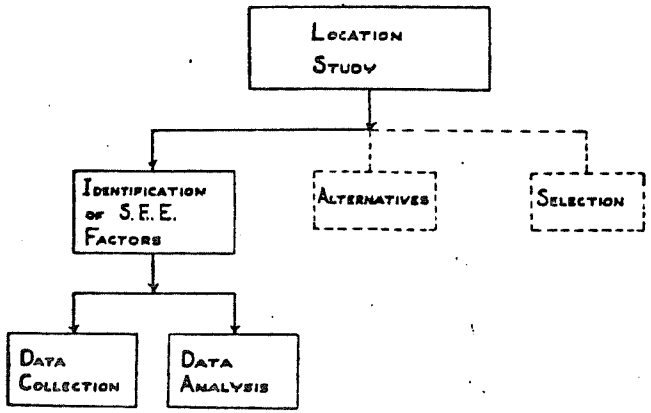
It is the purpose of this study to:

- Collect and analyze information and data relating to social, economic, environmental, and engineering factors of the proposed highway.
- Utilize this information and data in the selection and evaluation of location alternatives.
- Make a reasoned selection of a specific route location.

To achieve these objectives the Location Study Activity is divided into 3 sub-tasks (previously outlined) and abbreviated here to be:

1. Identification of Social, Economic, Environmental and Engineering Factors.
2. Identification and Recommendation of Route Alternatives.
3. Selection and Documentation of a Specific Route Location.

IDENTIFICATION OF SOCIAL, ECONOMIC, ENVIRONMENTAL AND ENGINEERING FACTORS



This task deals with collecting and analyzing all quantifiable data which is known to exist and which might form a positive or negative constraint on the judicious selection of route alternatives. The needs of the particular project, the area in which it is located, and the objectives of the study defined during Project Path Selection will in large measure determine the study technique to be used, and the data to be collected. The results of the impact prediction surrounding data collected and analyzed will indicate ways in which alternatives may be developed to eliminate or minimize adverse effects.

Data Collection

Data collection consists of a comprehensive survey of the identified study area to expand on and develop a complete base of economic, transportation, political, environmental, social, institutional, and special interest data. During the

collection of this data, special attention is paid to such non-transportation factors as possible replacement housing (where identified) joint development possibilities, and multiple use of rights of way, etc. It is also to be emphasized that the data shall be collected to reflect the "do-nothing" and multi-modal considerations.

It must be stressed that the data collected is strongly influenced by the individual nature of the project and the surroundings in which it is being developed. Since there are some forms of information which do not lend themselves to quantitative classification, special attention shall be paid to the qualitative nature of the data.

Data Collection shall be accomplished under the direction of the District Engineer who shall use a variety of information sources. These sources shall include the MHD Interdisciplinary Resource Unit, the auspices of various local, state and Federal agencies, regional clearinghouses, and consultants (where necessary). In instances where benefit may be derived, the District Engineer shall involve the public in this raw data collection task.

The techniques used in collecting the data and the interplay of the involved agencies will be largely dictated by the nature and complexity of the project under consideration.

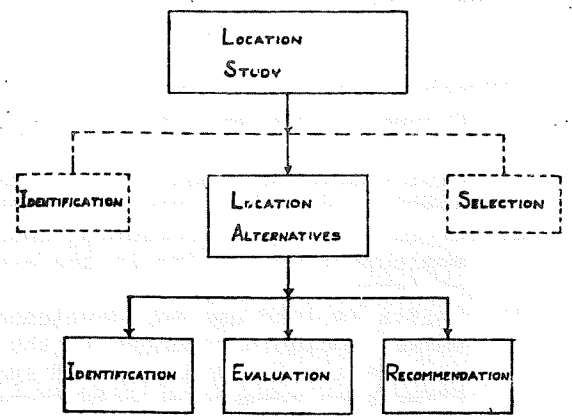
Data Analysis

Data Analysis consists of classifying the data collected into catagories typifying positive and negative areas of sensitivity. This classification may be divided in the areas of Social, Economic, Environmental, and Engineering Constraints.

The District Engineer shall have the responsibility to see that this task is completed.

In total the task of identification becomes one of determining what physical factors may constrain the further selection of location alternatives. It is the analysis of physical facts without regard (necessarily) to impact of future proposals. It is the physical inventory of the study area to act as a guide in a judicious selection of alternatives, and provision of a base for further impact study.

IDENTIFICATION AND RECOMMENDATION OF ROUTE ALTERNATIVES



This task deals with the initial identification of location alternatives to be studied; the evaluation of those alternatives in terms of impact; and recommendation of a prudent and reasonable set of alternatives from which to select a specific route location.

Identification of Route Alternatives

Based on the data collected and analyzed under the previously discussed task, the District Engineer, and his staff shall identify as many feasible and prudent alternatives as a study may warrant. The "do-nothing" alternative is automatically a consideration and the data provided is presented to reflect this consideration.

Evaluation of Identified Route Alternatives

Once the initial set of alternatives has been identified, they shall be evaluated to determine their social, economic and environmental impact.

Economic impacts are viewed as changes in the value of the output of goods and services due to increased value to users, or the loss of resources required for the project.

Examples of Economic impacts may include:

1. Changes in the ability to provide goods and services. This would include the distribution of goods, the transportation system, utilities, and communications.
2. Effects on labor, including changes in employment and shifts in the availability of labor.
3. Shifts in land use and developmental pressures, including changes in the tax base and the demand (and cost) of services.
4. Effects on commercial establishments, including access, shifts in market, clientels, or service capabilities.
5. Possibilities for multiple use of resources.

Social impacts are related to changes in income distribution and social amenities and services.

Examples may include:

1. Shifts in the ability to maintain a high level of public health and safety.
2. The residential or neighborhood character. This would include the make-up of the neighborhood and immediate and probable secondary displacement of people and such amenities as religious and educational institutions.
3. The effects of use of recreational facilities and open space.
4. The aesthetics of the highway design, including the view from the highway offered to the motorist and the view to the highway which will result for the adjacent resident.
5. Possibilities for multiple use of resources.

Environmental impacts are viewed as changes to the physical environment which result directly from highway construction and use, or indirectly from shifts in management or conservation practices and changes in developmental pressures.

Examples of the impacts studied may be the effect on:

1. Eco-systems
2. Areas of Production -
   - Lands for forestry; agriculture,. floriculture, nursery, etc.
   - Lands for mineral production, animal products, and water supply, etc.
3. Areas of Preservation and Protection -
   - Water and marsh land areas for fish and wildlife habitats; forest and woods for wildlife refuges, etc.
   - Historic and cultural sites.
   - Flood control reservoirs, flood plains, drainage channels and areas below dams, parkland, etc.

The particular types of information which will be needed for the evaluation will depend on the geographic area, the stage of development, and the analysis technique selected. The mechanics involved in establishing the evaluation will be defined by those involved.

The District Engineer, at all times, through the study process shall be aware of various public and agency concerns. Particular attention shall be paid to any new or revised alternatives which may arise as a result of any agency or public involvement. Alternatives at this point are very flexible and should easily change to reflect valid concerns.

At this point in the Location Study the District Engineer shall review the project for any considerations which may indicate to him that the project should be recycled. This action may mean returning to the project to the Project Path Selection activity to reassess the Project Development Path being used for either greater or lesser treatment. If this is the case he shall amend the Project Development Report to reflect any changes and publish notification of that change in the appropriate news media. Or, if conditions dictate he may have the project returned to System Planning for complete reconsideration. If he decides to recycle a project he shall publish notice of this decision in the appropriate news media.

Alternatives Recommendation

Based on the evaluation of all the alternatives the District Engineer and his staff shall identify a set of prudent and reasoned alternatives and shall recommend these for further study. A set may be defined as a minimum of two since the "do-nothing" alternative will automatically be a consideration.

These selected alternatives shall then be documented in a Preliminary Location Report and recommended for staff concurrence in the areas of:

System Compatibility
Interdisciplinary Consideration
Design Acceptance
Funding Priority

This recommending report will:

- provide background information on all alternatives considered, including engineering, social, economic, and environmental information
- discuss how and why these alternatives were selected, and who was involved
- give specific attention to
  - -- the environmental impact of the proposed action
  - -- any adverse environmental effects which cannot be avoided should the proposal be implemented
  - -- the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity
  - -- any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented, and
  - -- any quantifiable effects on
    Regional and community growth,
    conservation and preservation,
    public facilities and services,
    community cohesion,
    displacement of people, businesses and farms,
    air, noise and water pollution,
    aesthetic and other values.

This report shall serve to document all data collected and analyzed to this point in project development. It shall accompany any illustrative material which may be used for further advancement of the project.

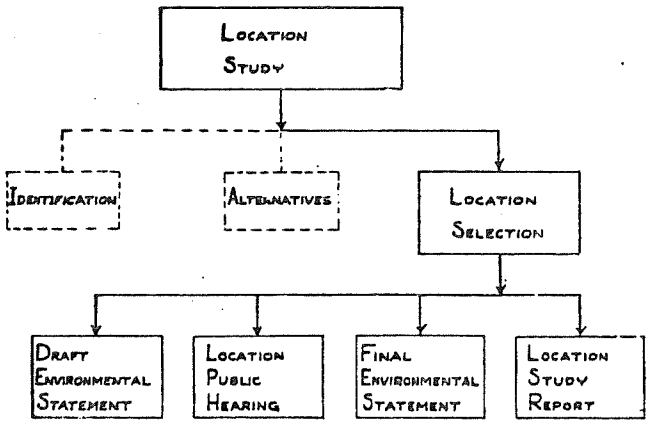
Although, it is designed as primarily an "in house" document, (and as such will follow no strict format) it will serve as valuable background information for the formalized documentation carried out by the Draft Environmental Statement and Location

Study Report.

The District Engineer shall have the responsibility for preparing this report and submitting it for staff concurrence. He shall use whatever resources he feels appropriate to make this report meaningful and comprehensive.

Following concurrence the project shall be advanced to the task of Selection and Documentation of a Specific Route Location.

SELECTION AND DOCUMENTATION OF A SPECIFIC ROUTE LOCATION



The final task of the Location Study is the formal selection and documentation of a Specific Route Location in which further studies (Design) may be conducted. This formalized portion of the Location Study is based on the alternatives developed in the first two stages. It begins with the preparation of a Draft Environmental Statement, or Negative Declaration, includes the Location Public Hearing, the Final Environmental Statement (when appropriate), and concludes with the preparation of a Location Study Report.

Environmental Statement

The first step in this formalized portion of the Location Study is the preparation and processing of either a Draft Environmental Impact Statement or a Negative Declaration. The determination of which of these report forms will be used is made during Project Path Selection, and further qualified during the Location Study. The project will have been evaluated as to its classification as a "major action," or "not a major action" by project complexity, and possible impact. A project that has been considered a major action and would significantly affect the quality of human environment will require a Draft and Final Environmental Statement. A project that is not considered a major action or a major action that would not significantly affect the quality of human environment will require a Negative Declaration of Environmental Effects.
(Procedures used will be in accord with those outlined in PPM 90-1 in Appendix B).

Negative Declaration. When a Negative Declaration is prepared on a project, it shall be approved by the Commissioner of Highways, and submitted to the Division Engineer of the Federal Highway Administration (FHWA) for concurrence. It will also be made available for review by appropriate local, state, and Federal agencies, Regional Clearinghouses and the public.

Draft Environmental Impact Statement. When a Draft Environmental Statement is prepared it will be based on the alternatives documented in

the Preliminary Location Report. It shall include an objective presentation of the history, planning and coordination of alternate route locations, including the "do-nothing" alternative for new highway locations. The statement shall identify and assess all anticipated positive and negative environmental impacts of the proposed action. Each alternative, including the "do-nothing" alternative shall be given the same in-depth study using an inter-disciplinary approach which will include the expertise available from other State and local agencies, units of the highway department, civic groups, planning commissions, etc. The Draft Statement shall address the specific issues of:

- the environmental impact of the proposed action
- any adverse environmental effects which cannot be avoided should the proposal be implemented
- alternatives to the proposed action
- the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
- any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

The District Engineer shall have the over-all responsibility for ensuring that the draft statement process is followed.

Review and Comment. The Draft Statement shall be submitted to the Division Engineer of the FHWA to be cleared for circulation. Upon receiving the Division Engineer's approval of the statement, it shall be circulated to appropriate Federal, State Regional and Local Agencies for review and comment on the environmental impacts of the proposed action. The Draft Statement shall be made available to the public not later than the first required published notice of a Location Public Hearing or published notice of opportunity for a public hearing. As a minimum a notice of the statements availability shall be published in any newspaper(s) having substantial circulation in the area of the proposed highway action.

Draft Statements shall be made available for review by the public at Highway Department District and Central Offices, State, Regional and Metropolitan Clearinghouses, Federal Highway Administration Division and Regional offices; and at appropriate public hearings.

Location Public Hearing

The purpose of the public hearing is to present to the public an explanation of the alternates under consideration and to receive comments concerning the route locations presented from interested citizens. A location hearing shall be held or the opportunity afforded to request a hearing for all projects which require a Route Location Study. It is held to ensure that a formal opportunity is afforded for effective participation by persons interested in the process of determining the need for, and the location of, a highway. The hearing process also provides a formal public forum that affords full opportunity for presenting views on each of the proposed alternate highway locations and the social, economic, and environmental effects of those alternate locations.

A "Route Location Public Hearing" is a public hearing which:

- Is held before location approval.
- Is held after construction feasibility of the alternative has been investigated.

- Is held to promote effective public discussion in the location of the highway.
- Provides for thorough discussion of the social, economic and environmental effects of alternate locations of a highway between controlling termini.
- Provides an opportunity to discuss the relocation program.

Public Hearing procedures, requirements, and formats shall be in conformance with Policy and Procedures Memorandums (PPM 20-8, Appendix B) issued by the FHWA. Notice of all public hearings or opportunities afforded for public hearings shall be given widespread distribution in the appropriate news media.

After the Location Public Hearing has been held, the transcript and submissions of the hearing shall be reviewed and analyzed. After the analysis has been completed, the District Engineer will make recommendations. These comments and recommendations, and results of any meetings subsequent to the hearing which affected the recommendations, will be included as input into both the Final Environmental Statement and the Location Study Report.

In advance of a Location Public Hearing, informal meetings may be held with state resource, recreation, regulatory and planning agencies, and those Federal agencies, local public officials, agencies and advisory groups whose functions, interest, or responsibilities can reasonably be anticipated to be affected by a highway in the proposed corridor. If the corridor affects another state, coordination with the appropriate agencies of that state is necessary.

Informal public meetings, clearly identified as such, may be desirable in advance of the hearing to gain information from the public which will be useful to the Department in the making of further studies of alternate routes. These meetings and contacts shall be held as deemed appropriate by the District Engineer to adequately inform interested parties of Location proposals to be presented at the hearing. Such meetings may take the form of presentations before municipal organizations, or civic groups; open forum type meetings conducted by other than Highway Department personnel; or "open-house" type meetings to orient interested persons in the proposals.

At all meetings, copies of applicable material (i.e. Draft Environmental Statements, maps, etc.) shall be made available for inspection. Documentation of all prehearing meetings deemed appropriate shall be maintained with the public hearing records and exhibits. All activities in conjunction with and surrounding the public hearing procedure will be the responsibility of the District Engineer.

Final Environmental Statement

The District Engineer shall ensure that a Final Environmental Statement is prepared for each project on which a Draft Statement was circulated.

Final statements shall incorporate all comments received on the draft (including environmental comments contained in the public hearing transcript) and a discussion of these comments.

The District Engineer shall describe the disposition of the comments, including:

- Revisions to the proposed development or improvement to overcome anticipated problems or objections.
- Reasons why specific comments and suggestions could not be accepted.

- Factors of overriding importance prohibiting the incorporation of suggestions, etc.

The Final Statement is approved by the Commissioner of Highways and then transmitted to the Regional Federal Highway Administrator (through the Division Office of the FHWA) for approval. The Regional Federal Highway Administrator shall indicate his adoption by his signature thereon and forward the Final Statement to the FHWA Office of Environmental Policy. The Federal Highway Administration's Office of Environmental Policy will submit copies of the Final Statement to the Office of Environment and Urban Systems (TEU); forward copies to the Council on Environmental Quality (CEQ); and inform the Regional Federal Highway Administrator when CEQ is furnished copies of the Final Statement. Final approval is subject to the conditions outlined in PPM 90-1 (found in Appendix B).

Location Study Report - Specific Route Recommendation

As the natural end result of the Location Study, the District Engineer shall recommend approval of a specific route location. This recommendation shall take the form of a Location Study Report. The Report shall serve as a total recapitulation of the location study process. It shall draw material from the Project Development Report, Preliminary Location Report, the Environmental Statement, and the public input received throughout the location study.

The Location Study Report documents:

- background information surrounding-the project
- the alternatives considered
- the alternative selected
- how and why that alternative was selected
- significant engineering data surrounding the project
- social, economic and environmental considerations regarding the project and,
- the disposition of all substantive comments received in the development of the project

The degree of analysis of the items may vary, depending upon the scope and nature of the project and the extent to which these items effect the project.

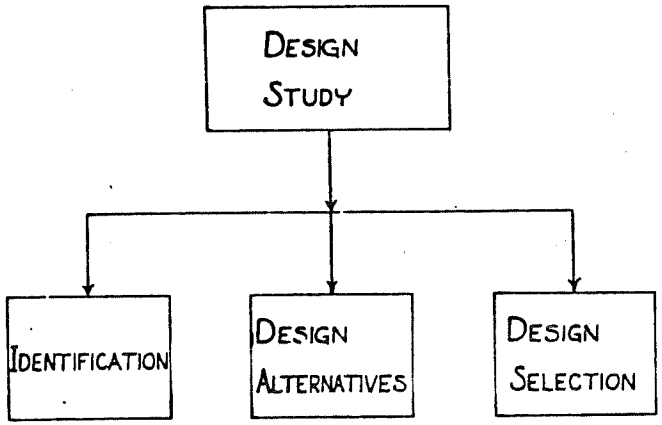
Before final submittal of this Recommendation to the FHWA, it shall be reviewed and concurred in by appropriate staff members rerpesenting the areas of:

System Compatibility
Interdisciplinary Consideration
Design Acceptance
Funding Priority

The approval of a specific location shall not preclude updating of the plan during the design study. The continuing analysis of growth and its effect on the route location, and the preparation of recommended adjustments to the design are part of the continuing development process.

The recommendation shall then be submitted to the FHWA for concurrence. Notification of both the request for and approval of the specific route location shall be made in the appropriate news media. The final location report shall be made available to interested parties.

DESIGN STUDY



Upon acceptance and concurrence of the specific route recommendation in the form of a specific route location approval, the activity of Location Study and Recommendation shall be considered complete and a project deemed ready for advancement to the Design Study.

The Design Study is that activity which is used to determine the shape of the proposed highway in terms of horizontal and vertical alignment, access control, right of way requirements and other items relating to the geometric design of the highway. It begins after the selection of specific route location and concludes with the recommendation and approval of a geometric design.

It is the purpose of this study to:

- collect and analyze information and data relating to engineering, social, economic, and environmental factors
- utilize this information and data in the development of design alternatives, and
- make a selection of a final geometric design

To achieve these objectives the Design Study Activity is divided into 3 sub-tasks and abbreviated here to be:

1. Identification of Engineering, Social, Economic and Environmental Factors.
2. Identification and Recommendation of Design Alternatives.
3. Selection and Documentation of Final Geometric Design.

Each of these sub-tasks represent operations identical in concept and approach to those outlined in the section on Location Study. They differ only in scale of the data and information examined.

Since the Location Study dealt with a more generalized study area, the data, information, and impact concerns expressed were described in a broader scale (i.e. location of a highway between points verses exact alignment determination).

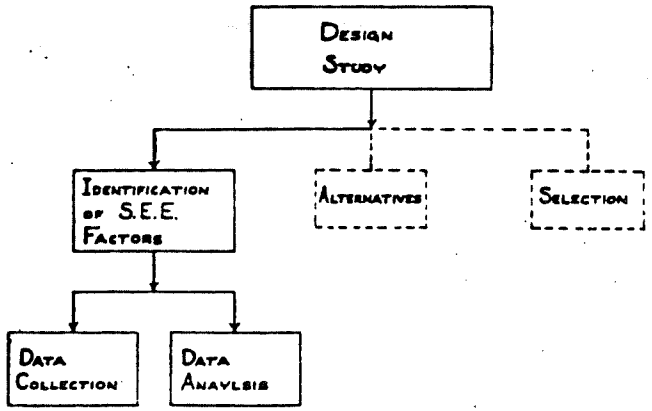
The Design Study since it begins with a much restricted study area represents a refinement in detail of previously developed information.

Thus, the description of the sub-tasks within this portion of the Action Plan will make frequent reference to parallel sections in the Location Study. An attempt will be made to highlight any significant differences which may not be readily apparent.

As with the Location Study the District Engineer remains the responsible official in conducting Design Study tasks.

The various involvement techniques and study procedures used will, as previously stated, be largely determined by the nature of the project, the area in which it is located, and recommendations and commitments in the Project Development Report.

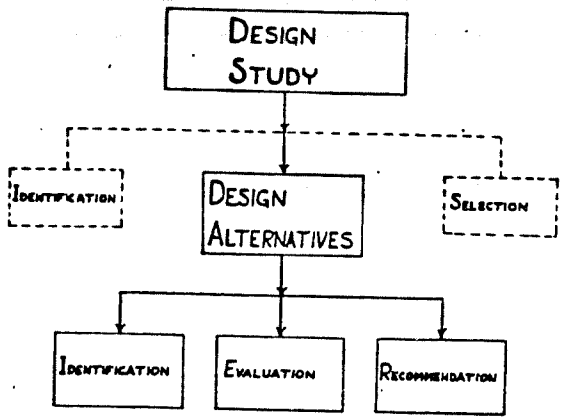
Identification of Social, Economic, Environmental and Engineering Factors



This task deals with the collecting and analyizing of all quantifiable data which are known to exist and which might create a positive or negative impact on the development of design alternatives. The needs of the particular project, the area in which it is located, and the objectives of the study defined during Project Path Selection will in large measure determine the study techniques to use and determine the data to be collected. The results of the impact prediction surrounding data collected and analyzed will indicate ways in which designs may be developed to eliminate or minimize adverse effects.

As in the location study, Identification of Engineering, Social, Economic and Environmental Factors will be accomplished in the data collection and analysis as outlined in the Location Study (p. 5-8).

IDENTIFICATION AND RECOMMENDATION OF DESIGN ALTERNATIVES



This task deals with the development of design alternatives to be studied; the evaluation of those alternatives in terms of impact, and the recommendation of a set of alternatives from which to select a geometric design.

Identification of Design Alternatives

Based on the data collected and analyzed, the District Engineer and his staff shall develop as many alternatives as a study may warrant. These alternatives shall represent paths of best possible impact and least negative effect. The "do-nothing" alternative, if not eliminated during the Location Study, is automatically a consideration and the data is provided to reflect this consideration.

Evaluation of Identified Design Alternatives

Once the initial set of alternatives has been developed they shall be evaluated to determine their social, economic and environmental impact.

The particular types of information which will

be needed to fulfill the evaluation will depend on the geographic area, the stage of development, and the analysis technique selected.

In particular, alternative evaluation will pay special attention to the following areas to consider the impact upon these factors by any of the proposals.

Regional and Community Growth
Conservation and Preservation
Public facilities and services
Community cohesion
Displacement of people - business, farms
Air, noise and water pollution
Aesthetic and other values

At this point in the Design Study the District Engineer shall again review the project for any considerations which may indicate to him that the project should be recycled. This action may mean returning the project to the Location Study. Or, if conditions dictate he may have the project returned to system planning for complete reconsideration. If he decides to recycle the project he shall publish notice of this decision in the appropriate news media.

Alternatives Recommendation

Based on the evaluation of all the alternatives, the District Engineer and his staff shall recommend a set of reasoned and prudent alternates for further study.

These selected alternatives shall then be documented in a Preliminary Design Report and recommended for concurrence in the areas of:

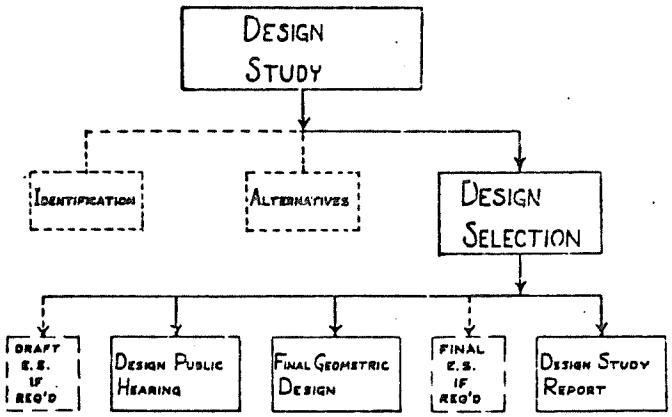
System Compatibility
Interdisciplinary Consideration
Design Acceptance
Funding Priority

This recommending report will carry the same format as outlined for the Preliminary Location Report (p. 11).

The District Engineer shall have the responsibility for preparing this report and submitting it for Staff Concurrence. He shall use whatever resources he feels appropriate to make this report meaningful and comprehensive.

Following concurrence the project shall be advanced to the task of Selection and Documentation of a Final Geometric Design.

SELECTION AND DOCUMENTATION OF A FINAL GEOMETRIC DESIGN



The final task of the Design Study is the formal selection and documentation of a final geometric design from which construction plans can be developed, right of way acquired, and a construction contract awarded. This formalized portion of the Design Study is based on the alternatives developed in the first two tasks. It begins with the

preparation of a new Environmental Statement (E.S.), or Draft Supplemental Environmental Statement (if required); includes a Design Public Hearing, Selection of a Final Geometric Design, Final Supplemental Environmental Statement; and concludes with the preparation of a Design Study Report.

New or Supplement Draft Environmental Statement (if required)

If during the Location Study a Negative Declaration was prepared, and since that time the design proposals have introduced new or changed social, economic, environmental effects of significance to the quality of the environment, the District Engineer shall prepare a new Environmental Impact Statement.

If during the Location Study an Environmental Impact Statement was prepared and processed, and since that time design proposals being processed introduce (1) new or changed effects of significance to the quality of the environment, (2) or the measures identified to minimize harm are found to be changed the District Engineer shall prepare a Draft Supplemental Environmental Statement.

The preparation (topics discussed and format) and processing (review and comment) of these statements will be accomplished as outlined in the section discussing environmental statements in the Location Study activities. (p. 12)

The determination of the need for a new or supplemental statement shall be made by the District Engineer, in consultation with appropriate staff members, and the FHWA Division Office.

The policies stated regarding the availability of these Statements shall remain as outlined in the Section on Location Study activities.

Design Public Hearing

A "Design Public Hearing" is a public hearing which:

- Is held after location approval.
- Is held before design locations become firmly established.
- Is held to present information to and solicit comments from the general public regarding decisions relating to geometrics, right of way limits, access control features, erosion, pollution, environmental effects, etc.
- Provides for discussion of the social, economic, and environmental effects of alternate designs.
- Provides an opportunity to discuss in more detail the relocation program.

The purposes, procedures, pre and post-hearing activities, and responsibilities associated with the Design Public Hearing are identical with those described for the Location Public Hearing (p. 13) and shall not be repeated here. It is to be emphasized that topics discussed at a Design Public Hearing are related primarily to the physical features of the facility proposed, including such items as horizontal and vertical alignment, proposed right of way requirements, access control, etc. The difference between a Location Public Hearing and a Design Public Hearing is the scope and magnitude of the topics under discussion. The Location Public Hearing discussion is centered around broad location bands, and the Design Public Hearing centers around specific design considerations.

Final Geometric Design

Based on all inputs received to this point in

the Design Studies (i.e. comments on Draft Environmental Statement, Location Public Hearing, etc.), the District Engineer shall be responsible for the selection of the best geometric design; considering the social, economic, environmental and engineering factors, and incorporating any appropriate design changes.

The District Engineer shall then request staff concurrence of the recommended design. This concurrence shall consist of:

System Compatibility
Interdisciplinary Consideration
Design Acceptance
Funding Availability

Following staff concurrence, copies of the design selected shall be distributed to appropriate governing bodies and agencies. The District Engineer shall be responsible for obtaining approval of the selected design, in writing, from affected municipalities.

Final Supplemental Environmental Statement (if required)

If significant changes in the design proposal warranted a new or supplemental Draft Environmental Statement, the District Engineer shall prepare and process a Final Supplemental Environmental Statement.

The preparation and processing of this final statement will follow the same requirements established for these statements in the section on location study activities. (p. 14)

Design Study Report - Design Approval

As the natural end result of the Design Study, the District Engineer shall recommend approval of a final geometric design. This recommendation and request will take the form of a Design Study Report.

The Report shall serve as a total recapitulation of the design development activities. It shall draw material from the Project Development Report, Preliminary Design Report, the Environmental Statement, and the public input received throughout the Design Study.

The Design Study Report documents:

- background information surrounding the project
- the alternatives considered
- the design selected
- how and why that design was selected
- significant engineering data surrounding the project
- social, economic and environmental considerations regarding the project, and
- the disposition of all substantive comments received in development of the project

The degree of analysis of the items may vary, depending upon the scope and nature of the project and extent to which these items effect the project.

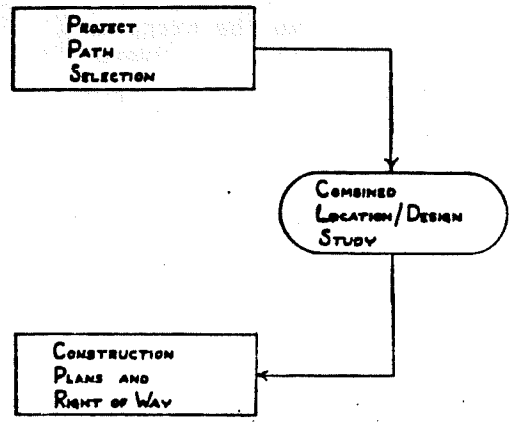
Preparation of the Design Study Report shall be the responsibility of the District Engineer.

The recommendation shall then be submitted to the FHWA for concurrence. Notification of both the request for and approval of the specific design shall be made in the appropriate news media. The Design Study Report shall be made available to interested parties.

Advancement to Construction Plans and Right of Way Activities

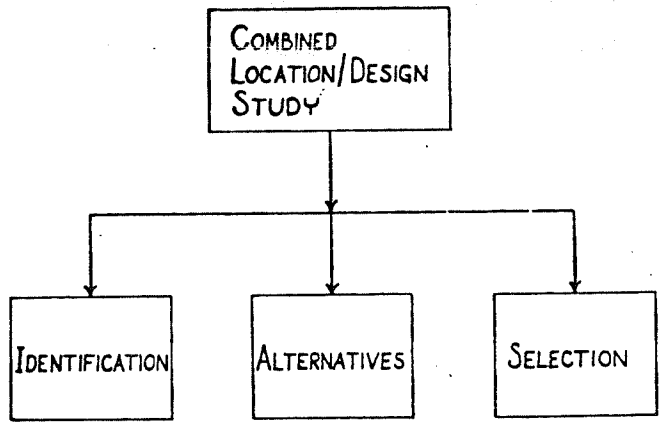
Upon acceptance and concurrence of the Design Recommendation by the FHWA in the form of a Design Approval, the project shall be advanced to the preparation of construction plans and the acquisition of the right of way on which to construct the project.

COMBINED LOCATION-DESIGN STUDIES



The Project Development Path requiring a Combined Location-Design Study represents a combined series of activities and depth of treatment designed for a project of medium level of complexity and limited levels of potential impact. Generally, this path would be used on the development of a project on an existing location and requiring additional right of way involvement. Such a project might be a proposal to improve an existing roadway by widening the shoulders, making horizontal and vertical curve improvements, and resurfacing the roadway without acquiring significant amounts of right of way, or having other serious social, economic, or environmental impact. Such a project would not, necessarily, require location studies as previously described, but would require significant design study.

Therefore, the range of activities relating to the development of the project would be limited in scope. The combination of activities necessary to accomplishing the combined Location-Design Study are represented below.



The Combined Location-Design Study is basically one activity divided into 3 tasks:

1. The identification of Social, Economic, Environmental and Engineering Factors affecting the selection of Location-Design Alternatives.
2. The selection of alternatives and the analysis of these alternatives for possible impact.
3. The formalized selection and documentation of an appropriate alternative.

Following the completion of these tasks, a project would be advanced for Construction Plans Development and Right of Way Acquisition.

As stated previously, these studies are based on the principles of early involvement in the decision making process, the identification of project alternatives and potential impacts, the desire for interdisciplinary consideration, and the need for continuing project documentation.

The overall responsibility for completion of the various tasks and decisions within these

studies rests with the District Engineer.

This particular portion of the Action Plan will not detail all the tasks and sub-tasks for Combined Location/Design Studies since they are similar in nature to those described under Separate Location and Design Studies. However, certain differences between the two paths will be enumerated.

The concepts and areas described earlier for involvement, recycle considerations, and responsibility are the same for Combined Location/Design Studies.

Selection of the Combined Path

The Combined Location/Design Path represents an alternative path for Project Development. It is selected through the Project Path Selection activity and documented in the Project Development Report.

The Combined Location/Design Study is used primarily under 2 conditions. When:

1. The use of the existing location of the facility is the only practical alternative because of some overriding social, economic, environmental or engineering consideration.
2. The range of location alternatives is so limited it is impractical to consider more than one.

Study Modification

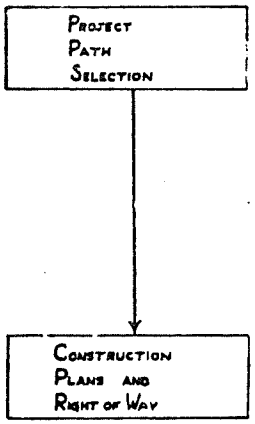
When the Combined Location/Design Study is used the following major documents and formal requirements are combined.

1. A single Preliminary Location/Design Report is prepared.
2. A single Draft and Final Environmental Statement (or Negative Declaration) covering both location and design features may be prepared.
3. A Combined Location/Design Public Hearing may be held in lieu of Separate Location and Design Hearings.
4. A Combined Location/Design Study Report may be prepared in lieu of Separate Location and Design Study Reports.

Advancement to Construction Plans and Right of Way Activities

Upon acceptance and concurrence of the Design Recommendations by the FHWA in the form of a Design Approval, the project shall be advanced to the preparation of construction plans and the acquisition of the right of way on which to construct the project.

NO LOCATION-DESIGN STUDIES



The Project Path labeled No Location-Design Studies represents a path of minimum activity and depth treatment, and is designed to facilitate development of projects having very little complexity and potential impact. However, this path still retains the concepts of opportunity for involvement and the need for continuing documentation. Such a

project might be a proposal to resurface an existing facility without any modification to the roadway and having no right of way involvement. Thus, there would be very little potential for impact to the areas of social, economic, or environmental concern.

The No Location-Design Study would literally mean just that. A project after documentation in the Project Path Selection activity would proceed directly to the preparation of construction plans.

The overall responsibility for the completion of this path activity and the decisions rests with the District Engineer.

Selection of the No Location-Design Path

The No Location-Design Path represents an alternative path for Project Development. It is dictated by the conditions of minimum project complexity or concern and is identified through the Project Path Selection activity. It is documented in the Project Development Report.

This path is used primarily under the following conditions:

1. When the project requires no significant right of way involvement.
2. When it has no adverse effect on abutting real property.
3. When it does not change the layout or function of any connecting roads or street or the facility being improved.
4. When it has no significant social, economic, environmental effect.

Each of these conditions shall be addressed in the Project Development Report, in addition to the items discussed in that section. (p. 6)

Study Modifications

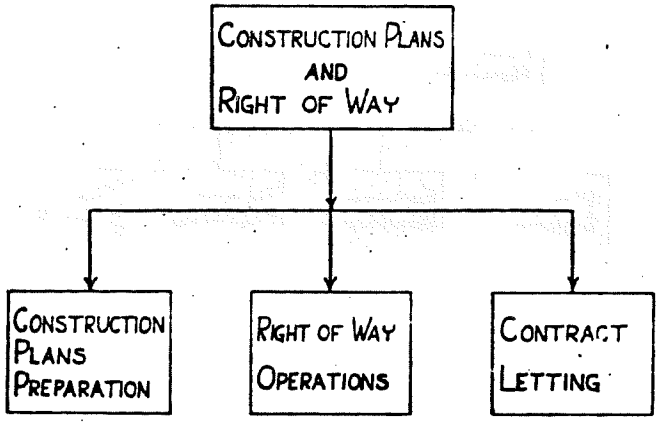
When this Project Development Path is used, the Project Development Report shall be modified to reflect certain conditions:

1. It will be expanded to include a Negative Declaration.
2. It will include information relating to significant engineering design considerations.
3. The Project Development Report will then be submitted for Staff Concurrence in:

   System Compliance
   Interdisciplinary Consideration
   Design Compatability
   Funding Availability

4. The Report will be submitted to the review and concurrence process outlined for a Negative Declaration and Design Study Report. (p. 20)

CONSTRUCTION PLANS AND RIGHT OF WAY

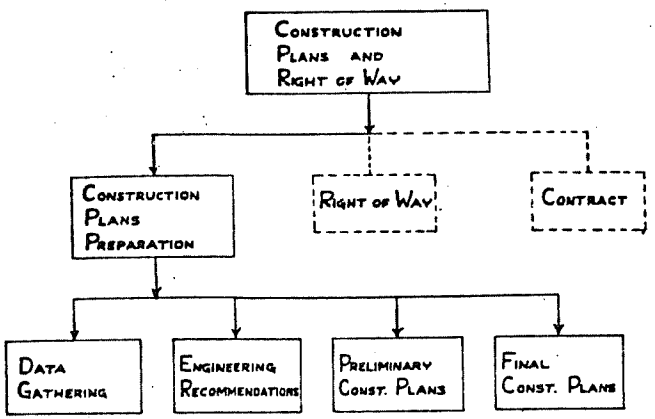


Once the Construction Plans and Right of Way activity has been reached, the major decisions have been made. What remains to be done is the drawing of final plans, acquisition of land on which to

build the highway, and contracting with a construction company to build the project. These last activities are the implementation of the decisions made earlier in the process. An interdisciplinary approach to design of contruction plans will aid in the determination of final data to be gathered, how it will be analyzed, and what measures can be incorporated into the plans to assure a "balanced" final product.

The purpose of this section is to describe the tasks involved in development of (1) Construction Plans and (2) Acquisition of Right of Way.

Construction Plans



The preparation of construction plans involves 4 basic steps: data gathering, developing of engineering recommendations from this data, preparation of preliminary construction plans, and refining of these preliminary plans into final construction plans.

Data Gathering. The first task in development of construction plans is the data gathering process. This process consists of three parts: (1) compiling all data previously developed in the planning process, (2) the basic design data required for development of construction plans such as soils and foundations information, surveys and mapping, drainage data, etc., and (3) design compatibility data -- that data necessary to assure proper design with respect to effects such as noise, aesthetics, water quality and other data.

The individual nature of each project and the sensitivity of the project to environmental damage will determine the data to be gathered, the techniques to be used, and the depth of analysis necessary.

The background data must be reviewed to determine what, if any, commitments have been made with respect to environmental preservation in the planning stages and to determine what measures can be taken to properly treat critical areas recognizable before actual detailed design is begun.

Soils and foundations data, surveys and mapping, drainage data are basic data required to design a construction plan. This data is used in recommending specific design criteria such as gradelines, soils selection, sizing of hydraulic structures, etc. to the designer. Other data such as noise, air and water quality factors may modify the design proposal.

Engineering Recommendations. The data gathered shall be analyzed for the purpose of developing engineering recommendations. These recommendations must be analyzed as a total body of interrelated information to assure that the recommendations of one discipline do not conflict with

recommendations of any other discipline. It is the responsibility of the District Engineer to have these recommendations analyzed.

Preliminary Construction Plans. Using the engineering recommendations as a guide, preliminary construction plans will be developed. A completed preliminary construction plan consists of a preliminary road plan and a preliminary bridge plan if required.

It is the responsibility of the District Engineer to have a preliminary construction plan developed within the context of the engineering recommendations described previously. These plans will be developed to a point where tentative construction limits are established.

After the preliminary construction plans are completed, the District Engineer shall begin to finalize coordination with permit-granting agencies having jurisdiction in appropriate areas. The purpose of this is to obtain reaction from these agencies before the Department is committed to a particular final design.

Final Construction Plans. Final roadway plans and final bridge plans if applicable, constitute a completed construction plan. These plans shall be the basis for obtaining construction permits from permit-granting agencies as well as municipal approvals (where applicable).

Final bridge plans and roadway plans will be developed from the preliminary plans taking into account the recommendations and alternations determined necessary through coordination with outside agencies. Early in this phase final construction limits (and any utility relocations deemed necessary) will be transmitted to the Right of Way Division by the District Engineer.

The Department of Highways must obtain a permit prior to any highway construction that would affect public waters. Primarily these agencies are:

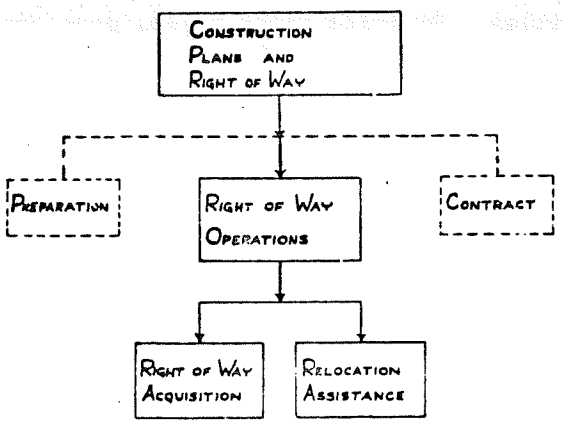
1. Department of Natural Resources
2. U.S. Corps of Engineers
3. U.S. Coast Guard
4. Minnesota Pollution Control Agency

but may also include:

1. Watershed Districts
2. County Board of Commissioners (County Ditch)
3. District Court (Judicial Ditch)

Under the provisions of the Minnesota Statutes, any highway construction project touching the corporate limits of any municipality must receive municipal plan approval prior to contract letting. It is the responsibility of the District Engineer to secure these approvals. If controvery arises in obtaining these municipal approvals, Chapter 312 of the Minnesota Statutes provides a procedure for resolution of these controversies. (Appendix C).

Right of Way Operations



This activity begins when a design is sufficiently defined to determine what properties are likely to be involved in acquisition and ends when the last right of way parcel is acquired. The purpose of this section is to explain the major activities involved in right of way acquisition and the sequence in which they occur. The relocation assistance program will also be discussed.

Right of Way Acquisition. Right of way acquisition includes the following activities which are generally in the order of their occurence.

Relocation 78 Plan. This activity begins at the location evaluation stage. Basically, it is an attempt to determine the number of displacees involved in the project and whether or not replacement housing will be available when acquisition occurs.

Title Search. This activity begins when the project location is defined sufficiently so that the Right of Way Division knows generally what property will be involved. It is the process of establishing legal ownership of the properties to be acquired. It is the responsibility of the Attorney General's Staff to furnish legal opinion of titles. District right of way personnel make personal contact with owners to determine unrecorded interests.

Preparation of authorization map. Once the land actually needed for right of way is determined from the construction plans, a map or plat shall be prepared by the District right of way personnel and approved by the Assistant Commissioner of Design and Right of Way. This gives the Right of Way Division the authorization to acquire the Right of Way designated on the authorization map or plat.

Parcel Sketches or Right of Way Plats. After the authorization map is approved, a drawing of each right of way parcel is prepared (or this is done collectively in the case of right of way taken by plat reference). If right of way is not acquired using plats, legal descriptions of property to be acquired are then prepared. Parcel sketches and preparation of Plats are generally District functions. Legal descriptions are done by the Central Office Right-of-Way Division.

Appraisals. Appraisals are then made to estimate the value of land taken and damage to the remainder. These appraisals shall be done in accordance with real property acquisition practices as required by Title III of the "Uniform Relocation Assistance and Real Property Acquisition Policies of 1970."

Acquisition by direct purchase or Eminent Domain. Based on appraisals made of right of way parcels, a direct purchase offer is made to the property owner. If the owner accepts the offer, the parcel is bought outright. If the owner refuses the offer, Eminent Domain proceedings are initiated. Under this process, an impartial board of commissioners is appointed by the Clerk of Distric Court who make their own appraisals and arrive at a second award of damages.

After the court commissioners have reviewed and appraised a parcel, a report is filed with the Clerk of District Court. This report contains the award of damages agreed upon by the appointed commissioners. Either the state or the owner can

appeal this award. If appealled by either side, the issue may be resolved through a settlement outside of court or by a jury trial.

Vacation of buildings. If a right of way parcel has a building on it, the owner must be given a minimum of 90 days from the time of award of damages to vacate the building.

Preparation of Right of Way Certificate. When all right of way for a project is acquired and all buildings are vacated, a certificate so stating is prepared by the Office of Right of Way and is forwarded to the Federal Highway Administration (FHWA).

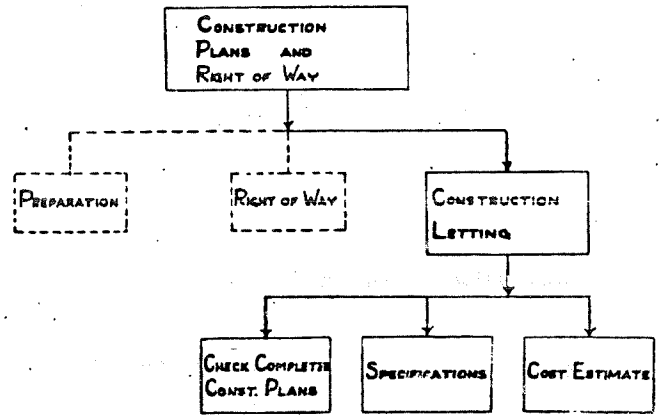
Relocation Assistance. Relocation Assistance is a program under which Department personnel assist displaced property owners in locating and buying or renting replacement housing or places of business.

It is the policy of the Department that:

- No person shall be displaced by its construction projects unless and until adequate replacement housing has already been provided for or built and has been made available to all affected persons regardless of race, color, religion, sex, or National origin.
- Services and payments described in the Departments' Relocation Assistance brochure shall be made available to all relocatees within the limits of the laws and administrative procedures established by the State. These services and payments include:
    1. Moving expenses.
    2. Replacement housing payments.
    3. Rent supplements.
    4. Mortgage closing cost allowance.
    5. Others.
- To the greatest extent practicable, no person lawfully occupying real property shall be required to move from his dwelling or place of business, without written notice at least 90 days prior to the date such move is required.

A uniform policy is followed for the fair and equitable treatment of persons displaced in accordance with the Federal Uniform Relocation Act of 1970.

Construction Letting



The final phase in the planning process is contract letting.

Processing a project for letting involves several basic steps. They are:

1. Checking of construction plans for form and content.
2. Preparation of a contract proposal which gives the specification under which the project will be constructed.
3. Preparation of a cost estimate for the project to be used in assuring that bids are reasonable.
4. Submit plans, specifications and estimates to Federal Highway Administration for approval.
5. Advertising the project for bids.
6. Awarding of contract to successful bidder by Commissioner of Highways.

RESPONSIBILITIES FOR PROJECT DEVELOPMENT ACTIVITIES

It would be nearly impossible for any one individual to make all the decisions necessary to plan, organize, direct, coordinate, and control the operations in Project Development. As a result, authority for decision making (and responsibility for the attendant consequences) must be distributed throughout the organization. The basis on which authority is assigned is: First, the longer the time period over which the effects of the decision will be felt, the higher in the organization the decision authority is placed. Second, if the effects of a decision are significant, the decision is the authority of higher-level managers. Finally, those decisions which tend to be frequently recurring - and for which a policy (guide to action) can be formulated by the responsible decision maker - can be passed down to the lowest level at which the policy can be properly interpreted.

The responsibility for the completion of day-to-day activities in project development is vested in the District Engineer. He is supported by his District staff and the resources of the Central Office. The District Engineer is the logically responsible agent because he is the closest to the public and has the clearest understanding of public desires and the impacts of any particular project.

He is not, however, autonomous in his decision making role. At appropriate times in project development, he must receive concurrence in his decisions from the Central Office staff, various local, state and Federal agencies, and implicitly the public. Specifically, the District Engineer shall ensure that during the course of project development information is made available to other agencies and the public, and that such information is as clear and comprehensible as practicable concerning:

- -- the alternatives being considered,
- -- the effects of alternatives, both beneficial and adverse,
- -- the manner and extent to which specific groups are affected, and
- -- the proposed time schedule for project development, including major points of public interest.

It shall be his responsibility, also, to ensure that interested parties, including local governments and metropolitan, regional, state and Federal agencies, and the public have an opportunity to participate throughout the activities of project development. He shall select and coordinate procedures, in addition to formal public hearings, to be used to inform and involve the public. When feasible he may utilize appropriate agencies with area-wide responsibilities to assist in the coordination of view-points during project development.

The Assistant Commissioner for Design and Right of Way is responsible for coordinating project development activities between the Districts and the Central Office and making Central Office resources available to the Districts. He participates in staff concurrence of District proposals, is responsible for right of way acquisition and is responsible for compiling the final plans, specifications and estimate for all projects.

Chapter 6

PARTICIPATION IN PROJECT DEVELOPMENT

An overview of agency and public participation in the project development activities.

Participation in the Project Development process is addressed at three levels:

- Minnesota Highway Department (MHD)
- Other Agencies (Federal, State, Regional, and Local)
- Public

Each play a unique role, but share in the responsibility for achieving a balanced decision making process.

The principles that guide the involvement for each level center around the opportunity for the expression of views regarding project development.

At least three characteristics of participation are worth noting:

- All participants should feel their interests are represented
- informal as well as formal interaction should take place
- the opportunity to choose the depth of involvement should be available.

The following sections will provide an overview of where, when and how this opportunity to participate is presented.

MINNESOTA DEPARTMENT OF HIGHWAYS

Although the District Engineer plays the major role in project development, participation is not limited to the District level. Intra-departmental communication and cooperation between the various Divisions and the District Offices within the MHD will be emphasized throughout project development.

Effective project development must recognize the human and natural resources which exist in any given study area, how these resources relate to the environment, the sensitivity of each of these

resources to transportation activities, and the probable consequences of the impacts of transportation and related development. Therefore, personnel from the Interdisciplinary Resource Unit will play an important role in project development. They will provide identification, expert analysis, and evaluation of social, economic, environmental and land-use related impacts. They will work with the District Engineer, assist in preparing reports, and participate in public meetings.

Consultant Participation. When in-house capabilities are not sufficient to handle certain needs it will be Department policy to subcontract specific tasks or responsibilities to independent experts, e.g. consultants or universities. This is an expedient way to handle small or infrequent tasks that do not justify the hiring of full-time expertise for the Highway Department, or to handle special situations.

If experts are hired, special attention will be given to the questions of availability, coordination and information flows, and the effects on overall integration. This is to insure that personnel with requisite skills will be available when needed and that the procedures for obtaining the services of these personnel will permit quick access to them. Also, it must be possible for these experts to make timely and meaningful input to both the day-to-day planning and decision making and to major decisions, as well as to receive information and data from the Highway Department as needed. This requires a high degree of coordination and carefully planned information flows.

Experts may be hired on a long term, "on call" basis or as needed. For small but regularly occurring tasks, a long term agreement may be best, since it provides some continuity.

The use of consultants will be appropriate to fill in gaps in expertise that occur irregularly rather than to provide for a major on-going need, but it is not acceptable as the sole approach of meeting the needs of interdisciplinary involvement.

OTHER AGENCIES

The participation of local, regional, state, and Federal agencies in Project Development is achieved on an informal as well as formal basis.

The nature of the informal involvement which any of these agencies may have will be dictated primarily by the type of study being conducted or unique characteristics of the particular project. The participation may be to advise or review proposals at early stages of development.

Opportunities for participation include:

- Project Path Selection
  - Initial Project Consideration
  - Documentation of Project Path Selection
- Location Study
  - Identification of SEE Factors
    - Data Collection
    - Data Analysis
  - Evaluation of Proposed Alternatives
- Design Study
  - Identification of SEE Factors
    - Data Collection
    - Data Analysis
  - Design Alternatives
    - Evaluation of developed alternatives
- Construction Plans and Right of Way
  - Data Collection

Participation techniques may include the submission of written comments, verbal day-to-day communication, or active involvement on project study committees.

The opportunities for formal agency participation in the development and decision making process are largely a matter of existing legislated responsibility. This formalized review, comment or approval function is enumerated under each of the following sections of the Action Plan.

Location Study
- Draft Environmental Statement
- Location Public Hearing
- Final Environmental Statement
- Location Study Report

Design Study
- Draft Supplement Environmental Statement (if required)
- Design Public Hearing
- Final Supplement Environmental Statement (if required)
- Design Study Report

In addition, local municipalities will review plans for official approval on those projects passing through their corporate limits. Designated state and Federal agencies with permit granting authority may review Construction Plans for compliance with permits granted through their agencies.

Documented agreements with various state agencies will also be utilized to aid in structuring agency involvement in Project Development.

PUBLIC PARTICIPATION

The MHD believes that decision makers and their supportive personnel must be genuinely responsive to citizens' attitudes and must accept their input as one consideration in providing balance to a technical product. Responsive project decisions must be sensitive to and incorporate broad community goals.

For public participation to be effective, officials and professionals must be open and energetic in obtaining citizen involvement and the citizens must be active in accepting the offered opportunity for involvement in the planning process.

The principles of adequate involvement call for effective two-way communication. Not only should the public and other agencies be informed but they should be involved at an early enough stage to influence decisions. To achieve this participation, the public must be afforded opportunities not only in informal and formal areas of involvement, but they must be allowed to choose a level of involvement. Such levels might include:

- Being informed periodically through written information.
- Attending meetings regularly to monitor the study process.
- Virtual day-to-day contact with the highway department.

The levels of involvement which any project may warrant will be dictated by the characteristics of that project and the citizen concern expressed during process selection. The techniques that are used to achieve this involvement are a dynamic factor and are constantly changing with innovation. Therefore, the technique will be structured to match the complexity of the project, from the availability of written information on the simplest type of project to the formation of detailed study groups or advisory committees for the more complex and involved projects.

Opportunities for public involvement in project development are afforded through public meetings and hearings, the solicitation of comments on environmental statements, and the Highway Information Offices which will be established.

In addition, the Minnesota Highway Department has a stated policy regarding availability of information to the public. (Appendix C). This policy states in broad terms that the public has the right of access to information relating to all highway proposals and that such information shall be made available at appropriate places and times.

The emphasis throughout project development is placed on opportunities for public involvement. The public must respond if the process is to be meaningful. The more responsive the public is, the more encouraged highway officials will become that public participation can be an effective tool in planning.

Chapter 7

PROCEDURES FOR LOCAL ROADS

A description of the manner in which the two-stage process of system planning and project development is modified in its application to local highway development.

The Minnesota Highway Department procedures described in this Action Plan must be qualified in scope of applicability at the local level. The majority of the procedures described in the Minnesota Department of Highways Action Plan will be applicable in urban metropolitan areas. However, the general nature of rural counties and municipalities must be recognized, and the applicable processes should reflect the level of concerns in rural Minnesota.

The Action Plan process is applicable to highway development at the local level (county and municipal) when the plans for such development must be approved by the Federal Highway Administration (i.e. Federal funds are used in the planning or implementation of such projects). At the present time the amount of Federal funds spent on highway development at the county level varies from less than 1% to an approximate 10% maximum of the total expenditure. Over 90% of the cost of county highway improvements is financed through State and local tax sources. Except for a few municipalities in the large urbanized areas, municipal governments do not have any Federal-aid routes under their jurisdiction and do not receive Federal highway funds. Therefore, although local highway development authorities will be guided by the principle of this Action Plan, only in a minority of instances when Federal Highway funds are involved, will it be a requirement.

Consequently, this portion of the Action Plan, involving local units of government, is a modification of the Minnesota Department of Highways

procedures. There will be a few exceptions due to proposed new roadway location, adjacent land use, and traffic characteristics; and where these exceptions occur the detailed studies and procedures described in the preceding chapters of this Action Plan will apply.

The road improvement projects included in the routine local road programs are not considered as actions with significant adverse social, economic, or environmental consequences to warrant the use of the full MHD Action Plan process. The following are additional reasons for modifying the MHD procedures:

1. The close relationship and knowledge of the local governing bodies and the local engineers to the proposed road improvements establish a course of close involvement between the local road officials and the affected citizens in resolving any issues.
2. Air and noise pollution are less significant in areas where residential and traffic densities are low.
3. The impact on natural or man-made resources is minimal because most projects are improvements to existing roadways.
4. The effects on employment and property values are generally enhanced by a local road improvement with a positive impact on economic and social conditions rather than an adverse impact.
5. There is rarely a need to displace people or business.

If new Federal programs are initiated to provide Federal-aid highway funds to municipalities, the municipalities will follow the same general procedures as the counties.

SYSTEM PLANNING

The existing Federal-aid highway system, on local roads, has been designated by the local units of government meeting previously established criteria, and concurred on by the Minnesota Department of Highways and the Federal Highway Administration. Additions, deletions, or modifications of the Federal-aid system shall be based upon the functional classification of the routes involved as determined by the local road authority and concurred on by other affected agencies, such as planning commissions and municipalities.

As part of a nationwide study, in which all county engineers participated, all roads and streets in Minnesota have been tenatively classified according to the function each road or street serves in the transportation network. This functional highway plan is the county highway system plan except in those areas where a continuing comprehensive, and cooperative (3c) transportation planning process is carried out. (The 3c process is explained elsewhere in this document). The functional highway plan is available to the public in the county engineers' offices.

Because constituents, citizens, civic groups, and special interest groups are in close contact with the county engineer and county board, their interests, ideas, and desires for minor plan revisions are made known through personal contact, regularly scheduled public meetings, and special meetings. As the direct representatives of these groups, the county board makes minor modifications to its transportation systems plan subject to approval by the MHD and FHWA.

However, when it becomes necessary for a county to make major modifications to their functional highway plan, a public meeting will be held to explain the proposed changes to afford the citizens an opportunity to express their views about the proposed changes before the revised plan is formally adopted. After approval by the county board, the revised plan will be transmitted to the MHD for concurrence. If the plan proposes changes in the Federal-aid systems, the MHD will transmit the plan to the FHWA for concurrence.

Each county has a highway needs study which contains estimates of the type and cost of improvements needed on their Federal-aid highway system. The needs study is updated annually to reflect construction accomplishments, changes in statewide standards, etc. Because an intensive traffic counting program is done in each county at least once every 6 years, major updates of the needs study occur on a 6-year cycle. To inform the public and to obtain their comments and suggestions, the county engineer will hold an informal public meeting at least once every 6 years summarizing the needs study information before the needs study is finalized.

IMPROVEMENT PROGRAM

In order to meet present and future traffic demands placed on the county road system, an improvement program is developed. There are many people in rural communities who experience hardships and difficulties due to the lack of adequate road improvements. Local road improvements tend to maintain or increase desirable community and regional growth.

The county board is made aware of desired and needed improvements through their direct and constant association with constituents, citizens, interest groups and other local agencies. The county board makes these needs known to the county engineer who maintains records of roadway and bridge conditions and traffic volumes. Using the information received from the county board and his own statistical data, the county engineer formulates a tentative road improvement program taking into account the available funds for financing the program. Generally, the program is developed to reflect improvements scheduled for the next 5 years. Because of the variables involved in fiscal and other resources some counties are compelled to program for periods of 3 to 5 years.

Final program approval rests with the county board and is formally adopted at a regularly scheduled public meeting. The action of the county board is published, as required by law, in an official newspaper as well as in news items by other local news media. The program is further made known through personal contact and special informational meetings. The program also is available at the office of the county engineer. The MHD State Aid Engineer sends copies of the Federally-funded program to the appropriate state, regional, and metropolitan clearinghouses for their review and comments.

PROJECT DEVELOPMENT

The development process for local projects is the same as that described previously in this document. Only the degree of detail required varies.

The project development process consists of four activities:

- Project Path Selection which is a determination of the depth of study appropriate to the project.
- Location Study which is the determination of the highway route location, when appropriate.
- Design Study which more explicitly defines the proposed development in terms of location, alignment, right-of-way, etc.
- Construction Plans and Right of Way which is the development of detailed construction plans.

PROJECT PATH SELECTION

On every project a decision must be made as to the depth of study. This includes the determination of the need for location studies, design studies, public hearings, the form of environmental statement, etc.

The process selection decision is the responsibility of the county engineer. He shall provide documentation of this decision making activity to the MHD State-Aid Engineer.

LOCATION STUDY

When a location study is required, alternate route locations are considered in the early stages of project development. At this stage the engineering, social, economic and environmental studies are made.

The county engineer is responsible for these procedures. When and if required, the county engineer may request and obtain assistance in inventory and analysis of the social, environmental and economic considerations from the MHD and/or through the use of consultants.

The county board will provide an opportunity for a public hearing when required and may hold public information meetings to present the foregoing information and to obtain public participation. As previously stated, the county engineer and county board through direct and constant association with the public, provide information to and obtain the recommendations of citizens, groups and agencies. The public comment and interests will be considered in the final route selection.

During the project planning process, the project will be evaluated as to its classifications as a "major action" or "not a major action". A project that has been considered a major action and would significantly affect the quality of the human environment will require a draft and final environmental statement. A project that is not considered a major action or a major action that would not significantly effect the quality of the human environment will require a negative declaration of environmental effects.

If an environmental impact statement is required, a draft and final statement will be prepared and completed by the county engineer, and circulated in accordance with applicable guidelines.

A location study report shall be prepared by the county engineer and submitted to the Minnesota Department of Highways for approval.

DESIGN STUDY

When a design study is appropriate, the county engineer shall be responsible for the development of preliminary plans with review as appropriate by affected agencies (such as, but not limited to, municipalities, Department of Natural Resources, watershed districts, etc.) Following preliminary approval of the plan, right of way and relocation studies are conducted by the county engineer.

The county board will provide an opportunity for a public hearing when required and may hold public information meetings to present the foregoing information and to obtain public participation. If appropriate, the meetings may be for the purpose of considering both the location and the design aspects of a project. If combined location and design meetings are held, the procedures for Location Study shall be included. The public comments and interests will be considered in the final design or combined location/design.

The design study report or the location/design study report shall be prepared by the county engineer and submitted to the MHD for approval.

CONSTRUCTION PLANS AND RIGHT OF WAY

The county engineer shall be responsible for the development of the construction plans, and these plans shall be submitted to the affected agencies (such as, but not limited to, municipalities, Department of Natural Resources, watershed districts, etc.) for concurrence and/or permits and to the MHD for final approval.

The county board will acquire the necessary right of way or provide certification of adequate existing right of way in accordance with current state and Federal laws. A uniform policy will be followed for the fair and equitable treatment of persons displaced and on real property acquisition practices as required by Titles II and III of the "Uniform Relocation Assistance and Real Property Acquisition Policies of 1970."

IMPLEMENTATION

The applicability of the above stated procedures, and revisions or modifications thereto, shall be as determined by the Office of State Aid, Minnesota Department of Highways, with concurrence by the FHWA.

The procedures stated herein are addressed to and provide for consideration of social, economic and environmental aspects by providing the opportunity for public participation throughout the planning of local road systems.

Chapter 8

DEVELOPMENT AND IMPLEMENTATION OF THE ACTION PLAN

A description of the development and implementation of the Action Plan. The involvement in the plan development of MHD, state agencies, counties, regional governmental units, FHWA and other Federal agencies, and the public is detailed. Responsibilities, resources, and a shedule for implementation of the Action Plan are given. Provisions for revising this document are described.

This chapter of the Action Plan describes the approach used in the preparation of this document and the involvement of other agencies and the public in its preparation. This chapter also deals with the implementation of the Action Plan.

DEVELOPMENT OF THE ACTION PLAN

The Action Plan requirements are a result of the Federal Department of Transportation (DOT) interpretation of the 1970 Federal-Aid Highway Act passed by Congress in 1971. The DOT directive to the state highway agencies requiring implementation was officially issued on September 21, 1972 (PPM 90-4). However, the MHD did have advance notice of these requirements through early drafts and the environmental statement process required by the National Environmental Policy Act of 1969. The first notice of the Action Plan concept was received in December of 1971 (the Draft Environmental Statement was received on April 26, 1972).

In anticipation of the forthcoming DOT directive requiring an Action Plan, the Minnesota Department of Highways (MHD) formed a working committee in April of 1972 to begin addressing the required issues. The working committee or Action Plan Task Force membership represents a cross-section of the Department including:

Roger M. Hill, Chairman, Design Concepts Engineer, representing the Office of Road Design.

Lyle M. Hansen, Director of the Office of System Planning, representing the Transportation and Transit Planning and Programming Division.

Herm Juffer, Senior Landscape Architect, representing the Office of Environmental Services.

David S. Ekern, Project Coordinator, representing the Twin Cities Metropolitan Offices, Districts 5 and 9.

Dennis Johnson, Transportation Planner, representing the Duluth District Office, a combined urban-rural area.

David Smilonich, Preliminary Design Engineer, representing the Brainerd District Office, a rural area of the state.

Other members of Central Office and District staffs have worked with the committee.

It was the task of this committee to develop an Action Plan which described the organization, assignment of responsibilities, and processes to be followed in the development of highway projects from initial planning through design. This included the need to identify:

- changes in existing organization and procedures.
- measures to be taken for the recruitment, training and upgrading of personnel with skills appropriate to the study and interpretation of social, economic and environmental effects.
- a means through which other agencies and the public could contribute to the decision making process.
- a program for implementation of the Action Plan.

Because some of the issues being addressed were of a policy nature, an Executive Management Committee was formed in November, 1972 to provide direction to the Task Force. Again, representation reflected a cross-section of interests and consisted of:

J.H. Alexander - Assistant Commissioner for Administration, Chairman
L.A. Korth - Assistant Commissioner for Design and Right of Way
C.E. Burrill - Assistant Commissioner for Transportation and Transit Planning and Programming
G.M. Fay - State Aid Engineer
C.M. Larson - District Engineer, Bemidji
R.J. McDonald - District Engineer, Rochester
Peter Gove - Representing the Governor

The Executive Committee, in addition to acting on policy issues, reviewed and reacted to drafts of the Action Plan as prepared by the Task Force.

To address the issues involved in the Action Plan, the Task Force solicited input from a variety of sources. These included:

- MHD employees in the Central and 9 District Offices.
- State agencies.
- urban transportation planning agencies and the Regional Development Commissions.
- the Counties.
- Federal agencies.
- the public.

Procedures employed in soliciting input from each of these groups are documented separately in the following paragraphs.

State Agency Involvement

The Task Force first made contact with those agencies that would be most directly involved with social, economic and environmental concerns. These included the State Planning Agency, Department of Natural Resources, Minnesota Pollution Control Agency, and Department of Economic Development.

In turn, these agencies expressed their interests and appointed representatives to work with the Task Force.

To determine if any other State agencies had an interest we invited 22 agencies to a presentation on the Action Plan concept in mid-February, 1973. Of those invited, 11 agencies sent representatives, and of those, three expressed interest in further involvement. A fourth, the Minnesota

Historical Society (MHS) expressed its satisfaction with existing procedures now employed at the project level and saw no need to be involved in the system planning phase. MHS did, however, express a willingness to cooperate and provide further information as necessary.

As a result of these contacts, the following agencies attended additional meetings relating to the Action Plan:

- State Planning Agency
- Department of Natural Resources
- Minnesota Pollution Control Agency
- Department of Economic Development
- Department of Agriculture
- Department of Public Safety

County Involvement

The 87 counties were alerted to the Action Plan requirements through distribution of the Federal Highway Administration (FHWA) directive PPM 90-4 by the State-Aid Engineer. The first formal presentation of the Action Plan concept and requirements was made at the annual County Engineers Institute in January, 1973. As a result, the counties appointed a committee of four County Engineers to work with the Task Force.

At the first formal meeting of the Task Force and the County Committee in April, 1973, the County Engineers began developing the scope of the Action Plan applicability to their areas of jurisdiction. Additional meetings were held in April and May.

Regional Government Involvement

In November, 1972, the Action Plan concept was presented to the Rochester Council of Governments (ROCOG).

The Action Plan concept was presented to the Head of the Lakes Council of Governments (HOTLCOG) in November, 1972. Informal contacts have been maintained.

Following a February, 1973, presentation to the Technical Advisory Committee of the Metropolitan Council, a five-member sub-committee was formed. This sub-committee subsequently met with the Task Force to address the Action Plan requirements.

In February, and again in March, 1973, the Task Force met with State, regional and metropolitan clearinghouses to discuss the Action Plan. Represented were the:

- Arrowhead Regional Development Commission (ARDC)
- Fargo-Moorhead Council of Governments (FMCOG)
- Headwaters Regional Development Commission (HRDC)
- Rochester-Olmsted Council of Governments (ROCOG), and the
- State Planning Agency, Office of Local and Urban Affairs.

In April, 1973, the Action Plan was presented at a meeting with the St. Cloud Metropolitan Planning Commission.

Federal Agency Involvement

The Department of Housing and Urban Development was represented at the February, 1973, Action Plan meeting with the clearinghouses.

A representative of the Environemntal Protection Agency attended a Task Force meeting in February, 1973, and expressed the EPA's concerns and interests.

The Department of Commerce requested an opportunity to review a draft copy of the Action Plan.

The Department of the Interior (DOI) responded in February by urging coordination with relevant state agencies, asking that provision be made in

the Action Plan for early review of projects by them, and requesting an opportunity to review the draft Action Plan.

The Soil Conservation Service, Department of Agriculture, offered assistance in implementing the Action Plan, particularly in consideration and application of soil and water conservation measures in location, design and construction of highways.

The Forest Service, Department of Agriculture, respondad with an enumeration of their areas of interest as related to highway development, and asked that local offices be alerted to the Action Plan development.

The Department of Health, Education and Welfare did not respond to an inquiry as to the nature and extent of their interest in the Action Plan.

The Corps of Engineers, Department of the Army, encouraged close liaison between agencies in development of projects.

Federal Highway Administration (FHWA) Involvement

Several Task Force members attended a seminar conducted by the FHWA in Ft. Mitchell, Kentucky on October 24-26, 1972. FHWA also conducted a regional Action Plan workship in Homewood, Illinois on March 5-7, 1973. FHWA Division Office representatives have participated in the regular Task Force meetings. Background and informative materials have been received from them periodically. FHWA Region Office representatives have met with the Task Force to provide direction and answer questions relating to the Action Plan development.

MHD "In-House" Involvement

Presentation of the Action Plan concept was made to various Central Office Units in October, 1972 and periodically at District Engineer's meetings starting in July, 1972. Assistant District Engineers and Preliminary Design Engineers were briefed further on PPM 90-4. The Action Plan concept was presented to the District Office Staffs the last week in November. Public informational meetings were held by the appropriate District Engineer in Rochester, Mankato, Marshall, Willmar, Fergus Falls, Bemidji, Duluth, Virginia and St. Cloud. As a result of public meetings in the District, an Action Plan representative was appointed to serve the public in each District. Additional input was derived from informal contacts with various MHD personnel.

Public Involvement

There have been several opportunities for formal and informal public involvement.

In August of 1972, testimony before a Legislative Sub-Committee in relation to a State Environmental Policy included a statement on the MHD Action Plan.

In September, 1972, a statement on the Action Plan concept was made to the State Environmental Quality Council.

In February, 1973, at the Minnesota Environmental Information Symposium sponsored by the Environmental Library of Minnesota, the Action Plan concept was introduced.

Also in February, 1973, a presentation on the Action Plan was made at the University of Minnesota "Program on Urban Transportation."

On February 21, 1973, a public information meeting concerning the Action Plan was held in the State Office Building auditorium in St. Paul. Some

of the citizens present expressed a desire for further involvement and were invited to a meeting with the Task Force on March 1. The purpose of this additional meeting was to organize a citizens' committee to work with the Task Force on the Action Plan development. However, it was the consensus of opinion of the group that they did not represent a working committee. It was then decided to conduct another public informational meeting on March 22 in the metro area and use all available means to compile a mailing list including names of individuals and organizations provided by citizens.

A second meeting was held on March 15 with the March 1st citizens groups to develop a program agenda. This resulted in several changes in format from the first meeting and a different citizen's response form. The new form asked for opinions on present involvement, future involvement (including roles of the various levels of government) and a questionnaire which asked the respondents to rank impact identification, citizen participation, alternate solutions and interdisciplinary study in order of importance as related to the Action Plan. A copy of the questionnaire and summary of the responses is found in Appendix C.

A mailing list of 2,550 names was used to advertise the March 22, 1973, public informational meeting held in the State Office Building auditorium in St. Paul.

The list was drawn from:

- The Minnesota Ecological Register
- The Metropolitan Council's Mailing List
- Lists Provided by Citizens
- Both Houses of the Minnesota Legislature
- Mail Responses Received from Earlier Contacts, and the
- Northern States Power Company Mailing List

As a result of the March 22 meeting, an open forum was established in Room 8-9 of the State Highway Building every Thursday evening between the hours of 5:30 and 8:30 P.M. from March 29 through May 31, 1973. The forum was attended by Task Force members and various background materials were available. Several citizens took advantage of this opportunity to discuss aspects of the Action Plan.

A phone number was also provided, (770-2311) at the Oakdale District 9 Office, where a citizen could call for information concerning the Action Plan.

During the months of February, March and April 1973, a total of 11 public information meetings were held; two in St. Paul and 9 at wide spread locations throughout the state (Rochester, Mankato, Willmar, Marshall, Fergus Falls, Bemidji, Duluth, Virginia and St. Cloud).

The first edition of an Action Plan Newsletter was published and circulated in May calling attention to the Action Plan and the status of development.

Future

Additional opportunities still exist for participation in the development of this Action Plan. This draft is being circulated to interested agencies and officials and to the public for review and comment. In addition to accepting written comments, the MHD will also conduct public meetings throughout the state to solicit comments on this draft of the Action Plan. Future issues of the Action Plan Newsletter will alert persons to the time and place of such meetings, the responses

received at those meetings, responses from other agencies, and the current status of development and implementation.

IMPLEMENTATION OF THE ACTION PLAN

This section deals with responsibilities, resources and the schedule for implementing the Action Plan, and provisions for revising this document.

The majority of the activities indicated in the highway planning and development process are existing procedure and major reorganization is not required to implement this Action Plan.

It must be recognized that several factors exist which may have an effect on this Action Plan. Some of these factors are:

(a) The Governor's Loaned Executive Action Program has recommended major organizational changes be made within the Minnesota Highway Department. How extensive these changes will be, when they will be implemented, and how they complement the Action Plan has not been resolved.

(b) The Minnesota Legislature is expected to address, early in 1974, the creation of a Department of Transportation. The formation of a Department of Transportation would require that additional considerations be added to this document.

(c) This Action Plan will require additional Highway personnel in special areas and disciplines at a time when a no-hire policy requires approval by the state's Department of Administration.

(d) The 1973 Minnesota Legislature enacted environmental legislation which must be recognized, integrated and accounted for in the Action Plan.

These factors may qualify some aspects of the following sections of this chapter.

The Action Plan process described in this document does not apply to highway planning and development activities completed prior to the effective implementation date (November 1, 1973) of the Action Plan. The process will be applied to projects in progress to the fullest extent feasible. System planning activities are of long duration and the process described in this Action Plan may not produce evident results in this phase for several years.

Responsibility for Implementation

The ultimate responsibility for implementation of this Action Plan rests with the Commissioner of Highways. The District Engineers, as agents for the Commissioner, have the responsibility for day to day project activities. Responsibility for the two Action Plan elements of overall highway planning is delegated, with responsibility for Highway System Planning assigned to the Assistant Commissioner for Transportation and Transit Planning and Programming, and Project Development assigned to the Assistant Commissioner for Design and Right of Way. Implementation of the appropriate portions of this Action Plan applicable to local road authorities is being coordinated by the State-Aid Engineer.

Additionally, the Assistant Commissioner for Research and Standards will assume the responsibility for monitoring current engineering, social, economic and environmental research programs and for monitoring environmental effects of completed projects when appropriate.

The immediate implementation of this Action Plan will be assigned to a short-term staff position reporting directly to the Deputy Commissioner

(Chief Engineer). This position will be responsible for coordinating the Action Plan throughout the Minnesota Highway Department Divisions and District Offices, and for continuing surveillance of the Action Plan process, development of procedures and modifications to keep the Action Plan current. After initial implementation of the Action Plan process, possibly 1 to 2 years, this staff position will be delegated to an operating position in one of the existing Divisions. An interdisciplinary resource unit will be organized by reassigning certain existing personnel and adding creditable expertise in the areas of natural, social, economic and physical sciences as required. The main function of this unit will be to serve as a central resource to assist in the identification and evaluation of potential social, economic and environmental impacts of highway proposals during all phases of planning and development. Primary responsibilities include providing information on social, economic and environmental effects of alternate courses of action during system planning and project development, monitoring the technical quality of social, economic and environmental studies, and assist in training programs and procedural development. This resource unit will also be made responsible to the Deputy Commissioner during this implementation period, and will take work assignments from all Divisions and District Offices through the Deputy Commissioner's staff assistant. Upon completion of the initial implementation period, this resource unit will be permanently assigned to one of the Divisions.

As a further aid in implementing this Action Plan, emphasis is being placed on the responsibilities for communication with the public. A new Highway Information Office is to be created by expanding the functions of the existing Road Plans Information Unit in the Central Office. The primary function of this Office will be to provide the public with current information on Minnesota Highway Department activities, project status, policy and procedures, etc., and to be a single reliable source available to respond to public inquiries for information. In addition to relaying information to the public, this Office will also relay public comments to the Highway Department staff, thereby promoting two-way communication. Additional functions of this Office will include monitoring public meetings, assisting District Offices and others in public hearing preparation and presentations and assisting in the coordination of education programs.

Expanded responsibilities to implement the Action Plan also extend to the District Offices. While the core interdisciplinary resource unit in the Central Office will satisfy most demands for assistance, each District Office will increase its interdisciplinary capabilities to the extent practical to serve its most common needs. Each District Office will also establish and maintain a Highway Information Officer position. This position will be the same as that previously described except that it will function at the District level.

To facilitate project control, each District Office will also designate Project Coordinators with the responsibility for applying the Action

Plan process activities to assigned projects at the District level. This Coordinator will be responsible for knowing the status of each project under his supervision from the beginning of the project development phase up to construction.

Resources

This section describes the resources being used to implement the highway program. This includes the source of fiscal resources, personnel available within the Highway Department, resources available within other state agencies, training programs and developing interdisciplinary capabilities.

Fiscal Resources

The State's trunk highway system is financed from road user funds collected at the State and National level.

At the State level these funds are primarily derived from a fuel tax and a motor vehicle registration fee. These funds are then distributed as follows:

95% of the annual revenue
- 62% to the Trunk Highway Fund (TH)
- 29% to the County State Aid Highway Fund (CSAH)
- 9% to the Municipal State Aid Street Fund (MSAS)

5% of the annual revenue
- 70% to the Trunk Highway Fund
- 21% to the County Turnback Account in the CSAH Fund
- 9% to the Municipal Turnback Account in the MSAS Fund

In addition to these major sources of income, funds are also derived from miscellaneous sources such as Patrol fines, Driver License fees, and interest on investments. (It is a State and Departmental policy to keep all funds invested which are not immediately needed for payment of current obligations).

At the National level, these funds are derived from motor fuel taxes, lubricating oil taxes, heavy vehicle use taxes, taxes on tires, tubes and retread rubber, taxes on new trucks, buses and trailers, and a tax on truck and bus parts and accessories. Appropriation of Federal funds to the individual state is made on the basis of formulas contained in Federal laws. One and one-half percent of Federal apportionments must be devoted to highway planning and research. The remainder of the funds may be used on planning and project development activities, the acquisition of right of way, and construction, but not on maintenance.

The total amount of funds expended annually on the state trunk highway system at the present time in Minnesota approximates 250 million dollars.

Personnel Resources

Minnesota Highway Department. The Minnesota Highway Department has more than 5000 employees at the present time. Within this organization is a diversity of training, experience and expertise. In the context of this Action Plan, it is most appropriate to discuss the capabilities of this Department to provide an interdisciplinary approach to highway development.

A systematic interdisciplinary approach to highway planning and development requires the use of appropriately selected disciplines working in a coordinated effort. This Department has a vast variety of engineering expertise knowledgeable in the areas of soils, foundations, traffic,

structures, hydraulics, etc. Other disciplines work together with engineering personnel on a project-by-project basis. Following is a resume of the interdisciplinary capabilities presently utilized in highway planning and development activities:

-- A statewide Transportation Planning Director with a masters degree in geography and minors in sociology and economics,
-- three Research Analysts in the Office of System Planning; one with a major in business and economics and minors in social science and history; two with geography and history majors,
-- several engineers familiar with the state-of-the-art engaged in noise and air quality; one with a master of science degree in Civil Engineering and another with a bachelors degree in meteorology,
-- a Director of Environmental Services with a PH.D. degree in Agronomy and background in ecology, botany, land use and economics,
-- two Foresters with master degrees in resource economics and resource management,
-- six Landscape Architects; one with a masters degree in Architecture, focusing on city design and regional resource analysis; two with strong plant material/horticultural backgrounds; and two with emphasis on site planning and recreation,
-- a Natural Resource Geographer,
-- several right-of-way agents for appraising land economics and determining real estate evaluations, and
-- a Transportation Planner with a degree in Geography and two technicians; one with a degree in Geology and the other with a degree in Forestry, are located in the District Office at Duluth.

Other disciplines available for consultation when needed include:

-- two Geologists with master degrees,
-- two Agricultural Engineers with experience in erosion and sediment control and vegetation establishment,
-- a Soils Scientist with experience in aerial photo interpretation of soil patterns,
-- an Aggregate Engineer with a degree in Geological Engineering and a masters degree in Engineering,
-- seven Civil Engineers and a technician specializing in hydraulics, and
-- all District Offices have some degree of expertise in soils, hydraulics, traffic, etc.

The above listing does not reflect the additional expertise of engineers, technicians, and other personnel who have developed capabilities related to assessment of social, economic and environmental effects through associations other than formal education, or does it reflect a store of additional potential resources which are not presently utilized in the planning process. A recent survey of the disciplinary backgrounds of Department personnel revealed a storehouse of social science, economic science, and environmental and design art disciplines.

Other State Agencies. While expertise in the social, economic and environmental disciplines may be available on a limited basis from other state agencies, these agencies must first obligate their resources for their own responsibilities.

The utilization of multi-agency expertise is first attained in this Action Plan through a Technical Advisory Committee during System Planning and continues, until construction plans have been developed. An example of this coordiantion is reflected in Appendix C describing procedures for the identification and reduction of environmental impacts. This coordination extends to agencies other than the Department of Natural Resources and the Minnesota Historical Society, but the

procedures are not formally documented at this time. As part of this Action Plan implementation, the documentation of such procedures will be pursued.

It is beyond the scope of this document to identify the vast variety of individual disciplines available in each of the state agencies, but assuredly each agency has the capability to address their area of jurisdiction be it economic development, pollution control, recreational development, or protection of the natural environment.

Programs

Programs for the development of creditable expertise to address social, economic and environmental issues will be carried on at several levels. While some reliance will be placed on the resources of other agencies, the MHD will proceed to enhance its own capability to identify and evaluate all effects of highway proposals through the hiring of qualified expertise, the use of expertise available in the University and College systems, the use of student intern programs when appropriate, the use of private consultants as required, and the training programs described below. One of the initial efforts in the established Action Plan will be to make wider use of available personnel.

This Action Plan emphasizes the need for a variety of disciplines working in a systematic and integrated manner to assure identification of social, economic and environmental effects. To complement existing capabilities, the MHD will conduct efforts directed toward the acquisition of expertise in the areas of biology, ecology, sociology, and economics, and in the field of air quality. Additional expertise will be added on a continuing basis. Appendix C contains a listing of suggested interdisciplinary resource needs of the Department.

To attract and retain creditable multi-disciplinary talents, opportunities must exist for personal and career development. Potential opportunity for employee development exists within the Highway Department and other State agencies. It is first necessary to understand the organizational structure of the Highway Department. Each of the major Divisions in the St. Paul Central Office is divided into Offices; each Office is divided into Sections; each Section is divided into Units; and each Unit may be further divided into groups. Each of the nine District Offices has a similar organizational structure. As an employee gains experience and needed qualifications he advances to more responsible positions. When a vacancy occurs in the Department, it is policy to promote present employees whenever possible. Opportunities are not completely confined to the Highway Department. The State classified service adheres to a commitment that jobs in state government must be filled by qualified persons. Openings in positions of greater responsibility within the Highway Department and the entire state service are filled through a competitive process. Announcements of such opportunities are issued periodically. Although some positions are limited to employees of a specific department, there do exist opportunities in other State departments.

The Minnesota Highway Department carries on a continuous broad scale employee training program. Under this Action Plan, emphasis will be placed on

training related to recognizing social, economic and environmental factors, implementation of the Action Plan procedures, communication and public involvement.

In a recent example of a training program related to this Action Plan, a University of Minnesota professor of rhetoric conducted a program on communication for employees involved in preparing environmental statements and other communications. This 30 hour course has been offered 3 times in the past year and is a continuing program. A second example is an effort made to broaden the social, economic and environmental awareness of employees. This was a series of 8 seminars utilizing a variety of expertise from the University of Minnesota including Geography, Sociology, Political Science, Landscape Architecture, and Economics, and a wildlife management expert from the U.S. Bureau of Sport Fisheries and Wildlife. Fifty-five employees representing all 9 District Offices and several Central Office Divisions were involved in this initial effort. This program is now being evaluated to determine what approach to use in developing a continuous training program for creating social, economic and environmental awareness.

Training and Manpower Development Policy

The Training Section's primary missions is to ensure that the MHD work force possesses the necessary skills to implement and achieve its organizational and manpower objectives.

Under the direction of a Personnel Director accountable for accomplishment of this mission, it is the Training Officer's responsibility to develop and implement training programs.

High priority has been given to training programs meeting one or more of the following criteria;

- Upgrade skill levels and knowledge of Highway Department employees to increase proficiency on present job assignments.
- Develop the skills and provide information to prepare Highway Department employees to perform other jobs to which they likely will be assigned in the future.
- Develop employee identification with, and concern for, goals and objectives of their division and those of the Highway Department.
- Enhance general knowledge and awareness of management systems and principles which maximize performance and induce more significant contributions from employees.

The Personnel Director has been authorized to accomplish this training mission. Further, it is a desirable objective of the Department that each employee participate annually in a meaningful training experience. Training efforts of the Highway Department and those of Civil Service will continue to complement each other with Civil Service providing general employee training and MHD providing specialized training in skills needed in the Highway Department.

A Training Outline serves as a guideline for planning and reference purposes. This outline is flexible so that courses or topics may replace others or may be added as additional training needs are perceived. Additionally, it is a long range outline from which short-range (e.g. one-year) training objectives may be established and a reference to help determine priorities for future training programs. A portion of the training outline is listed below.

I. Operational
   A. Technical (sub-professional upgrading)
   B. Technical (upgrading to and for professional)
      1. Engineering specialized training (photogrammetry; noise control; traffic engineering; geometric design; highway capacity; preliminary design; foundations; hydraulics, etc.)
      2. Civil Engineering Work Study Program
      3. Graduate Engineer Continued Education Program
      4. Graduate Engineer Rotation Program
      5. Land Surveyor Program
      6. Student Civil Engineer Trainee Program
      7. New concepts (environmental; noise control; DOT, etc.)
   C. Right of Way
      1. Real Estate appraisal (rural; urban; industrial; residential)
      2. Condemnation
   D. Clerical
   E. Financial
   F. Maintenance
   G. Appreticeship Programs
   H. Occupational Safety and Health
II. Management Development
III. General Employee Training

Under the direction of the Personnel Director, the Training Officer devises specific training plans based upon "training needs" compiled by District Engineers and Assistant Commissioners. All training requests are considered according to the training criteria.

Once the training needs of employee groups are ascertained, relevant topics are selected from the Master Training Outline and assembled into training programs. Selection of employees for training will remain the prerogative of management.

Methods by which employees are trained vary depending upon availability of competent instructors and subject matter. The Department has a training center located in the Metropolitan area and makes extensive use of this facility. At other times employees are trained at district headquarters and sometimes employees are sent away to schools and seminars offered throughout the country. This latter method affords the advantage of mixing with outsiders adding to their perspective. Other subjects are dealt with by contracting and bringing in instructors. Another method is correspondence or programmed instruction. Still other topics are informal on-the-job teaching by supervisors.

While most training is done on the employer's time, some will be done on the employee's time. Training on the employees' time is voluntary and then normally the cost is borne by the Highway Department. Other courses are taken on the employee's initiative and may be reimbursable under tuition refund.

In summary, our program for enhancing our capabilities to address social, economic and environmental considerations includes;

1. Organization of existing expertise and resources,
2. Utilization of other state agency resources to the extent possible,
3. Hiring of new expertise in special areas and disciplines,
4. Use of expertise in the State and private educational system on a consultant basis,
5. The hiring of private consultants as needed to address special problems, and
6. A comprehensive training program for employees.

Schedule for Implementation

Implementation of this Action Plan will begin immediately and be completed as soon as feasible following its approval by the Governor and the Federal Highway Administration. The effective

date for implementation is November 1, 1973, a nominal date because many of the activities are being accomplished in accordance with this document. There are however, certain feature which may not be accomodated by November 1, 1973. These include:

- -- organization of the inter-agency Technical Advisory Committee (TAC) to assist the MHD in system planning,
- -- development of inter-agency procedures for identification and evaluation of impacts, such as air quality studies to be coordinated with the Minnesota Pollution Control Agency and local agencies,
- -- acquisition of personnel representing a diversity of expertise,
- -- initiation of additional training programs,
- -- functional organization within the Highway Department, and
- -- development of work procedures and new techniques to ensure meeting the objectives of this Action Plan.

It is anticipated that most of these features will be accomplished within one year so that this Action Plan will be fully implemented by November 1, 1974.

REVISIONS TO THE ACTION PLAN

This Action Plan will be responsive to lawful changes dictated by public goals and desires, and with experience gained through the operation, modifications may be made.

The Action Plan will have continual review. Suggestions for revisions may come from individuals, groups, public officials, state or Federal agencies, or from within the Minnesota Highway Department. The Deputy Commissioner's Staff Assistant shall coordinate all proposed modifications and prepare revisions for review and approval.

Revisions affecting the public or agencies outside of the Highway Department will be circulated to those affected for review and comment before approval and implementation. Revisions affecting only the internal operation of the Highway Department will be circulated within the agency for review and comments prior to being submitted to the Commissioner of Highways for approval.

The Governor shall be informed of significant changes to this Action Plan and his formal approval required for any revisions which change the purpose or intent of this document. Changes will require appropriate public meetings before adoption.

After approval by the Commissioner of Highways and the Governor, as appropriate, the proposed revisions will be forwarded to the Federal Highway Administration for concurrence. Action to implement changes will be initiated only upon receipt of concurrence in those changes.

APPENDIX A

GLOSSARY

A-95 Clearinghouse	The agencies and offices of a state, metropolitan area and region which perform coordination functions as outlined in the Office of Management and Budget Circular A-95. This directive provides for a review of Federally assisted projects by interested and affected state and regional agencies to determine the compatibility of proposed projects with their interests.
C.A.C.	Citizens Advisory Committee
C.O.G.	Councils of Governments
D.O.T.	Federal Department of Transportation
Economic Effects	The aggregate of the effects of a highway project on the material needs of people.
Environmental Effects	The totality of the effects of a highway project on the human and natural environment.
Environmental Statement	A written statement containing an assessment of the anticipated significant beneficial and detrimental effects which the proposal may have upon the quality of the human environment.
F.H.W.A.	Federal Highway Administration of the U.S. Department of Transportation
Functional Classification	Identification of a road by the function it serves.
H.U.D.	Department of Housing and Urban Development
Human Environment	The aggregate of all external conditions and influences (esthetic, ecological, biological, cultural, social, economic, historical, etc.) that affect the lives of humans.
Informational Meetings	Informal presentations of information relating to a project or program for the purposes of obtaining the publics views.

Interdisciplinary Approach	The involvement of persons from professions in addition to engineering in the planning, location and design phases of project development. The purpose of this involvement is to insure adequate consideration of the economic, social and environmental effects of highway programs.
M.C.	Metropolitan Council
M.T.C.	Metropolitan Transit Commission
Negative Declaration	A written document in support of a determination that should the project be constructed, the anticipated effects upon the human environment will not be significant.
O.M.B.	Federal Office of Management and Budget
PPM	Policy and Procedure Memorandum Form used by Federal agencies to inform State and other agencies of its interpretation and application of Federal statutes.
Program (noun)	A priority listing of projects, usually for a defined period of time.
Project Development	The second stage of highway planning and development. It is the implementation of the planning needs identified in System Planning and the refinement of those needs into a specific plan.
Public Hearing	Provides a formal opportunity to present to the public an explanation of alternatives under consideration and to receive comments on those alternatives from interested parties.
Regional Development Commission	Any grouping of counties, cities, villages, boroughs, or towns of a geographic region embodied in an Executive Order of the Governor or as established by the Regional Development Act of 1969; for the purpose of planning the solutions to economic, social, physical and governmental problems.

Right of Way	Land acquired by purchase, gift, or eminent domain in order to build and maintain a public road.
Secondary Road Plan	The plan used for administering Federal-aid secondary projects which sets forth the procedures and standards the State highway department will use in the administration of such projects.
Social Effects	The aggregate of effects of a highway project on the quality of living or the associating in groups or communities.
System Planning	The first stage of highway planning and development. Studies the overall transportation demands placed on the transportation system, forecasts future transportation demands, and develops generalized plans for providing safe, efficient, economical transportation facilities.
T.A.C.	Technical Advisory Committee
3C Planning Process	The Continuing, Comprehensive, Cooperative planning process for all Federally aid highway projects in urban areas of more than 50,000 population required by the Federal Aid Highway Act of 1962.
UMTA	Urban Mass Transit Administration of the U.S. Department of Transportation

APPENDIX B

Federal Highway Administration

Policy and Procedure Memorandum	Title
20-8	Public Hearings and Location Approval
50-9	Urban Transportation Planning
90-1	Environmental Impact and Related Statements
90-4	Process Guidelines (Economic, social, and environmental effects on highway projects)

Transmittal 147

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
BUREAU OF PUBLIC ROADS

POLICY AND PROCEDURE MEMORANDUM

20-8

January 14, 1969

PUBLIC HEARINGS AND LOCATION APPROVAL

Par.

1. PURPOSE

a. The purpose of this PPM is to ensure, to the maximum extent practicable, that highway locations and designs reflect and are consistent with Federal, State, and local goals and objectives. The rules, policies, and procedures established by this PPM are intended to afford full opportunity for effective public participation in the consideration of highway location and design proposals by highway departments before submission to the Federal Highway Administration for approval. They provide a medium for free and open discussion and are designed to encourage early and amicable resolution of controversial issues that may arise.

b. The PPM requires State highway departments to consider fully a wide range of factors in determining highway locations and highway designs. It provides for extensive coordination of proposals with public and private interests. In addition, it provides for a two-hearing procedure designed to give all interested persons an opportunity to become fully acquainted with highway proposals of concern to them and to express their views at those stages of a proposal's development when the flexibility to respond to these views still exists.

2. AUTHORITY

This PPM is issued under authority of the Federal-aid Highway Act, 23 U.S.C. 101 et seq., 128, 315, sections 2(a), 2(b)(2), and 9(e)(1) of the Department of Transportation Act, 49 U.S.C. 1651(a) and (a)(2), 1657(e)(1); 49 CFR § 1.4(c); and 23 CFR § 1.32.

3. APPLICABILITY

a. This PPM applies to all Federal-aid highway projects.

b. If preliminary engineering or acquisition of right of way related to an undertaking to construct a portion of a Federal-aid highway project is carried out without Federal-aid funds, subsequent phases of the work are eligible for Federal-aid funding only if the nonparticipating work after the effective date of this PPM was done in accordance with this PPM.

c. This PPM shall not apply to the construction of highway projects where the Federal Highway Administrator has made a formal determination that the construction of the project is urgently needed because of a national emergency, a natural disaster or a catastrophic failure.

4. DEFINITIONS (As used in this PPM)

a. A "corridor public hearing" is a public hearing that:

(1) Is held before the route location is approved and before the State highway department is committed to a specific proposal;

(2) Is held to ensure that an opportunity is afforded for effective participation by interested persons in the process of determining the need for, and the location of, a Federal-aid highway; and

(3) Provides a public forum that affords a full opportunity for presenting views on each of the proposed alternative highway locations and the social, economic, and environmental effects of those alternate locations.

b. A "highway design public hearing" is a public hearing that:

(1) Is held after the route location has been approved, but before the State highway department is committed to a specific design proposal;

(2) Is held to ensure that an opportunity is afforded for effective participation by interested persons in the process of determining the specific location and major design features of a Federal-aid highway; and

(3) Provides a public forum that affords a full opportunity for presenting views on major highway design features, including the social, economic, environmental, and other effects of alternate designs.

c. "Social, economic, and environmental effects" means the direct and indirect benefits or losses to the community and to highway users. It includes all such effects that are relevant and applicable to the particular location or design under consideration such as:

(1) Fast, safe and efficient transportation.

(2) National defense.

(3) Economic activity.

(4) Employment.

(5) Recreation and parks.

(6) Fire protection.

(7) Aesthetics.

(8) Public utilities.

(9) Public health and safety.

(10) Residential and neighborhood character and location.

(11) Religious institutions and practices.

(12) Conduct and financing of Government (including effect on local tax base and social service costs).

(13) Conservation (including erosion, sedimentation, wildlife and general ecology of the area).

(14) Natural and historic landmarks.

(15) Noise, and air and water pollution.

(16) Property values.

(17) Multiple use of space.

(18) Replacement housing.

(19) Education (including disruption of school district operations).

(20) Displacement of families and businesses.

(21) Engineering, right-of-way and construction costs of the project and related facilities.

(22) Maintenance and operating costs of the project and related facilities.

(23) Operation and use of existing highway facilities and other transportation facilities during construction and after completion.

This list of effects is not meant to be exclusive, nor does it mean that each effect considered must be given equal weight in making a determination upon a particular highway location or design.

5. COORDINATION

a. When a State highway department begins considering the development or improvement of a traffic corridor in a particular area, it shall solicit the views of that State's resources, recreation, and planning agencies, and of those Federal agencies and local public officials and agencies, and public advisory groups which the State highway department knows or believes might be interested in or affected by the development or improvement. The State highway department shall establish and maintain a list upon which any Federal agency, local public official or public advisory group may enroll, upon its request, to receive notice of projects in any area specified by that agency, official, or group. The State highway departments are also encouraged to establish a list upon which other persons and groups interested in highway corridor locations may enroll in order to have their views considered. If the corridor affects another State, views shall also be solicited from the appropriate agencies within that State. All written views received as a result of coordination under this paragraph must be made available to the public as a part of the public hearing procedures set forth in paragraph 8.

b. Other public hearings or informal public meetings, clearly identified as such, may be desirable either before the study of alternate routes in the corridor begins or as it progresses to inform the public about highway proposals and to obtain information from the public which might affect the scope of the study or the choice of alternatives to be considered, and which might aid in identification of critical social, economic and environmental effects at a stage permitting maximum consideration of these effects. State highway departments are encouraged to hold such a hearing or meeting whenever that action would further the objectives of this PPM or would otherwise serve the public interest.

6. HEARING REQUIREMENTS

a. Both a corridor public hearing and a design public hearing must be held, or an opportunity afforded for those hearings, with respect to each Federal-aid highway project that:

(1) Is on a new location; or

(2) Would have a substantially different social, economic or environmental effect; or

(3) Would essentially change the layout or function of connecting roads or streets.

However, with respect to secondary road programs, two hearings are not required on a project covered by paragraph 6(a)(1) or (2) unless it will carry an average of 750 vehicles a day in the year following its completion.

b. A single combined corridor and highway design public hearing must be held, or the opportunity for such a hearing afforded, on all other projects before route location approval, except as provided in paragraph 6.c. below.

c. Hearings are not required for those projects that are solely for such improvements as resurfacing, widening existing lanes, adding auxiliary lanes, replacing existing grade separation structures, installing traffic control devices or similar improvements, unless the project:

(1) Requires the acquisition of additional right-of-way; or

(2) Would have an adverse effect upon abutting real property; or

(3) Would change the layout or function of connecting roads or streets or of the facility being improved.

d. With respect to a project on which a hearing was held, or an opportunity for a hearing afforded, before the effective date of this PPM, the following requirements apply:

(1) With respect to projects which have not received location approval:

(a) If location approval is not requested within 3 years after the date of the hearing or an opportunity for a hearing, compliance with the corridor hearing requirements is required unless a substantial amount of right-of-way has been acquired.

(b) If location approval is requested within 3 years after the date of the hearing or an opportunity for a hearing, compliance with the corridor hearing requirements is not required.

(2) With respect to those projects which have not received design approval:

(a) If design approval is not requested within 3 years after the date of the hearing or an opportunity for a hearing, compliance with the design hearing requirements is required.

(b) If design approval is requested within 3 years after the date of the hearing or an opportunity for a hearing, compliance with the design hearing requirements is nevertheless required unless the division engineer finds that the hearing adequately dealt with design issues relating to major design features.

e. If location approval is not requested within 3 years after the date of the related corridor hearing held, or an opportunity for a hearing afforded, under this PPM, a new hearing must be held or the opportunity afforded for such a hearing.

f. If design approval is not requested within 3 years after the date of the related design hearing held, or an opportunity for a hearing afforded, under this PPM, a new hearing must be held or the opportunity afforded for such a hearing.

7. OPPORTUNITY FOR PUBLIC HEARINGS

a. A State may satisfy the requirements for a public hearing by (1) holding a public hearing, or (2) publishing two notices of opportunity for public hearing and holding a public hearing if any written requests for such a hearing are received. The procedure for requesting a public hearing shall be explained in the notice. The deadline for submission of such a request may not be less than 21 days after the date of publication of the first notice of opportunity for public hearing, and no less than 14 days after the date of publication of the second notice of opportunity for public hearing.

b. A copy of the notice of opportunity for public hearing shall be furnished to the division engineer at time of publication. If no requests are received in response to a notice within the time specified for the submission of those requests, the State highway department shall certify that fact to the division engineer.

c. The opportunity for another public hearing shall be afforded in any case where proposed locations or designs are so changed from those presented in the notices specified above or at a public hearing as to have a substantially different social, economic, or environmental effect.

d. The opportunity for a public hearing shall be afforded in each case in which either the State highway department or the division

engineer is in doubt as to whether a public hearing is required.

e. Public hearing procedures authorized and required by State law may be followed in lieu of any particular hearing requirement of paragraph 7 or 8 of this PPM if, in the opinion of the Administrator, such procedures are reasonably comparable to that requirement.

8. PUBLIC HEARING PROCEDURES

a. Notice of public hearing:

(1) When a public hearing is to be held, a notice of public hearing shall be published at least twice in a newspaper having general circulation in the vicinity of the proposed undertaking. The notice should also be published in any newspaper having a substantial circulation in the area concerned; such as foreign language newspapers and local community newspapers. The first of the required publications shall be from 30 to 40 days before the date of the hearing, and the second shall be from 5 to 12 days before the date of the hearing. The timing of additional publications is optional.

(2) In addition to publishing a formal notice of public hearing, the State highway department shall mail copies of the notice to appropriate news media, the State's resource, recreation, and planning agencies, and appropriate representatives of the Departments of Interior and Housing and Urban Development. The State highway department shall also mail copies to other federal agencies, and local public officials, public advisory groups and agencies who have requested notice of hearing and other groups or agencies who, by nature of their function, interest, or responsibility the highway department knows or believes might be interested in or affected by the proposal. The State highway department shall establish and maintain a list upon which any federal agency, local public official, public advisory group or agency, civic association or other community group may enroll upon its request to receive notice of projects in any area specified by that agency, official or group.

(3) Each notice of public hearing shall specify the date, time, and place of the hearing and shall contain a description of the proposal. To promote public understanding, the inclusion of a map or other drawing as part of the notice is encouraged. The notice of public hearing shall specify that maps, drawings, and other pertinent information developed by the State highway department and written views received as a result of the coordination outlined in Paragraph 5.a will be available for public inspection and copying and shall specify where this information is available; namely, at the nearest State highway department office or at some other convenient location in the vicinity of the proposed project.

(4) A notice of highway design public hearing shall indicate that tentative schedules for right-of-way acquisition and construction will be discussed.

(5) Notices of public hearing shall indicate that relocation assistance programs will be discussed .

(6) The State highway department shall furnish the division engineer with a copy of the notice of public hearing at the time of first publication.

b. Conduct of public hearing:

(1) Public hearings are to be held at a place and time generally convenient for persons affected by the proposed undertaking.

(2) Provision shall be made for submission of written statements and other exhibits in place of, or in addition to, oral statements at a public hearing. The procedure for the submissions shall be described in the notice of public hearing and at the public hearing. The final date for receipt of such statements or exhibits shall be at least 10 days after the public hearing.

(3) At each required corridor public hearing, pertinent information about location alternatives studied by the State highway department shall be made available. At each required highway design public hearing information about design alternatives studied by the State highway department shall be made available.

(4) The State highway department shall make suitable arrangements for responsible highway officials to be present at public hearings as necessary to conduct the hearings and to be responsive to questions which may arise.

(5) The State highway department shall describe the State-Federal relationship in the Federal-aid highway program by an appropriate brochure, pamphlet, or statement, or by other means.

(6) A State highway department may arrange for local public officials to conduct a required public hearing. The State shall be appropriately represented at such public hearing and is responsible for meeting other requirements of this PPM.

(7) The State highway department shall explain the relocation assistance program and relocation assistance payments available.

(8) At each public hearing the State highway department shall announce or otherwise explain that, at any time after the hearing and before the location or design approval related to that hearing, all information developed in support of the proposed location or design will be available upon request, for public inspection and copying.

(9) To improve coordination with the State highway department, it is desirable that the division engineer or his representative attend a public hearing as an observer. At a hearing, he may properly explain procedural and technical matters, if asked to do so. A Federal Highway Administration decision regarding a proposed location or design will not be made before the State highway department has requested location or design approval in accordance with paragraph 10.

c. Transcript:

(1) The State highway department shall provide for the making of a verbatim written transcript of the oral proceedings at each public hearing. It shall submit a copy of the transcript to the division engineer within a reasonable period (usually less than 2 months) after the public hearing, together with:

(a) Copies of, or reference to, or photographs of each statement or exhibit used or filed in connection with a public hearing.

(b) Copies of, or reference to, all information made available to the public before the public hearing.

(2) The State highway department shall make copies of the materials described in subparagraph 8.c.(1) available for public inspection and copying not later than the date the transcript is submitted to the division engineer.

9. CONSIDERATION OF SOCIAL, ECONOMIC AND ENVIRONMENTAL EFFECTS

State highway departments shall consider social, economic, and environmental effects before submission of requests for location or design approval, whether or not a public hearing has been held. Consideration of social economic, and environmental effects shall include an analysis of information submitted to the State highway department in connection with public hearings or in response to the notice of the location or design for which a State highway department intends to request approval. It shall also include consideration of information developed by the State highway department or gained from other contacts with interested persons or groups.

10. LOCATION AND DESIGN APPROVAL

a. This section applies to all requests for location or design approval whether or not public hearings, or the opportunity for public hearings, are required by this PPM.

b. Each request by a State highway department for approval of a route location or highway design must include a study report containing the following:

(1) Descriptions of the alternatives considered and a discussion of the anticipated social, economic, and environmental effects of the alternatives, pointing out the significant differences and the reasons supporting the proposed location or design. In addition, the report must include an analysis of the relative consistency of the alternatives with the goals and objectives of any urban plan that has been adopted by the community concerned.

(a) Location study reports must describe the termini, the general type of facility, the nature of the service which the highway is intended to provide, and other major features of the alternatives.

(b) Design study reports must describe essential elements such as design standards, number of traffic lanes, access control features, general horizontal and vertical alignment, right-of-way requirements and location of bridges, interchanges, and other structures.

(2) Appropriate maps or drawings of the location or design for which approval is requested.

(3) A summary and analysis of the views received concerning the proposed undertaking.

(4) A list of any prior studies relevant to the undertaking.

c. At the time it requests approval under this paragraph, each State highway department shall publish in a newspaper meeting the requirements of paragraph 8.a.(1), a notice describing the location or design, or both, for which it is requesting approval. The notice shall include a narrative description of the location or design. Where practicable, the inclusion of a map or sketch of that location or design is desirable. In any event, the publication shall state that such maps or sketches as well as all other information submitted in support of the request for approval is publicly available at a convenient location.

d. The following requirements apply to the processing of requests for highway location or highway design approval:

(1) Location approval. The division engineer may approve a route location and authorize design engineering only after the following requirements are met:

(a) The State highway department has requested route location approval.

(b) Corridor public hearings required by this PPM have been held, or the opportunity for hearings has been afforded.

(c) The State highway department has submitted public hearing transcripts and certificates required by section 128, title 23, United States Code.

(d) The requirements of this PPM and of other applicable laws and regulations.

(2) Design approval. The division engineer may approve the highway design and authorize right-of-way acquisition, approve right-of-way plans, approve construction plans, specifications, and estimates, or authorize construction, only after the following requirements have been met:

(a) The route location has been approved.

(b) The State highway department has requested highway design approval.

(c) Highway design public hearings required by this PPM have been held, or the opportunity for hearings has been afforded.

(d) The State highway department has submitted the public hearing transcripts and certificates required by section 128, title 23, United States Code.

(e) The requirements of this PPM and of other applicable laws and regulations.

e. The division engineer, under criteria to be promulgated by the Federal Highway Administrator, may in other appropriate instances authorize the acquisition of right-of-way before a design hearing. See IM 20-1-69

f. Secondary Road Plans shall be amended as necessary to incorporate procedures similar to those required for other projects. Secondary Road Plans shall include provisions requiring:

(1) route location and highway design approval,

(2) preparation of study reports as described in paragraph 10(b), and

(3) corridor and highway design public hearings in all cases where they would be required for Federal-aid projects not administered under the Secondary Road Plan. Project actions by the division engineer or submissions to the division engineer which are not now required should not be established for Secondary Road Plan projects as a result of this PPM.

11. PUBLICATION OF APPROVAL

In cases where a public hearing was held, or the opportunity for a public hearing afforded, the State highway department shall publish notice of the action taken by the division engineer on each request for approval of a highway location or design, or both, in a newspaper meeting the requirements of paragraph 8. a. (1), within 10 days after receiving notice of that action. The notice shall include a narrative description of the location and/or design, as approved. Where practicable, the inclusion of a map or sketch of that location or design is desirable. In any event, the publication shall state that such maps or sketches as well as all other information concerning the approval is publicly available at a convenient location.

12. REIMBURSEMENT FOR PUBLIC HEARING EXPENSES

Public hearings are an integral part of the preliminary engineering process. Reasonable costs associated with public hearings are eligible for reimbursement with Federal-aid funds on the same basis as other preliminary engineering costs.

F. C. Turner
Director of Public Roads

Lowell K. Bridwell
Federal Highway Administrator

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
WASHINGTON, D.C. 20590

August 30, 1972

INSTRUCTIONAL MEMORANDUM 20-4-72
HEV-20

SUBJECT: Guidelines for Consideration of Economic, Social, and Environmental Effects (PPM 20-8 Modification)

1. Purpose

a. This memorandum is issued to assure that:

(1) Possible adverse economic, social, and environmental effects relating to any proposed federally funded project on any Federal-aid highway system have been fully considered in developing such project.

(2) Final decisions on the project are made in the best overall public interest, taking into consideration the need for fast, safe, and efficient transportation, public services, and the costs of eliminating or minimizing adverse effects.

b. Policy and Procedure Memorandum 20-8, issued January 14, 1969, provided guidance for the consideration of social, economic, and environmental effects in the design and location of highways. This instructional memorandum supersedes the list of effects in paragraph 4.c. of PPM 20-8 by consolidating it with the effects listed in 23 U.S.C. 109(h). It also sets forth reporting procedures to assure that the general types of consequences that may be expected from construction of the proposed highway improvement are being considered with respect to costs, gains and losses.

2. Authority

Sections 135(a), 135(b) and 136(b) of the Federal-Aid Highway Act of 1970; 23 U.S.C. 109(h), 128(a) and 128(b).

3. Application

This memorandum applies to proposed projects which have not received PS&E (plans, specifications, and estimates) approval as of the effective date of this memorandum. These guidelines do not apply to projects which are already in various stages of physical construction or are exempt under the emergency provisions of paragraph 3.c. of PPM 20-8.

4. Procedures

a. As of the effective date of this memorandum, projects which have received design approval (as defined in PPM 90-1), may receive PS&E approval, if otherwise satisfactory, on the basis of past State highway department submissions which identify and document the economic,

-more-

social and environmental effects previously considered with respect to these advanced projects, together with a supplemental report, if necessary, covering the consideration and disposition of the items not previously covered and now listed herein in paragraph 4.b. The supplemental report shall be prepared by the State and submitted to the division engineer not later than the time of submission of PS&E documents for the next Federal-aid improvement of the highway section. This supplemental documentation may take the form of statements in the program submission (PR-1 or PR-9 forms and attachments), relative to the overall proposal being advanced, unless the division engineer determines that a more detailed report is warranted.

b. After the effective date of this memorandum, a State highway department request for location and design approval, as required under PPM 20-8, shall be accompanied by reports and other documents showing that the development of the project has taken into consideration the need for fast, safe, and efficient transportation together with highway costs, traffic benefits and public services including provisions of national defense; and which discuss the anticipated economic, social, and environmental effects of the proposal and alternatives under consideration, to the extent applicable, on the following:

(1) Regional and Community Growth including general plans and proposed land use, total transportation requirements, and status of the planning process.

(2) Conservation and Preservation including soil erosion and sedimentation, the general ecology of the area as well as man-made and other natural resources, such as: park and recreational facilities, wildlife and waterfowl areas, historic and natural landmarks.

(3) Public Facilities and Services including religious, health and educational facilities; and public utilities, fire protection and other emergency services.

(4) Community Cohesion including residential and neighborhood character and stability, highway impacts on minority and other specific groups and interests, and effects on local tax base and property values.

(5) Displacement of People, Businesses, and Farms including relocation assistance, availability of adequate replacement housing, economic activity (employment gains and losses, etc.).

(6) Air, Noise, and Water Pollution including consistency with approved air quality implementation plans, FHWA noise level standards (as required under PPM 90-2), and any relevant Federal or State water quality standards.

(7) Aesthetic and Other Values including visual quality, such as: "view of the road" and "view from the road," and the joint development and multiple use of space.

c. In addition to coverage of the significant differences and reasons supporting the alternative locations and designs, discussions of the above items and other economic, social, and environmental effects, which were raised during public hearings or which were otherwise considered, shall include: (1) identification of the adverse effects, (2) appropriate measures to eliminate or minimize the adverse effects, (3) the estimated costs [expressed in either monetary, numerical or qualitative terms] of the measures considered.

d. The degree of analysis of the items may vary, depending upon the scope and the nature of project, the stage of project development, and the extent of the adverse effect.

e. Where material required by this memorandum has been previously submitted pursuant to other requirements, such as those in PPMs 20-8 or 90-1, the State highway department may either resubmit such material or make reference to it.

5. Effective date

The effective date of this memorandum is September 29, 1972.

R. R. Bartelsmeyer

R. R. Bartelsmeyer
Acting Federal Highway Administrator

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
BUREAU OF PUBLIC ROADS

POLICY AND PROCEDURE MEMORANDUM

Transmittal 162
50-9
November 24, 1969

URBAN TRANSPORTATION PLANNING

1. PURPOSE

To provide the definitions and interpretations of the urban transportation planning process which is required as a prerequisite to program approval for projects in urban areas of more than fifty thousand population. Guidelines are provided for developing each element of the transportation planning process.

2. AUTHORITY

The authority for the transportation planning requirements rests in Section 9 of the Federal-Aid Highway Act of 1962, approved October 23, 1962, which amended Chapter 1 of Title 23, United States Code, by the addition of a new Section 134 which reads as follows:

"It is declared to be in the national interest to encourage and promote the development of transportation systems embracing various modes of transport in a manner that will serve the States and local communities efficiently and effectively. To accomplish this objective the Secretary shall cooperate with the States, as authorized in this title, in the development of long-range highway plans and programs which are properly coordinated with plans for improvements in other affected forms of transportation and which are formulated with due consideration to their probable effect on the future development of urban areas of more than fifty thousand population. After July 1, 1965, the Secretary shall not approve under Section 105 of this title any program for projects in any urban area of more than fifty thousand population unless he finds that such projects are based on a continuing comprehensive transportation planning process carried on cooperatively by States and local communities in conformance with the objectives stated in this section."

3. JURISDICTION

The following sections define the areas where the planning process definitions and interpretations will apply as a prerequisite to program approval.

a. Urbanized Areas: The planning requirements of Section 134, Title 23, United States Code, are applicable for urban areas of more than fifty thousand population which are identified as fitting into the following two categories:

(1) Urban areas of more than 50,000 population identified by decennial census: These areas are identified as the "urbanized areas" established by the U. S. Bureau of the Census in the latest available census of population of the United States and Puerto Rico.

(2) Urban areas of more than 50,000 population identified between decennial census periods: These areas are identified subsequent to a decennial census as a result of a finding, by the U. S. Bureau of the Census based on a special census, or an evaluation of newly annexed areas, that the population of a city or urban area is now in excess of 50,000 population. Other official findings may come from the U. S. Bureau of the Budget in the nature of additions to their list of Standard Metropolitan Statistical Areas.

b. Boundaries

(1) Urbanized Area boundaries: The boundaries of the urbanized areas established by the U. S. Bureau of the Census shall be controlling in determining the eligibility for approval of Federal-aid projects in programs, unless other limits for this purpose shall be agreed upon by the U. S. Bureau of Public Roads and the States. Since urbanized area boundaries are only established by the U. S. Bureau of the Census at the time of the decennial census, the municipal boundaries will be controlling in determining the eligibility for approval of any program of Federal-aid projects until such time as urbanized area boundaries are officially established, unless other limits for this purpose shall be agreed upon by the U. S. Bureau of Public Roads and the States. In the event that a city, included within an established urbanized area extends its boundaries by annexation beyond the boundaries of

the urbanized area, the area included in the expanded municipal boundaries will also be subject to the provision of Section 134.

(2) Comprehensive planning area boundaries: The boundaries of the urbanized area established by the U. S. Bureau of Census or in Section 3b(1) above should not, however, necessarily restrict the area to be encompassed in a comprehensive transportation planning process. For planning purposes all of the area likely to be urbanized within the forecast period, usually 20 years, should be included. In those instances where urbanized areas as defined by the U. S. Bureau of the Census are adjoining or are likely to become adjoining in the forecast period, the planning process should embrace the entire area. Except in unusual circumstances the planning area shall not be less than the urbanized area delimited by the U. S. Bureau of the Census.

(3) Boundary restrictions: The boundaries of urbanized areas as defined herein either for planning purposes or for determining eligibility of proposed Federal-aid highway projects are not necessarily coincidental with urban area boundaries defined in Policy and Procedure Memorandum 10-5, and the revisions thereto.

4. DEFINITION

The following definitions and interpretations will apply to the planning process:

a. Transportation planning process:

(1) The planning process includes the operational procedures and working arrangements by which short and long-range highway and transportation plans are soundly conceived and developed, and continuously evaluated in a manner that will:

(a) Assist governing bodies and official agencies in determining courses of action and in formulating attainable capital improvement programs in anticipation of community needs.

(b) Guide private individuals and groups in their planning decisions which can be important factors in the pattern of future development and redevelopment.

(2) Transportation planning is concerned with all facilities used for the movement of persons and goods, including terminal facilities and traffic control systems. The process is based on the collection, analysis, and interpretation of pertinent data concerning existing conditions and historical growth; the establishment of community goals and objectives; and the forecasting of future urban development and future travel demands. It includes not only the initial preparation and evaluation of a transportation plan through an appraisal of practicable alternatives, but also periodic review and modification to meet changing conditions. In addition, it includes the preparation and dissemination of pertinent information needed by official agencies in their consideration of planning proposals and improvement programs, and for the encouragement of public understanding and support; and, the preparation of recommendations concerning scheduling and financing of highway improvements, coordination with other urban development programs, revision of ordinances and regulations, and additional legislation, if necessary.

(3) The planning process should be closely coordinated with policy making and program administration and should be organized with the objectives of achieving agreement on interrelated action programs founded on factual information.

(4) Basic elements for which inventories and analyses are required are as follows:

(a) Economic factors affecting development
(b) Population
(c) Land use
(d) Transportation facilities including those for mass transportation
(e) Travel patterns
(f) Terminal and transfer facilities
(g) Traffic control features
(h) Zoning ordinances, subdivision regulations, building codes, etc.
(i) Financial resources
(j) Social and community-value factors

(5) The scope of the inventories and the extent to which the various analyses need to be carried will, of course, vary depending upon such factors as city size, age, and growth potential.

b. Comprehensive - The comprehensive character of the planning process requires that the economic, population, and land use elements be included; that estimates be made of the future demands for all modes of transportation both public and private for both persons and goods; that terminal and transfer facilities and traffic control systems be included in the inventories and analyses; and, that the entire area, within which the forces of development are interrelated and which is expected to be urbanized within the forecast period, be included.

c. Continuing - The maintaining of current valid data on land use, travel and transportation and related facilities by staff at State or local level to provide for updating and re-evaluating the transportation plan as conditions change from those initially analyzed and forecasted. Maintenance of data can range from full time day-to-day operations for the large urban areas to part-

time or intermittent operations for the smaller urban areas. Either type of operation should insure that land use changes differing from those forecasted are recorded in a manner that will permit a ready evaluation of their significance with respect to the transportation plan. Similarly, as each portion of a transportation plan is placed in operation an evaluation of its effectiveness should be made. Travel habits should be reappraised and transportation plans updated whenever the departures from the land use forecast are significant or the effectiveness of new facilities differs materially from that anticipated. In any event, transportation plans should be re-evaluated and updated when necessary, but not less frequently than every five years.

d. Cooperatively -

(1) The establishment of a formal procedure - supported by a written memorandum of understanding - between the State highway departments and the governing bodies of the local communities for carrying out the transportation planning process in a manner that will insure that the planning decisions are reflective of and responsive to both the programs of the State highway department and the needs and desires of the local communities. The agreement may be directly between the State highway department and the local governing bodies or by way of an agreement between the State highway department and an agency or agencies embracing the urban area encompassed in the transportation planning process and qualified to act in behalf of the local jurisdictions for this purpose. The State highway department will be expected to show by suitable evidence that scrupulous efforts have been made to carry out the intent of the Act with respect to cooperative action by all political subdivisions. If there is an unwillingness on the part of a local political unit within an urban area to participate in the transportation planning process in such area, a determination shall be made as to whether the percentage of the urban area affected is such as to negate an effective planning process for the whole area.

(2) Cooperation is construed to mean that each jurisdiction having authority and responsibility for actions of regionwide significance should have appropriate voice in the transportation planning process, either through direct participation or through adequate representation. State highway departments should solicit the cooperation of all political subdivisions having such authority and responsibility. This solicitation can be made directly to the governing bodies of each individual political subdivision or through an appropriate local agency.

(3) Ideally, all political subdivisions should participate in the transportation planning process. This would insure full consideration of all pertinent factors and contribute to the resolution of any differences of opinion during the process of developing proposals for improvements. However, individual, direct participation by all jurisdictions will generally not be practical in the large urban areas, and in such cases it may be necessary for the smaller jurisdictions to be represented by the larger or more inclusive ones. Many small incorporated places included in large urbanized areas do not have authority to exercise land use controls or to construct transportation improvements, and their participation need not necessarily be solicited.

(4) Each urbanized area has State and local legislation pertaining to authorities and responsibilities of local political subdivisions which make it impractical to establish uniform criteria for determining the specific political subdivisions with which a memorandum of understanding is required. It will be the responsibility of the regional Federal Highway Administrator to make this determination for each urbanized area within his region.

(5) In cases where the urbanized area is located in more than one State, the initial agreement should be between the State highway departments involved. The responsibility for effecting State and local cooperation rests with the particular State highway department concerned.

(6) The memorandum of understanding need not follow any prescribed format but should clearly indicate that a continuing comprehensive transportation planning process is to be carried on cooperatively by the States and the local political subdivisions. The administrative procedure by which this cooperation is to be effected, including an assignment of duties and responsibilities, should be covered in the memorandum or by reference to a prospectus.

5. SCOPE OF THE ELEMENTS OF THE TRANSPORTATION PLANNING PROCESS

The following sections supplement the definitions of the ten elements in the transportation planning process as set forth in paragraph 4a(4).

a. Economic factors affecting development

(1) An economic study should provide an estimate of the total change in the level of economic activity in the study area from the present to the forecast year. This forecast of future economic activity together with the population forecast will provide the basic input for the land use and travel forecasts.

(2) The economic study should consist of the collection, analysis, and forecasting of the following elements:

(a) Employment (by Standard Industrial Classification)

(b) Per capita income or median family income, in constant dollars

(c) Income-consumption patterns

(d) Vehicle ownership

(e) Labor force

(3) The economic study should also include an inventory and analysis of all pertinent economic forecasts made by others for the larger region, the study area, or for any of its subunits.

(4) Economic data are required at two levels of geographic detail; (1) for the study area as a whole, and (2) for traffic analysis zones, census tracts, or other small areal units. At the study area level, data should be collected for current and past years in sufficient detail to permit a thorough analysis.

(5) At the small area level, data are needed for the current period for trip generation and land use analyses. In addition, it is desirable to have small area data for a past time period to determine whether current relationships have been stable over time.

(6) In making the forecasts of future economic activity, the study area's economic advantage in holding and attracting industries and workers should be analyzed and evaluated. Industry location decisions are influenced by such factors as costs of production, access to resources, characteristics of the labor force (i.e., its occupational skills, productivity, educational level, age, sex, etc.), the quality of the area's nonhuman resources, including the geography of the region (i.e., the future supply of these resources, climate, terrain, water, transportation, recreational facilities, etc.), and the fiscal and financial policies guiding the area's governing unit (i.e., its tax structure, borrowing powers, etc.).

(7) Moreover, analyses of data forecasts should take account of the effect on the local economy of variations (recent or otherwise) in the national economy; the effect of economic fluctuations on different industries, and the probable effect of technological developments on local industries over time.

(8) Forecasts which are merely extrapolations of recent trends may give misleading estimates of the future. An analysis of relationships between factors found within recent trends, however, form an important part of any forecast and provide a basis for forecasts that diverge from these trends.

(9) Regardless of the method used to make future estimates, the results obtained should be tested for reasonableness and consistency. For example, an important check is to prepare a population forecast based on the employment forecast and compare this with the independent population forecast based on demographic techniques.

b. Population studies

(1) A population forecast is required to provide an estimate of the total potential tripmakers at some future time. The population and economic forecasts together form the basis for estimating future land use and travel demands, since the number of people and jobs are the major determinants of tripmaking.

(2) The first step in a population study should be a survey of all available historical data on total population, its distribution by small areas, and its characteristics. Using these data, analyses can be made of changes in rates of growth and in composition of the population. Such analyses will aid in determining the appropriate forecasting technique to be used.

(3) All available pertinent population studies previously conducted by others should be fully utilized to the extent they are applicable and acceptable. These may include estimates of current population as well as forecasts, and may relate to the study area, parts of the area, or to larger regions containing the study area.

(4) Several forecasting methods are in common use today. The technique used to forecast population will depend upon the input requirements of other phases of the study, the detail of the available data, and the special characteristics of the study area (size, composition, and growth rate). The most important information that should be provided by the forecast is an estimate of future total population and average household size (or number of households).

(5) All assumptions and the reasons for making them should be documented. The population forecast should be checked for consistency with other forecasts independently prepared, especially those relating to employment.

c. Land use

(1) The land use study incorporates a wide variety of undertakings, all of which are aimed at providing an accounting of the current land use activity structure of the study area and the most probable or desirable future structure.

(2) The land use study should include the following items for the entire study area:

(a) An inventory of the location and intensity of existing land use activities, including vacant land. The inventory of vacant land should take account of land subject to flood, to the extent such information is available. Requests for flood hazard information may be addressed to the appropriate district office of the Corps of Engineers, U.S. Army. Inventory should also be made of authorized public and private capital improvement plans and programs, and existing pertinent zoning and subdivision regulations.

(b) An analysis of past trends to aid in determining land consumption rates and the most likely location patterns of households and business firms.

(c) The distribution of an area-wide forecast of population and economic activity to small areas (zones). The forecast should give full consideration to officially approved plans or programs and community goals and objectives.

(3) The land use data needed as a base for developing the forecast may be obtained from field surveys, local planning agencies, other secondary sources, or a combination of these. All existing land use data, such as those available in local planning departments, should be fully utilized, provided they are adequate for the needs of the transportation study. Where a new field survey is necessary, it should be jointly undertaken by local and regional planning agencies working with the transportation study group.

(4) The land use data should be collected in a form that will allow their use for a variety of public and private planning purposes, including study of the area's land use characteristics and growth trends. To accomplish these objectives, it is desirable to list land use by specific activity rather than to classify land use into general categories. The Standard Land Use Coding Manual is a valuable guide for identifying and coding detailed land use activities. Adherence to the system recommended in the manual will maintain detailed data in a form that will permit its application to specific needs of various users as they arise.

(5) A forecast of land uses within an area - their type, intensity, and geographic distribution - is based on the long range goals and objectives of the individual communities, the broad planning concepts for the entire urban region, and the market forces inherent in private and public capital expenditures. The land use forecast is essential for determining future travel movements and transportation needs for the entire urban area.

(6) Land use forecasts provide the information needed for the travel forecasts. Normally these will be required for both a short-range period of about five years, as well as for a long-range period of about 20 years, to correspond to capital improvement program periods. In some cases, the forecasting process itself, as well as the requirements of the other phases of the study, may warrant forecasts for each five-year increment of the 20-year forecast period. The estimates of the future distribution of land use activities should permit periodic comparison of forecasts to actual development.

(7) The specific information to be provided by the forecast will vary considerably with the size of the study area. As a minimum, however, the following estimates should be provided for each zone, for each forecast period:

(a) Population

(b) Number of occupied dwelling units

(c) Net residential density

(d) Automobile ownership

(e) Total employment

(f) Retail employment or other indicators of the amount of retail activity such as retail sales, or floor area in retail use

(g) Amount of nonresidential land by major land use categories

(h) Amount of vacant land

d. Transportation facilities including those for mass transportation

(1) The inventory of the existing transportation system should provide complete information on the physical features and operational characteristics of each link of the major street system (freeways, expressways, arterials, and collectors). Among the physical features of roads and streets that should be inventoried are right-of-way width, roadway width, roadway type and condition, parking regulations, and traffic control regulations and devices. Other items that may be included are listed in the National Committee on Urban Transportation (NCUT) Procedure Manual 5A, Inventory of the Physical Street System. The items to be included should fit the specific needs of each urban area study.

(2) Operational characteristics needed include the capacities of the roadways and the major street intersections; the volume of traffic

on each segment of the system; the speed of traffic movement at different volumes; and the frequency and location of accidents. NCUT Procedure Manual 3E, Maintaining Accident Records, may be used as a guide for making accident studies.

(3) The street capacity study should utilize the techniques described in the Highway Capacity Manual.[1/] Data from the physical street inventory will be required for the capacity study.

(4) Procedures for measuring traffic volumes are provided in the Bureau of Public Roads Guide for Traffic Volume Counting Manual. Traffic volumes should be measured at a sufficient number of points to describe the traffic being carried by the major street system. Both the annual average daily traffic (ADT) and the morning and evening peak-hour volumes are needed. The total traffic counting program should also include manual and machine counts at selected cordons and screenlines, turning movement counts at important intersections, and vehicle classification counts at points representative of conditions on different types of roads and streets.

(5) A functional classification should be made of the existing street system using the procedures given in the National Committee on Urban Transportation Procedure Manual 1A, Determining Street Use, and 7A, Standards for Street Facilities and Services, and in Highway Planning Technical Report, Number 3.[2/]

(6) The inventory of the transportation system should also provide information on public transportation. Transit studies should provide data which will be useful in estimating the choice of mode of travel in the forecast year. The following data should be collected for each transit line by period of the day for an average weekday for the survey year:

(a) Transit route map by type of service and transit vehicle

(b) Passenger counts at the CBD cordon or maximum load points

(c) Passenger fare distribution by single or combination fares

(d) Operating data, consisting of:

1 Revenue vehicle-miles

2 Average seating capacity by type of service and standard regulations

3 Route-miles and terminal-to-terminal running time

4 Headways

5 Regularity of service as measured by ability to maintain schedules

(7) Often additional information is needed on the character of trips within the central business district. To collect this information, "on and off" counts may be necessary.

e. Travel patterns

(1) Urban transportation planning requires specific knowledge of the current travel patterns of the area being studied. Information is needed on the location and amount of travel by the various modes, and on such trip characteristics as purpose, length, and time of day. Although similarities in certain trip characteristics are found in urban areas, there is enough evidence of differences to require these data be obtained in each area.

(2) For urban areas of over 50,000 population, it is considered essential that the base year travel for all types of trips (zone-to-zone, zone-to-external station, and external station-to-external station) by automobile, transit, truck, and taxi be established by purpose and time of day. This is usually done by conducting a comprehensive origin-destination survey.

(3) The zones into which the planning area is subdivided for analysis purposes should be sufficiently small to permit the transportation planning process to develop traffic assignments meaningful at the arterial street level. Normally there should not be more than 10,000 future trip ends (origins and destinations) in any zone.

(4) The zones should not be so large that the assigned volumes would be unrealistic, and the shape of each zone should be suitable

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1/ Highway Capacity Manual, 1965. Special Report 87 by the Highway Research Board, Washington, D.C.

2/ "Developing and Analyzing Functionally Classified Networks Utilizing Traffic Simulation-Phase 1," Highway Planning Technical Report, Number 3, Bureau of Public Roads, February 1966.

for representation by a point. Preferably zones should be square and of homogenious land uses. Consideration should also be given to the compatibility of the selected zones with census tracts.

(5) It is recommended that the travel information be obtained by an external cordon and a home interview survey using methods described in the Bureau of Public Roads Home Interview Procedure Manual. Sample rates suggested in the manual are recommended. Other survey techniques are acceptable, provided adequate sampling procedures are used and adequate controls are established for expansion purposes.

(6) In preparing estimates of travel patterns for the forecast year, it is recommended that mathematical models be used. The models must be calibrated against the current travel patterns and, if results are to be acceptable, procedures used should meet the following tests:

(a) The total number of person trips, auto driver trips, transit trips, truck trips, taxi trips, and work trips are in reasonable agreement with controls independently established.

(b) Trip generation relationships used for estimating travel should be in reasonable agreement with actual relationships in the area being studied, and the trip length (time) frequency distribution and mean trip length values of estimated and actual travel should be similar.

(c) The number of work trips estimated to be destined for selected employment areas within the city should compare with actual employment data within reasonable limits.

(d) The distribution of trips crossing preselected screenlines should compare within acceptable limits with actual volumes measured on facilities crossing these lines. These screenlines should be placed so as to measure different portions of the travel pattern. The check should be made for vehicle trips and for transit person trips where the latter are significant.

(e) Weighting factors used to calibrate the travel distribution formula must be correlated logically with characteristics of the area where applied. The use of factors merely to provide a "match" between estimated and actual travel patterns will not be considered acceptable.

(f) The assignment of the synthesized vehicular travel to the current highway network should produce a reasonable comparison with actual ground counts and vehicle-miles of travel.

(7) Estimates must be made of the future travel by all modes. Zone-to-zone, zone-to-external station, and external station-to-external station traffic should be forecast, and it is recommended that estimates be made of the peak period travel as well as of the total 24-hour travel. Estimates of the future travel that will be generated from and attracted to each zone should be based on relationships between travel, land use, and socio-economic characteristics found significant in the base year analysis.

f. Terminal and transfer facilities

(1) The effectiveness and efficiency of the urban transportation system is dependent to a large measure upon the availability of adequate terminal and transfer facilities at trip origins and destinations.

(2) An inventory of the present supply of parking space should be made as outlined in Procedure Manuals 3C, Conducting a Limited Parking Study, or 3D, Conducting a Comprehensive Parking Study, of the National Committee on Urban Transportation. The inventory should cover parking facilities, both at the curb and in offstreet garages and lots. Also, information on the location and use of truck loading and unloading facilities is needed. In addition, information on parking rates and on the average time, by hour of the day, required to park and unpark vehicles in offstreet facilities will be useful in estimating choice of mode of future trips.

(3) Special studies should be made of selected major terminal facilities serving substantial volumes of commercial traffic whether located inside or outside of critical areas. The study of these facilities will provide information useful for determining future parking, loading, and unloading requirements for similar terminals which may be required in the future.

(4) Estimates should be made of the future requirements for both parking and commercial loading and unloading facilities in critical areas. These estimates should be developed, utilizing the travel forecasts (as discussed under "Travel patterns") by trip purpose and time of day. Parking estimates should be consistent with forecasts of vehicle trip ends in a given area. The feasibility of satisfying future parking demands should be determined considering their compatibility with existing and future land uses, ordinances, codes, other regulations, and their effects upon the operational characteristics of freeways, expressways, arterial streets, and transit networks.

g. Traffic control features

(1) Many engineering techniques for increasing the traffic capability of facilities are known. Some involve, for the most part, relatively minor expenditures and little or no construction. The traffic control features analysis in the transportation planning process should include studies leading to recommendations for the fullest utilization of the capacity of existing expressways and arterial streets. Traffic engineering techniques include improved signal operations, turning movement controls, parking restrictions, unbalanced lane operations, one-way street operations, through street systems, uniformity of signs, signals, and markings, simple channelization, street lighting, and pedestrian controls.

(2) These techniques are more fully defined in the report Increasing the Traffic-Carrying Capability of Urban Arterial Streets, by the Bureau of Public Roads, and available from the U.S. Government Printing Office.

h. Zoning ordinances, subdivision regulations, building codes, etc.

(1) Zoning ordinances, setback requirements, subdivision controls, building codes, tax policies, and the official map, together with licensing powers, are basic techniques used to control community development. The forecasting of future land uses is subject to considerable error at best, but lacking adequate controls, "planned" development will in most instances have little chance of becoming reality. Further, land use controls are important to protect the traffic-carrying capability of, and public investment in, transportation facilities.

(2) Existing State, regional, and local laws and ordinances should be analyzed in the light of the objectives for future development and deficiencies carefully documented. The review of such laws and ordinances should be made as they are initiated or approved.

i. Financial resources

(1) One of the more critical factors influencing programs devised to implement an urban transportation system plan is the availability of adequate financial resources. In addition to determining the transportation system needs for a study area and the estimated costs to fulfill these needs, the transportation planning process should also survey and analyze the ability of the affected governmental units in the study area to finance the needed improvements.

(2) A financial resources study should begin with an inventory of the sources and amounts of revenue available for the construction, maintenance, and operation of transportation facilities in the study area over the past 5 to 10 years. In addition, a historical record of the disbursements actually made for transportation purposes over the same period of time should be obtained.

(3) It is also well to determine the overall financial condition of the local governmental units involved by analyzing the trend of their funded debt. This trend, along with any laws specifying debt limitations or taxing restrictions may help indicate to what extent the governmental units within the study area will be able to contribute to the financing of the area's transportation system.

(4) The next step in the analysis is to prepare estimates of the revenues expected to be available for transportation improvements within the study area. For many urban areas, estimates are usually available for short-time periods.

j. Social and community value factors

(1) In the development of transportation plans, it is important that full consideration be given to the possibility of utilizing these facilities to raise the standards of the urban area. Open space, parks, and recreational facilities are important environmental factors. It is becoming more and more important in our transportation planning that additional attention be given not only to the preservation and enhancement of existing open space, but also to the providing of additional open space in anticipation of future development. Similarly, conscientious attention should be given to the preservation of historical sites and buildings.

(2) In planning the location of transportation facilities, every effort should be made to avoid areas subject to flooding. If an encroachment of flood plain appears necessary, an evaluation should be made of the flood potential on the highway and the effect of the highway construction on the flood hazard.

(3) Care also should be exercised in selecting locations for new transportation facilities so that neighborhoods are not disrupted. To the maximum extent possible, cutting through school districts, fire station districts, etc., should be avoided and the appearance of the facility from the viewpoint of the motorist, the pedestrian and the nearby residents should be considered.

* 6. CITIZEN PARTICIPATION

a. Citizen participation is needed at all stages of the planning process beginning with the spelling out of goals and objectives and extending through the choice between alternatives for both land use and transportation. Lines of communication should be established and maintained which will not only seek the views of those affected by proposed programs but demonstrate to them in ways they understand that their views receive full and sincere consideration. This may well require the aggressive use of newspapers, radio and television in addition to public meetings and organized citizens committees.

b. The organization responsible for the planning process shall make provisions to inform the public completely, to obtain the public views, and to use these views in developing transportation plans.

R. R. Bartelsmeyer
Director of Public Roads

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

POLICY AND PROCEDURE MEMORANDUM

Transmittal 257

90-1

September 7, 1972

ENVIRONMENTAL IMPACT AND RELATED STATEMENTS

Par.

1. PURPOSE

To provide guidelines to highway departments and Federal Highway Administration (FHWA) field offices to assure that the human environment is carefully considered and national environmental goals are met when developing federally financed highway improvements.

2. AUTHORITY

a. Section 4332(2)(C), Title 42, United States Code (popularly known as Section 102 (2)(C) of the National Environmental Policy Act of 1969, P. L. 91-190) states in part that all agencies of the Federal Government shall:

"include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible officials on ---

(i) the environmental impact of the proposed action,

(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,

(iii) alternatives to the proposed action,

(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement and the comments and views of the appropriate Federal, State, and local agencies which are authorized to develop and enforce environmental standards, shall accompany the proposal through the existing agency review processes."

b. Section 1653(f), Title 49, United States Code 1/, Section 138, Title 23, United States Code, (hereafter referred to as "Section 4(f)") permits the Secretary of Transportation to approve a program or project which requires the use of publicly owned land from a park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance as determined by the Federal, State or local officials having jurisdiction thereof, or land from an historic site of national, State, or local significance as so determined by such officials (hereafter "Section 4(f) land") only if:

(1) there is no feasible and prudent alternative to the use of such land, and

(2) such program includes all possible planning to minimize harm to the Section 4(f) land resulting from such use.

1/ Section 1653(f), Title 49, United States Code, is identical to Sections 138, Title 23, United States Code, and 4(f) of the Department of Transportation Act as amended by Section 18 of the Federal-Aid Highway Act of 1968."

c. Section 470f, Title 16, United States Code 2/ provides that the head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in the National Register. The head of any such Federal agency shall afford the Advisory Council on Historic Preservation a reasonable opportunity to comment with regard to such undertaking.

d. Section 1857h-7, Title 42, United States Code (popularly known as Section 309 of the Clean Air Act of 1970 - P.L. 91-604), provides:

"(a) The Administrator (Environmental Protection Agency) shall review and comment in writing on the environmental impact of any matter relating to duties and responsibilities granted pursuant to this chapter or other provisions of the authority of the Administrator, contained in any . . . (2) newly authorized Federal projects for construction and any major Federal agency action (other than a project for construction) to which Section 4332 (2)(C) of this Title applies . . . Such written comment shall be made public at the conclusion of any such review."

3. DEFINITIONS (as used in this memorandum)

a. Highway Section - a substantial length of highway between logical termini (major crossroads, population centers, major traffic generators, or similar major highway control elements) as normally included in a single location study. (See paragraph 6).

b. Federal Agency Decision - FHWA approval of the location of a highway improvement (approval of the design; right-of-way acquisition; the plans, specifications, and estimates (PS&E) or authorization to construct a project within the highway section is not, for the purposes of this memorandum, an additional agency decision.)

(1) A decision for a change in either the highway location or design (See paragraph 6p) of sufficient magnitude to require a public hearing or which significantly alters the environmental impact discussed in the statement previously filed would be the basis to prepare and process a supplemental environmental statement.

c. Environmental Statement - a written statement containing an assessment of the anticipated significant beneficial and detrimental effects which the agency decision may have upon the quality of the human environment for the purposes of:

(1) assuring that careful attention is given to environmental matters,

(2) providing a vehicle for implementing all applicable environmental requirements, and

(3) to insure that the environmental impact is taken into account in the agency decision.

d. Negative Declaration - a written document in support of a determination that, should the proposed highway section improvement be constructed, the anticipated effects upon the human environment will not be significant.

e. Highway Agency (HA) - the agency with the primary responsibility for initiating and carrying forward the planning, design, and construction of the highway. For highway sections financed with Federal-aid highway funds, the HA will normally be the appropriate State highway department. For highway sections financed with other funds, such as Forest highways, Park roads, etc., the HA will be the appropriate Federal or State highway agency.

f. Human Environment - the aggregate of all external conditions and influences (aesthetic, ecological, biological, cultural, social, economic, historical, etc.) that affect the life of a human.

4. POLICY

It is a national policy that all Federal agencies promote efforts for improving the relationship between man and his environment and to make special effort for preserving the natural beauty of the countryside and public park and recreational lands, wildlife and waterfowl refuges, and historic sites. It is also national policy that Federal agencies consult with other

2/ This requirement is also found in Section 106 of the National Historic Preservation Act of 1966.

appropriate Federal, State, and local agencies; assess in detail the potential environmental impact in order that adverse effects are avoided and environmental quality is restored or enhanced, to the fullest extent practicable; and utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and decisionmaking which may have an impact on man's environment. The environmental assessments include the broad range of both beneficial and detrimental effects.

5. APPLICATION

a. An environmental statement or combined environmental/Section 4(f) statement or negative declaration, whichever is appropriate, shall be prepared and processed in accordance with this memorandum for each highway section proposed for construction with funds administered by the FHWA, including in appropriate cases any section financed from funds transferred to the FHWA from other agencies, which receives or received design approval (see paragraph 5e) on or after February 1, 1971.

b. An environmental statement or combined environmental/Section 4(f) statement, whichever is appropriate, shall be prepared and processed in accordance with this memorandum for each highway section which received design approval on or after January 1, 1970, and before February 1, 1971, and which constitutes a major action significantly affecting the environment (see Appendix F, paragraphs 2 and 3) if, in the judgment of the FHWA division engineer, implementation of the National Environmental Policy Act to the fullest extent possible requires preparation and processing of an environmental statement. In making his judgment the FHWA division engineer should consider, in addition to the written reassessment prepared by the HA (see paragraph 5c) for each such highway section, the status of the design; right-of-way acquisition including demolition of improvements within the right-of-way; number of families already rehoused and those yet to be rehoused; construction scheduling; benefits to accrue from the proposed highway improvement; significant impacts; and measures to minimize any adverse impacts of the highway.

c. Highway sections which received design approval on or after January 1, 1970, and before February 1, 1971, that are classed as a major action are to be reassessed by the HA in consultation with the FHWA division engineer or his representative. The written reassessment should consider if the highway plans were developed in such a manner as to minimize adverse environmental consequences.

d. A highway section involving an historic site included in the National Register of Historic Places shall be coordinated with the State Liaison Officer for Historic Preservation and representatives of the Office of Archeology and Preservation of the National Park Service, Department of the Interior, as set forth in Appendix A. The provisions of 16 U.S.C. 470f, should be satisfied before submitting the final environment/Section 4(f) statement to the FHWA (see paragraph 2c).

e. Design approval may be regarded as having been obtained prior to February 1, 1971, if any one of the following conditions is satisfied.

(1) Prior to the issuance of revised PPM 20-8 dated January 14, 1969, procedures of the FHWA did not require a HA to receive a formally documented FHWA design approval before undertaking right-of-way acquisition and/or preparation of the plans, specifications and estimate (PS&E). Therefore, design approval was that action or series of actions by which the FHWA indicated to the HA that the essential elements of the highway as set out in PPM 20-8 were satisfactory or acceptable for preparation of the PS&E. Such actions may have consisted of review and comments upon preliminary plans, schematic drawings, design studies, layouts or reports or unconditional approval to acquire all the right-of-way for a project. The HA shall identify those projects (both Federal-aid and non-Federal-aid) in the above category which it anticipates Federal-aid funds will be requested for a subsequent stage and furnish the FHWA division engineer for his concurrence a letter similar to Appendix B of this memorandum citing the document(s) or action(s) which it believes are equivalent to design approval. The FHWA division engineer's concurrence in the HA's determination will serve as verification that the previous actions or approvals were in effect design approval.

(2) Written approval by the FHWA of the design submitted in accordance with PPM 20-8.

(3) Similar type evidence that an official of the State highway department approved the design prior to February 1, 1971, for projects administered under an approved Secondary Road Plan. Such evidence need not be submitted to the FHWA division engineer for concurrence but shall be available in the State highway department's files.

f. A single environmental statement, or negative declaration, is applicable to jointly planned undertakings between the FHWA and other Federal agencies. The lead agency will

be responsible for the appropriate document (i.e. the HA for a proposed highway section that also requires a U.S. Coast Guard action for bridge clearance over navigable water). Highway section proposals submitted for an FHWA approval shall include a copy of the statement prepared and processed by another Federal agency or reference to such a statement previously furnished to FHWA. A highway section in this category will generally be of the nature where there is no actual transfer of funds to the FHWA and the FHWA acts only in the capacity of a review agency or consultant advisor to the other Federal agency.

g. An environmental statement shall not be required in connection with any highway section that is urgently needed because of a national emergency, a disaster, a catastrophic failure, or similar great urgency. The HA may request and the FHWA may exempt such urgently needed highway sections from the environmental statement requirement after consultation with the Office of the Secretary of Transportation and the Council on Environmental Quality.

6. PROCEDURES (See Appendixes C and D for a flow chart)

The highway section included in an environmental statement should be as long as practicable to permit consideration of environmental matters on a broad scope. Piecemealing proposed highway improvements in separate environmental statements should be avoided. If possible, the highway section should be of substantial length that would normally be included in a multi-year highway improvement program.

a. A proposal to develop or improve a highway section should be coordinated in the early stages with appropriate local, State, and Federal agencies (PPM 20-8 and IM 50-1-70). Initiation of coordination at the beginning of the location study will assist in identifying natural and cultural areas of significance, agency and public concerns, and help in determining the need for and preparation of an environmental statement. Existing coordination mechanisms, such as above cited, (public hearings, Office of Management and Budget Circular No. A-95 reviews) and other established procedures for coordination should be used to the greatest extent practicable.

(1) The information obtained through coordination and the highway studies (technical, engineering, social, economic, and environmental, as appropriate) should be used in making an assessment of the potential environmental impact (both beneficial and detrimental) of the proposed action. This environmental assessment should be accomplished utilizing a systematic, interdisciplinary approach to assure that proper consideration is given to the identification and evaluation of potential environmental impacts. This environmental assessment, performed in consultation with FHWA for all projects, will provide the basis for determining whether an environmental statement will be prepared.

(2) The environmental statement and/or Section 4(f) statement may be a part of the study report for the highway location, if desired; however, if included in the study report, the statements are to be consolidated in one place in the report and in a form that can be reproduced separate from the report.

b. A draft environmental statement shall be prepared only for those sections for which the HA or division engineer determine that construction and operation of the highway section will have a significant impact upon the environment. Appendix F lists guidelines to assist in determining significant impacts associated with the construction and operation of a highway. In addition, the HA or FHWA may wish to consult other local, State and Federal agencies with specific expertise when determining the significance of an impact. The draft environmental impact statements, including Section 4(f) information, shall be prepared and circulated by the HA in cooperation with the FHWA during the location study. A representative of the FHWA division office shall indicate his review and adoption of the draft environmental statement by signing and dating before it is released for comment.

c. The draft environmental statement, including necessary Section 4(f) information when required, is to be circulated by the HA to the appropriate agencies (see Appendix G) for comment, and made available to the public not later than the first required notice of location public hearing (30 to 40 days before date of hearing) or notice of opportunity for a public hearing as set out in PPM 20-8 (see Appendix H). If the highway section qualifies for exemption from public hearing procedures, a draft environmental statement, if required, (including necessary Section 4(f) information) is to be prepared and circulated for comment, and made available to the public as early as practicable. Regardless of whether or not there is a public hearing, a notice should be placed in the newspaper advising the public that the draft environmental impact statement is going to be circulated for review and comment. The notice should include information on where the statement is available for review and how copies can be obtained.

(1) The HA shall request a determination of significance from the Section 4(f) lands agency and include the letter requesting such determination and the determination, if received, as exhibits to the draft statement.

(2) An additional location or design public hearing will not be required for the sole purpose of presenting and receiving comments on the draft environmental statement for those projects which were processed in accordance with procedures in effect at the time.

(3) The comments received on the draft statement are to be made available at the HA office for public review.

d. The HA shall furnish 17 copies of each draft environmental statement to the FHWA division engineer who shall distribute 16 copies to the following recipients:

FHWA Regional Office	1
FHWA (to the Office of Environmental Policy, HEV-10)	2
DOT's Office of Environment and Urban Systems (TEU)	3
Council on Environmental Quality (CEQ) . . . . . 722 Jackson Place, NW. Washington, D.C. 20006	10

NOTE: The HA is to make distribution to all other required local, State, and Federal agencies (see Appendix G).

e. The HA shall announce the availability of and briefly explain the draft environmental statement or negative declaration in its presentation at the location public hearing (or at the highway design hearing when a draft statement is prepared and circulated in conjunction with design studies).

f. The HA may establish a date not less than 30 days from the date of transmittal, plus a normal time for mail to reach and be returned from the recipient, for return of the comments, except 45 days plus mailing time shall be allowed for the Environmental Protection Agency (EPA) to comment. The FHWA division engineer should include a similar time period (30 days plus mailing) for return of comments in his distribution correspondence. If an agency does not respond by the indicated date, the HA may assume the agency had no comments. The HA should endeavor to grant requests for a time extension of up to 15 days for return of comments unless a 45 day review period, plus mailing time, was originally established.

g. Draft environmental statements shall be available for review by the public at the HA headquarters; the State, regional, and metropolitan clearinghouses; the FHWA division, regional, and headquarters offices; and at the appropriate public hearings. The HA and FHWA may charge non-governmental individuals and organizations for copies of environmental statements in accordance with established fee schedules.

(1) The public and private organizations may also order copies of draft and final environmental statements from the National Technical Information Service, U. S. Department of Commerce (See Appendix I).

h. Similar procedures apply to highway sections which have received location approval but did not have design approval before February 1, 1971. In such instances the environmental statement, combination environmental/Section 4(f) statement or negative declaration shall be prepared and processed during the design studies. The final environmental statement or negative declaration for such highway sections shall be furnished to FHWA before or with the request for design approval. If the design public hearing was held prior to the issuance of this memorandum, an additional design public hearing will not be required for the sole purpose of presenting and receiving comments on the draft statement. All other requirements for circulation for comment and availability to the public will apply.

i. The HA shall prepare a final environmental statement or combined environmental/4(f) statement in consultation with the FHWA for each project for which it prepared and circulated a draft environmental statement following the format in Appendix E. The final statement shall include a copy of all comments received and the consideration and disposition of environmental comments raised at the public hearing and on the draft statement. The correspondence included in the final statement should contain marginal notes indicating where in the statement the comments are treated or discussed (any other suitable method of showing where the comments are discussed is satisfactory).

j. FHWA review and adoption of the final environmental statement shall be the responsibility of the Regional Federal Highway Administrator. The Regional Federal Highway Administrator shall indicate his adoption by signature thereon, and forward 15 signed copies of the final statement to the Office of Environmental Policy, HEV-10. A copy of a signed statement may also be returned to the originating office.. The HA and FHWA may, upon request of an individual or organization, make a copy of the statement as signed by

the Regional Federal Highway Administrator available, but such document should be marked "NOT Official - Subject to Approval by U. S. Department of Transportation."

k. FHWA's Office of Environmental Policy shall be responsible for:

(1) submitting copies of the final statement to TEU,

(2) forwarding copies of the final statement to CEQ,

(3) informing the Regional Federal Highway Administrator when CEQ is furnished copies of the final statement.

l. The Regional Federal Highway Administrator shall be responsible for:

(1) assuring that a copy of the final statement as sent to CEQ is furnished the HA; the appropriate State, regional, and metropolitan clearinghouses; and the FHWA division, and

(2) assuring that the following time limitations have expired prior to FHWA's approval of the location (or design if the location was previously approved).

(a) Ninety (90) days have expired since the draft environmental statement was circulated for comment, sent to CEQ (postmarked), and made available to the public as described in 6g.

(b) Thirty (30) days have expired since the final environmental statement was made available to both CEQ and the public. This time period may run concurrently with the ninety (90) day period.

m. Negative declarations shall be prepared by the HA when the anticipated impact of construction and operation of a highway section is determined to be not significant (not of major importance). Appendix F outlines several types of highway section improvements which may warrant a negative declaration; however, each highway section should be evaluated to determine whether its impact is significant. Their purpose is to include in the written record evidence that the highway section was evaluated and a determination made that it would have no significant effect upon the quality of human environment. They should be based on the information developed during the highway study and coordination with local, State, and Federal agencies.

n. A negative declaration need not be circulated for comment, but its availability should be included in the notice of the public hearing or opportunity for public hearing. The FHWA division engineer shall concur in the negative declaration before he approves the location or design, whichever is appropriate.

o. The HA or FHWA may, based upon comments at the public hearing, rescind a negative declaration and prepare and process an environmental statement if in their judgment significant impacts have been identified which were not previously considered. It would not be necessary in such instances to hold additional public hearings for the purpose of presenting the draft environmental statement.

p. The HA shall include reference to the previous environmental statement, negative declaration, or reassessment when requesting design approval, authorization for right-of-way acquisition, approval of PS&E, and construction authorization.

(1) A new environmental statement, or a supplemental statement will be necessary for a highway section when the proposal being processed introduces a new or changed environmental effect of significance to the quality of environment. The FHWA may also request an environmental statement for a highway section which received design approval before February 1, 1971, when in its judgment changes in the highway subsequent to the reassessment (see paragraph 5c) introduce significantly different impacts on the environment.

(2) A supplemental statement is to be processed in the same manner as a new environmental statement. Where the need for a supplemental statement results from the use of Section 4(f) land only, a Section 4(f) statement may be prepared in lieu of a supplemental environmental statement and coordinated with the Departments of the Interior and Housing and Urban Development by the HA. The coordinated Section 4(f) statement, with comments and suggestions and the HA disposition of same, shall be furnished to the FHWA for appropriate processing.

q. State highway agencies operating in accordance with a Secondary Road Plan approved pursuant to 23 U. S. C. 117 have the responsibility for approval of most Federal-aid project actions, including the highway location and design. However, environmental statements and negative declarations require Federal approvals as indicated in this memorandum.

R. R. Bartelsmeyer
Acting Federal Highway Administrator

Attachments

PROCEDURES FOR HISTORIC PRESERVATION

1. The provisions of 16 U.S.C. 470(f) require that all proposed highway sections that are federally assisted be developed with consideration to effected districts, sites, buildings, structures, or objects that are included in the National Register for Historic Preservation. This authority derives from Section 106 of the National Historic Preservation Act. Procedures for compliance have been implemented by the Advisory Council on Historic Preservation, and the National Park Service, Department of the Interior, as follows:

a. At the earliest stage of planning or consideration of any undertakings carried out, licensed, or financially assisted by the Federal Government, the HA and FHWA should follow these steps:

(1) Consult the National Register of Historic Places to determine if a National Register property is involved in the undertaking. The National Register is maintained by the Office of Archeology and Historic Preservation, National Park Service, and monthly addenda are published in the FEDERAL REGISTER.

(2) Apply the "Criteria for Effect." If there is no effect, the undertaking may proceed. (See paragraph 3 of this appendix.) This determination of effect should be made by the HA in consultation with the division engineer, the State Liaison Office and a representative of the Office of Archeology and Historic Preservation. If there is documented agreement that a project will not have an effect on the National Register Historic Site, no further review is required under the National Historic Preservation Act.

(3) If there is an effect, the HA in consultation with the FHWA division engineer, State Liaison Officer 1/ and a representative of the Office of Archeology and Historic Preservation of the National Park Service shall:

(a) Determine if the effect is adverse--if not, the undertaking may proceed;

(b) Upon finding an adverse effect, select and agree upon a prudent and feasible alternative to remove the adverse effect, in which case the undertaking may proceed;

(c) Failing to find and agree upon an alternative, recommend all possible planning to minimize the adverse effect and delay further processing of the undertaking pending the receipt of comments from the Advisory Council.

(4) Provide written notice affording the Advisory Council an opportunity to comment upon doubtful or unresolved situations of adverse effect and upon request submit a report of the undertaking.

2. If there is a finding of adverse effect, the proposed highway section is to be processed in accordance with these procedures and the Office of Environmental Policy should be notified and kept informed of further developments. If it becomes necessary to provide a written notice affording the Advisory Council on Historic Preservation an opportunity to comment in doubtful or unresolved situations of adverse effect, the Office of Environmental Policy will act as the coordinating element for the FHWA.

3. Criteria for Effect

a. A federally financed or licensed undertaking shall be considered to have an effect on a National Register listing (districts, sites, buildings, structures, and objects, including their settings) when any condition of the undertaking creates a change in the quality of the historical, architectural, archeological, or cultural character that qualified the property under the National Register criteria for listing in the National Register.

b. Generally, adverse effect occurs under conditions which include but are not limited to:

(1) Destruction or alteration of all or part of a property;

(2) Isolation from or alteration of its surrounding environment;

(3) Introduction of visual, audible, or atmospheric elements that are out of character with the property and its setting (i.e. introduction of a new highway or a higher type functional highway, such as a freeway for an arterial, into the environment of a historic site).

1/ State Liaison Officers are appointed by the Governors to be responsible for State activities under the National Historic Preservation Act.

EXAMPLE OF DESIGN CONCURRENCE LETTER

Mr. John Doe
Division Engineer
Federal Highway Administration

Dear Mr. Doe:

The initial phases (PE - ROW) for the proposed improvement of State Route 35 between State Route 64 and Springfield were accomplished without Federal-aid highway funds. Preliminary drawings, which included the elements outlined in paragraph 10b(1)(b) of PPM 20-8, were commented upon in your letters of August 18, 1966, and September 12, 1967. We have, therefore, determined that your review and comments were equivalent to design approval of this project.

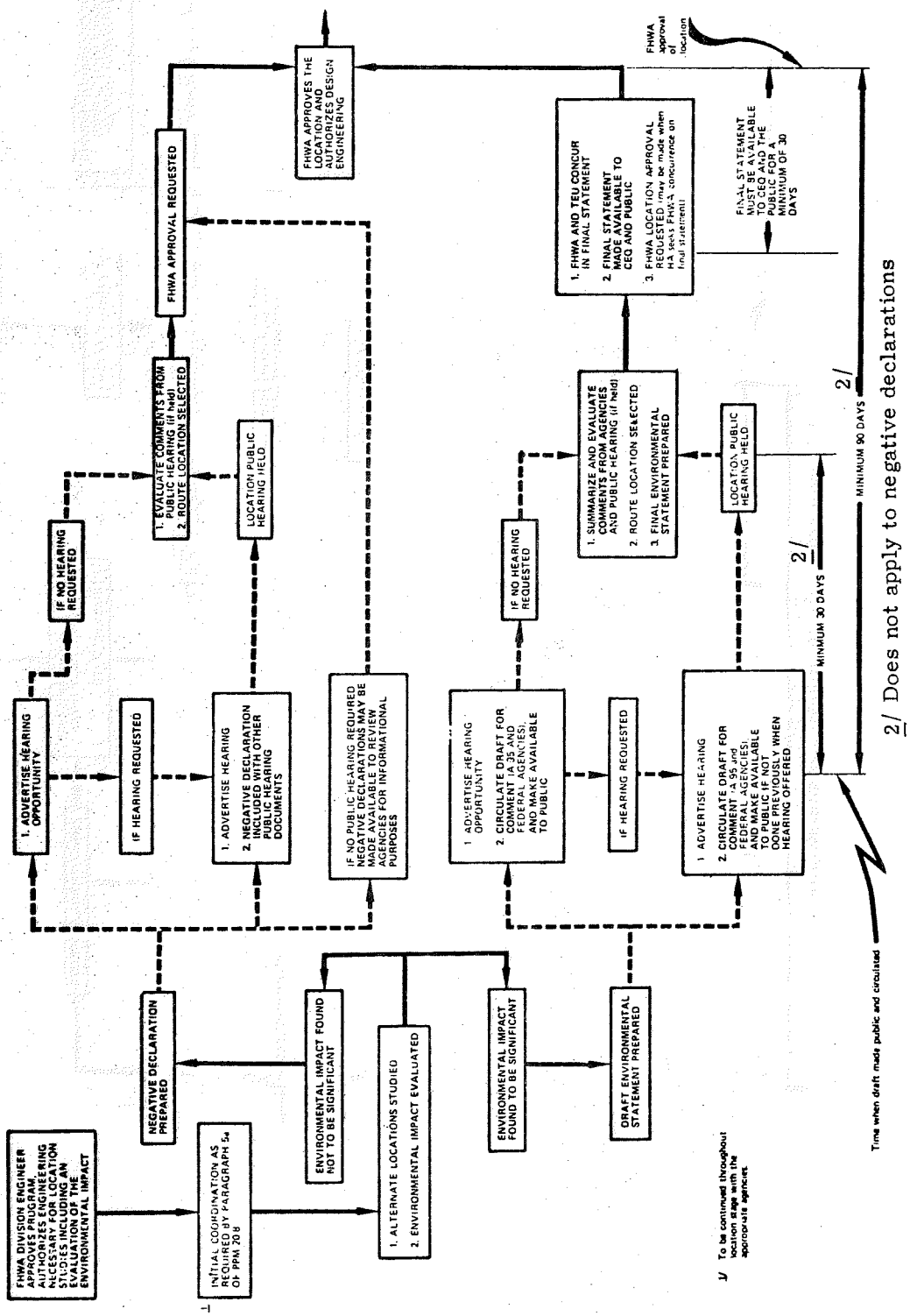
For your convenience we have included below a space for your concurrence in our determination.

Sincerely,

Endorsement to (SHD)

Concur _____ Date _____

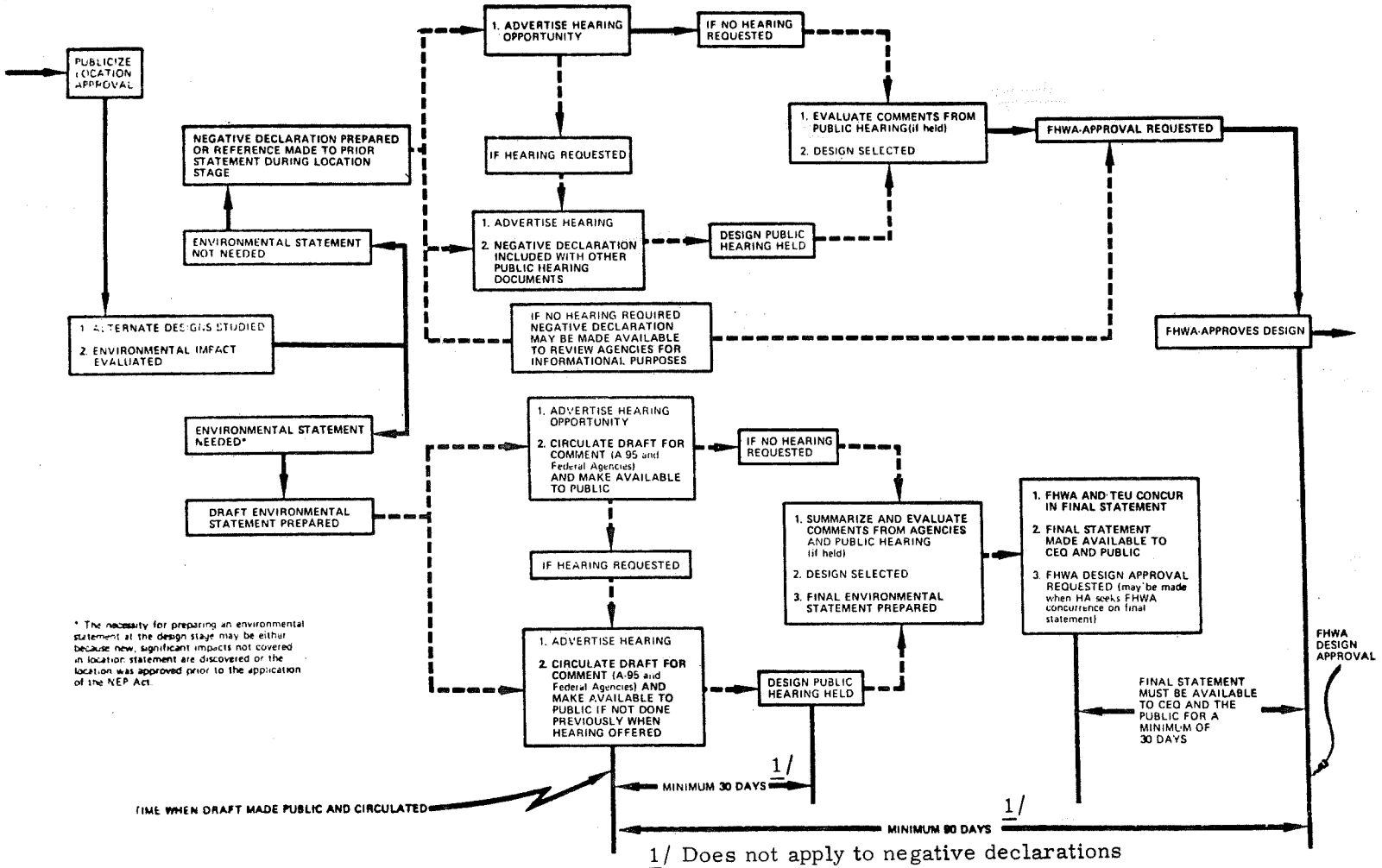
APPENDIX C
LOCATION STAGE FLOW CHART



2/ Does not apply to negative declarations

APPENDIX D

DESIGN STAGE FLOW CHART



1/ Does not apply to negative declarations

ENVIRONMENTAL STATEMENTS - CONTENTS AND FORMAT

1. Environmental statements and combination environmental/Section 4(f) statements (draft and final) shall have a title page similar to the examples attached to this Appendix and numbered by the method shown.

2. The following sections, as a minimum, are to be covered in environmental statements:

a. A description of the proposed highway improvement and its surroundings. The description should include the following type information: type of facility; length; termini; traffic data; right-of-way width (including existing ROW); lengths on existing and new location; major design features such as number of lanes, access control, location of bridges and interchanges, etc.; a general description of the surrounding terrain, existing land use and proposed land use (a map preferable), and other existing environmental features; existing highway facilities including their deficiencies; the need for the proposal; the benefits to the State, region, and community; an estimate of when the proposal will be constructed; and the current status of the proposal with a brief historical resume. Inventory of economic factors such as employment, taxes, property values, etc., should be included as appropriate. The description should also include any involvement with Section 4(f) land (Paragraph 3 of this Appendix). A vicintiy map(s) shall be furnished which will show the proposed highway section and its relationship to surrounding natural and cultural features such as towns, lakes, streams, mountains, historic sites, landmarks, institutions, developed areas, principal roads and highways and similar features that are pertinent to a highway study. Detailed maps, sketches, pictures, and other visual exhibits should be used to show specific environmental involvements as necessary. Maps and layouts of the proposed highway/Section 4(f) land involvement should be sufficiently detailed to give a layman reviewer a reasonable understanding of the highway impact and proposed measures to minimize harm.

b. The probable impact of the proposed development or improvement. The evaluation and discussion should specifically emphasize significant beneficial and detrimental environmental consequences upon the State or region or community, as appropriate, of building a new highway into or through an area, or modernizing the existing highway by upgrading and/or relocation.

(1) This section, for instance, would discuss and evaluate the broad impacts on the area or region such as the problems relating to anticipated increase in urbanization or the probable impact of displacing people (if these are significant elements of the highway proposal). Efforts to minimize impact should also be discussed in broad items. For example, measures necessary to insure proper rehousing should be discussed and other differences of the alternatives. The significant environmental impacts of alternative locations and, as appropriate, designs, including a "do nothing" alternative is a proper subject for discussion under "Alternatives" paragraph 2d of this Appendix.

(2) Impacts upon the narrow band (i.e., about 1000 feet) adjacent to the highway may be included when significant to the whole of the region or community. However, the discussions under this section should address the probable significant impacts of the highway proposal (as opposed to individual alternative locations or designs) which might include the probable impact upon such elements, factors, and features listed in paragraph 3 of Appendix F.

c. Any probable adverse environmental effects which cannot be avoided should the proposal be implemented such as water or air pollution, effect upon Section 4(f) land, damage to life systems, urban congestion, threats to health or other consequences adverse to the environment identified under paragraph 2b of this Appendix. Adverse effects should include those which cannot be reduced in severity and those which can be reduced (but not eliminated) to an acceptable level unless the reduction is a result of a different location in which case it should be included in the discussion of alternatives (paragraph 2d of this Appendix).

d. Alternatives: The locations and/or designs studied in detail by the HA are to be described (narratively and with maps and other visual aids, as necessary) and the probable beneficial and/or adverse effects of each alternate (including a do-nothing alternative) identified to the extent practicable consistent with the scale of the proposed highway improvement and significance of the impact. The exploration of alternatives should include an objective evaluation and analysis of estimated costs (social and transportation), engineering factors, transportation requirements, and environmental consequences. The description of alternatives will include information, as appropriate, similar to that suggested in paragraph 2a of this Appendix. The discussion of environmental impacts will include more detailed impacts for each alternative that the broad environmental consequences for the corridor identified in paragraphs 2 b and 2c of this Appendix. The draft environmental statement should indicate that all alternatives are under consideration and that a specific alternative will be

selected by the HA following the public hearing. The final environmental statement will be prepared for the selected alternative. Unless the final statement is included in the location study report (design report when prepared and circulated during design study), the final statement should include a brief discussion of the data supporting the selected alternative. This section should also include a discussion of alternatives to the use of Section 4(f) lands.

e. The relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity. The short-term uses should be evaluated (construction, changes in traffic patterns, the taking of natural features such as trees, etc., and man-made features such as homes, churches, etc.) as compared to the long-term effects (foreseen changes in land use resulting from the highway improvement or other similarly related items that may either limit or expand land use, affect water, air, wildlife, etc., and other environmental factors.)

f. Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented. Highways require use of natural resources such as forest or agricultural land, however, these are generally not in sufficient quantity to be significant. The improved access and transportation afforded by a highway may generate other related actions that could reach major proportion and which would be difficult to rescind. An example would be a highway improvement which provides access to a nonaccessible area, acting as a catalyst for industrial, commercial, or residential development of the area.

g. Where unavoidable adverse environmental effects are encountered, planning and measures taken and proposed to minimize harm should be identified. These include procedural and standard measures which are required by standard specifications or standard operating procedures such as erosion control, stream pollution prevention, borrow pit screening or rehabilitation, fencing, relocation of people and businesses, land acquisition procedures, joint development, etc. Measures unique to a specific project should be discussed in detail. Examples of such would be depressing an urban highway to minimize audio and visual effects, providing buffer zones for esthetic purposes, replacement of parklands, etc.

h. Final statements shall incorporate all comments received on the draft (including environmental comments contained in the public hearing transcript) along with a discussion of the comments and suggestions. The HA shall describe its disposition of the comments and suggestions (e. g., revisions to the proposed development or improvement to overcome anticipated problems or objections; reasons why specific comments and suggestions could not be accepted; factors of overriding importance prohibiting the incorporation of suggestions, etc.). This section may be added at the end of the review process in the final text of the environmental statement.

i. Measures to minimize harm to Section 4(f) lands should be included under a separate paragraph even though discussed elsewhere in the final statement.

j. Each draft and final environmental statement shall include a summary sheet. (See paragraph 4 of this Appendix.)

3. The following information, when pertinent and available, should be included in the combination environmental/Section 4(f) statements. (See paragraphs 2a, 2c, 2d, and 2i of this Appendix.) To the extent practicable, this information should be included in the draft to initiate the necessary interagency review.

a. The description of the project (see paragraph 2a of this Appendix) shall include information about the Section 4(f) land in sufficient detail to permit those not acquainted with the project to have an understanding of the relationship between the highway and park and the extent of the impact, such as:

(1) Size (acres or square feet) and location (maps or other exhibits such as photographs, slides, sketches, etc., as appropriate).

(2) Type (recreation, historic, etc)

(3) Available activities (fishing, swimming, golf, etc.).

(4) Facilities existing and planned (description and location of ball diamonds, tennis courts, etc.

(5) Usage (approximate number of users for each activity if such figures are available).

(6) Patronage (local, regional, and national).

(7) Relationship to other similarly used lands in the vicinity.

(8) Access (both pedestrian and vehicular).

(9) Ownership (city, county, State, etc.)

(10) If applicable, deed restrictions or reversionary clauses.

(11) The determination of significance by the Federal, State, or local officials having jurisdiction of the Section 4(f) land.

(12) Unusual characteristics of the Section 4(f) land (flooding problems, terrain conditions, or other features that either reduce or enhance the value of portions of the area).

(13) Consistency of location, type of activity, and use of the Section 4(f) land with community goals, objectives, and land use planning.

(14) If applicable, prior use of State or Federal funds for acquisition or development of the Section 4(f) land.

b. A description of the manner in which the highway will affect the Section 4(f) land (include within paragraph 2c of this Appendix) such as:

(1) The location and amount of land (acres or square feet) to be used by the highway.

(2) A detailed map or drawing of sufficient scale to discern the essential elements of the highway/Section 4(f) land involvement.

(3) The facilities affected.

(4) The probable increase or decrease in physical effects on the Section 4(f) land users (noise, fumes, etc.).

(5) The effect upon pedestrian and vehicular access to the Section 4(f) land.

c. A specific statement (with supporting reasons) that there is no feasible and prudent alternative. (Include in discussion of alternatives, paragraph 2d of this Appendix.)

d. Information to demonstrate that all possible planning to minimize harm is or will be included in the highway proposal. (See paragraph 2i of this Appendix.) Such information should include:

(1) The agency responsible for furnishing the highway right-of-way.

(2) Provisions for compensating or replacing the Section 4(f) land and improvements thereon, including the status of any agreements. (Include agreed upon compensation, replacement acreages, and type land, etc., when known.)

(3) Highway design features developed to enhance the Section 4(f) land or to lessen or eliminate adverse effects (improving or restoring existing pedestrian or vehicular access, landscaping, esthetic treatment, etc.).

(4) Coordination of highway construction to permit orderly transition and continual usage of Section 4(f) land facilities (new facilities constructed and available for use prior to demolishing existing facilities, moving of facilities during off-season, etc.).

e. Evidence that the provisions of 16 U.S.C. 470(f) (Section 106 of the Historic Preservation Act of 1966) have been satisfied when National Register Properties are involved.

4. Summary Sheet

a. Check Appropriate Box(es)

Administrative Action

( ) Draft ( ) Final

( ) Environmental Statement

( ) Combination Environmental/ Section 4(f) Statement

b. Brief description of highway improvement indicating route, termini, length, county, city, State, etc., as appropriate.

c. Summary of environmental impacts (identified in paragraphs 2b and 2c of this Appendix).

d. Summarize alternatives considered (as described under paragraph 2d of this Appendix).

e. (1) (For draft statements) List Federal, State, and local agencies and other organizations from which comments are being requested.

(2) (For final statements) List Federal, State, and local agencies and other organizations from which comments were requested and identify those that returned written comments.

f. Date draft statement was made available to CEQ (date mailed) which will also be considered the date the draft statement was made available to the public.

Report Number FHWA-State-EIS-Year-Number (Sequential for each State)-Draft or Final
(Example: FHWA-Az -EIS-72-01-D)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
AND

Appropriate Highway Agency

DRAFT
FINAL

Whichever is appropriate

Environmental Statement or Environmental/Section 4(f) Statement

ADMINISTRATIVE ACTION

for

(Brief Description of Highway Improvement: Route, Termini, County, City, etc.)

THIS HIGHWAY IMPROVEMENT IS PROPOSED FOR FUNDING UNDER TITLE 23, UNITED STATES CODE. THIS STATEMENT FOR THE IMPROVEMENT WAS DEVELOPED IN CONSULTATION WITH THE FEDERAL HIGHWAY ADMINISTRATION AND IS SUBMITTED PURSUANT TO:

42 U.S.C. 4332(2)(C)
and
(when applicable)
49 U.S.C. 1653(f)

FINAL ONLY

Date

Signature of Appropriate Highway Agency Official

Reserve 3" x 3" space for DOT approval

APPROVED AND ADOPTED BY THE FHWA

Date

Signature of FHWA Reviewing Official

The number placed at the top left-hand corner of the title page on all draft and final environmental statements is as follows:

FHWA-Az-EIS-72-01-D or F

FHWA - Name of Federal agency
Az - Name of State (cannot exceed four characters)
EIS - Environmental Impact Statement
72 - Year draft statement was prepared
01 - Sequential number of statement for each calendar year
D or F - D-designates the statement as the draft statement
F-designates the statement as the final statement

The first draft statement prepared each year is numbered one (1) and other draft statements prepared in that same year are numbered sequentially in accordance with the date prepared. Final statements carry the same number based upon the date the draft was prepared.

EVALUATING HIGHWAY SECTION ENVIRONMENTAL EFFECTS

1. Draft and final environmental statements should be prepared and processed in accordance with the procedures required by this memorandum for all highway sections falling under one or more of the following three categories:

a. Highway sections where organized opposition has occurred or is anticipated to occur.

b. Highway sections significantly affecting historic or conservation lands (public or private) independant of whether they are Section 4(f) cases.

c. Highway sections which are classed as major actions and are also likely to significantly affect the quality of the human environment. This category requires a two-step analysis. First, it must be determined if the proposed highway section is a major action (paragraph 2 of this Appendix); secondly, the significance of the effects upon the human environment must be determined (paragraph 3 of this Appendix).

2. The following should be used to determine whether a proposal to construct or improve a highway section is a major action.

a. Highway sections entirely or generally on new location.

b. Major up-grading of an existing highway section resulting in a functional characteristic change (e. g., a local road becoming an arterial highway). Such changes usually result by adding lanes, interchanges, access control, medians, etc., and require extensive right-of-way acquisition and construction (grading, base, paving, bridges, etc.) which have the potential of significantly affecting the human environment.

3. Any of the following highway sections should ordinarily be considered as significantly affecting the quality of the human environment.

a. A highway section that is likely to have a significantly adverse impact on natural ecological, cultural, or scenic resources of national, State or local significance.

b. A highway section that is likely to be highly controversial regarding relocation housing resources.

c. A highway section that divides or disrupts an established community or disrupts orderly, planned development or is inconsistent with plans or goals that have been adopted by the community in which the project is located or causes increased congestion.

d. A highway section which involves inconsistency with any national, State or local standard relating to the environment; has a significantly detrimental impact on air or water quality or on ambient noise levels for adjoining areas; involves a possibility of contamination of a public water supply system; or affects ground water, flooding, erosion or sedimentation.

The comments, suggestions and information obtained during the highway studies, including the coordination and evaluation required by paragraphs 5a and 4c of PPM 20-8 will in most instances supply the information necessary to make the determination required above.

4. Negative declarations shall be prepared for all highway sections which are not major actions and for highway sections, even though classed as major actions, where it is determined there is no significant effect upon the quality of human environment as a result of the study and early coordination. Highway improvements of the following types are not likely to have significant impacts upon the environment:

a. Signing, marking, signalization and railroad protective devices.

b. Acquisition of scenic easements,

c. Modernization of an existing highway by resurfacing; less than lane width widening; adding shoulders; auxillary lanes for localized purposes (weaving, climbing, speed-changing, etc.)

d. Correcting substandard curves,

e. Reconstruction of existing stream crossings where stream channels are not affected,

f. Reconstruction of existing highway/highway or highway/railroad separations,

g. Reconstruction of existing intersections including channelization,

h. Reconstruction of existing roadbed (existing curb to curb for urban cross sections), including minor widening, shoulders and additional right-of-way,

i. Rural two-lane highways on new or existing location which are found to be generally environmentally acceptable to the public and local, State, and Federal officials.

INTER-AGENCY REVIEW OF DRAFT ENVIRONMENTAL STATEMENTS

1. Draft environmental statements are to be circulated to appropriate Federal, State, and local agencies. State and local agency review comments will be solicited from State, regional, and metropolitan clearinghouses. Federal agencies are those having jurisdiction by law or special expertise with respect to any environmental impact involved.

2. Careful attention should be given to the selection of agencies having jurisdiction by law or special expertise in an anticipated impact to avoid the unnecessary solicitation of agencies. Appendix II to CEQ's guidelines published in the April 23, 1971, Federal Register (copy attached) lists agencies with their respective areas of jurisdiction by law or special expertise. A majority of the areas are the concern of the Departments of Housing and Urban Development, the Interior, Agriculture, and the Environmental Protection Agency.

3. The Department of Housing and Urban Development (HUD) generally deals with urban aspects of historic and archeological sites, flood plains and watersheds, parks, forests, outdoor recreation, noise, congestion, low-income neighborhoods, and urban planning. Draft environmental statements in urban areas and all draft combination environmental/Section 4(f) statements should be furnished to HUD for comment.

a. It is desirable to develop a written understanding with the regional office of HUD about which rural statements it wishes to review. HUD has delegated review of environmental statements to its regional offices.

4. The Department of the Interior has an interest in several environmental impact areas, including energy transmission, land use, historic and archeological sites, flood plains and watersheds, parks, forests, outdoor recreation, erosion, urban congestion, low-income neighborhoods, urban planning, rivers, canals, stream control, and wildlife. It may be advantageous to include the Department of the Interior in the mailing list for all draft environmental statements.

5. The Department of Agriculture is oriented towards rural matters. It has an interest in rural electrical energy transmission, toxins, pesticides, herbicides, land use, flood plains, watersheds, parks, forests, outdoor recreation, erosion, rivers, canals, stream control, and wildlife. Accordingly, it should be furnished draft statements on rural highway sections.

6. The Environmental Protection Agency (EPA) has jurisdiction by law or expertise in all major Federal actions significantly affecting the environment. The EPA should be furnished five copies of all draft statements. Comments should be solicited under both Section 102(2)(C) of the National Environmental Policy Act and Section 309 of the Clean Air Act of 1970.

7. The Department of the Army, Office of the Chief of Engineers (Corps of Engineers), is interested in land use and management (coastal areas and navigable waters), flood plains and watersheds, soil and plant life, transportation (harbors, channels, inlets, inland waterways, locks and dams, dredged spoil disposal), and water quality and pollution control. Early coordination is the best guide in determining if the Corps of Engineers has an interest in commenting on the highway section. This early coordination will establish which projects will subsequently require a Corps of Engineers permit.

8. Other agencies, that should be consulted and furnished a copy of the draft environmental statements for comment, will usually be identified during early coordination.

9. Other administrations within the Department of Transportation will need to be solicited for comment in some cases such as a proposed highway section with a bridge over navigable water that requires a permit from the Coast Guard. The administration from which comments are sought (preferably local offices) may be contacted directly by the HA.

10. In its letter asking an agency for comment on any anticipated environmental impacts for which the agency has jurisdiction by law or special expertise, it is suggested that the HA identify which impacts described in the statement the HA would specifically wish discussed. The Federal agency should be asked to comment on each alternative and, if it desires, state a preference and reasons therefor. When the HA places a time limit on the commenting period, the Federal agencies are to be advised at the time comments are solicited and should be informed that if no comments are received within that time period, the HA will assume that the review agency has no comments to offer. The HA should clearly indicate where responding agencies are to return their comments.

COUNCIL ON ENVIRONMENTAL QUALITY

STATEMENTS ON PROPOSED FEDERAL ACTIONS AFFECTING THE ENVIRONMENT

Guidelines

APPENDIX II—FEDERAL AGENCIES WITH JURISDICTION BY LAW OR SPECIAL EXPERTISE TO COMMENT ON VARIOUS TYPES OF ENVIRONMENTAL IMPACTS

AIR

Air Quality and Air Pollution Control

Department of Agriculture—
Forest Service (effects on vegetation).
Department of Health, Education, and Welfare (Health aspects).
Environmental Protection Agency—
Air Pollution Control Office.
Department of the Interior—
Bureau of Mines (fossil and gaseous fuel combustion).
Bureau of Sport Fisheries and Wildlife (wildlife).
Department of Transportation—
Assistant Secretary for Systems Development and Technology (auto emissions).
Coast Guard (vessel emissions).
Federal Aviation Administration (aircraft emissions).

Weather Modification

Department of Commerce—
National Oceanic and Atmospheric Administration.
Department of Defense—
Department of the Air Force.
Department of the Interior—
Bureau of Reclamation.

ENERGY

Environmental Aspects of Electric Energy Generation and Transmission

Atomic Energy Commission (nuclear power).
Environmental Protection Agency—
Water Quality Office.
Air Pollution Control Office.
Department of Agriculture—
Rural Electrification Administration (rural areas).
Department of Defense—
Army Corps of Engineers (hydro-facilities).
Federal Power Commission (hydro-facilities and transmission lines).
Department of Housing and Urban Development (urban areas).
Department of the Interior—(facilities on Government lands).

Natural Gas Energy Development, Transmission and Generation

Federal Power Commission (natural gas production, transmission and supply).
Department of the Interior—
Geological Survey.
Bureau of Mines.

HAZARDOUS SUBSTANCES

Toxic Materials

Department of Commerce—
National Oceanic and Atmospheric Administration.
Department of Health, Education and Welfare (Health aspects).
Environmental Protection Agency.
Department of Agriculture—
Agricultural Research Service.
Consumer and Marketing Service.
Department of Defense.
Department of the Interior—
Bureau of Sport Fisheries and Wildlife.

Pesticides

Department of Agriculture—
Agricultural Research Service (biological controls, food and fiber production).
Consumer and Marketing Service.
Forest Service.
Department of Commerce—
National Marine Fisheries Service.
National Oceanic and Atmospheric Administration.
Environmental Protection Agency—
Office of Pesticides.
Department of the Interior—
Bureau of Sport Fisheries and Wildlife (effects on fish and wildlife).
Bureau of Land Management.
Department of Health, Education, and Welfare (Health aspects).

Herbicides

Department of Agriculture—
Agricultural Research Service.
Forest Service.
Environmental Protection Agency—
Office of Pesticides.
Department of Health, Education, and Welfare (Health aspects).
Department of the Interior—
Bureau of Sport Fisheries and Wildlife.
Bureau of Land Management.
Bureau of Reclamation.

Transportation and Handling of Hazardous Materials

Department of Commerce—
Maritime Administration.
National Marine Fisheries Service.
National Oceanic and Atmospheric Administration (impact on marine life).
Department of Defense—
Armed Services Explosive Safety Board.
Army Corps of Engineers (navigable waterways).
Department of Health, Education, and Welfare—
Office of the Surgeon General (Health aspects).
Department of Transportation—
Federal Highway Administration Bureau of Motor Carrier Safety.
Coast Guard.
Federal Railroad Administration.
Federal Aviation Administration.
Assistant Secretary for Systems Development and Technology.
Office of Hazardous Materials.
Office of Pipeline Safety.
Environmental Protection Agecny (hazardous substances).
Atomic Energy Commission (radioactive substances).

LAND USE AND MANAGEMENT

Coastal Areas: Wetlands, Estuaries, Waterfowl Refuges, and Beaches

Department of Agriculture—
Forest Service.
Department of Commerce—
National Marine Fisheries Service (impact on marine life).
National Oceanic and Atmospheric Administration (impact on marine life).
Department of Transportation—
Coast Guard (bridges, navigation).
Department of Defense—
Army Corps of Engineers (beaches, dredge and fill permits, Refuse Act permits).
Department of the Interior—
Bureau of Sport Fisheries and Wildlife.
National Park Service.
U.S. Geological Survey (coastal geology).
Bureau of Outdoor Recreation (beaches).
Department of Agriculture—
Soil Conservation Service (soil stability, hydrology).
Environmental Protection Agency—
Water Quality Office.

Historic and Archeological Sites

Department of the Interior—
National Park Service.
Advisory Council on Historic Preservation.

Department of Housing and Urban Development (urban areas).

Flood Plains and Watersheds

Department of Agriculture—
Agricultural Stabilization and Research Service.
Soil Conservation Service.
Forest Service.
Department of the Interior—
Bureau of Outdoor Recreation.
Bureau of Reclamation.
Bureau of Sport Fisheries and Wildlife.
Bureau of Land Measurement.
U.S. Geological Survey.
Department of Housing and Urban Development (urban areas).
Department of Defense—
Army Corps of Engineers.

Mineral Land Reclamation

Appalachian Regional Commission.
Department of Agriculture—
Forest Service.
Department of the Interior—
Bureau of Mines.
Bureau of Outdoor Recreation.
Bureau of Sport Fisheries and Wildlife.
Bureau of Land Management.
U.S. Geological Survey.
Tennessee Valley Authority.

Parks, Forests, and Outdoor Recreation

Department of Agriculture—
Forest Service.
Soil Conservation Service.
Department of the Interior—
Bureau of Land Management.
National Park Service.
Bureau of Outdoor Recreation.
Bureau of Sport Fisheries and Wildlife.
Department of Defense—
Army Corps of Engineers.
Department of Housing and Urban Development (urban areas).

Soil and Plant Life, Sedimentation, Erosion and Hydrologic Conditions

Department of Agriculture—
Soil Conservation Service.
Agricultural Research Service.
Forest Service.
Department of Defense—
Army Corps of Engineers (dredging, aquatic plants).
Department of Commerce—
National Oceanic and Atmospheric Administration.
Department of the Interior—
Bureau of Land Management.
Bureau of Sport Fisheries and Wildlife.
Geological Survey.
Bureau of Reclamation.

NOISE

Noise Control and Abatement

Department of Health, Education, and Welfare (Health aspects).
Department of Commerce—
National Bureau of Standards.
Department of Transportation—
Assistant Secretary for Systems Development and Technology.
Federal Aviation Administration (Office of Noise Abatement).
Environmental Protection Agency (Office of Noise).
Department of Housing and Urban Development (urban land use aspects, building materials standards).

PHYSIOLOGICAL HEALTH AND HUMAN WELL BEING

Chemical Contamination of Food Products

Department of Agriculture—
Consumer and Marketing Service.
Department of Health, Education, and Welfare (Health aspects).
Environmental Protection Agency—
Office of Pesticides (economic poisons).

Food Additives and Food Sanitation

Department of Health, Education, and Welfare (Health aspects).
Environmental Protection Agency—
Office of Pesticides (economic poisons, e.g., pesticide residues).
Department of Agriculture—
Consumer Marketing Service (meat and poultry products).

Microbiological Contamination

Department of Health, Education, and Welfare (Health aspects).

Radiation and Radiological Health

Department of Commerce—
National Bureau of Standards.
Atomic Energy Commission.
Environmental Protection Agency—
Office of Radiation.
Department of the Interior—
Bureau of Mines (uranium mines)

Sanitation and Waste Systems

Department of Health, Education, and Welfare—(Health aspects).
Department of Defense—
Army Corps of Engineers.
Environmental Protection Agency—
Solid Waste Office.
Water Quality Office.
Department of Transportation—
U.S. Coast Guard (ship sanitation).
Department of the Interior—
Bureau of Mines (mineral waste and recycling, mine acid wastes, urban solid wastes).
Bureau of Land Management (solid wastes on public lands).
Office of Saline Water (demineralization of liquid wastes).

Shellfish Sanitation

Department of Commerce—
National Marine Fisheries Service.
National Oceanic and Atmospheric Administration.
Department of Health, Education, and Welfare (Health aspects).
Environmental Protection Agency—
Office of Water Quality.

TRANSPORTATION

Air Quality

Environmental Protection Agency—
Air Pollution Control Office.
Department of Transportation—
Federal Aviation Administration.
Department of the Interior—
Bureau of Outdoor Recreation.
Bureau of Sport Fisheries and Wildlife.
Department of Commerce—
National Oceanic and Atmospheric Administration (meteorological conditions).

Water Quality

Environmental Protection Agency—
Office of Water Quality.
Department of the Interior—
Bureau of Sport Fisheries and Wildlife.
Department of Commerce—
National Oceanic and Atmospheric Administration (impact on marine life and ocean monitoring).
Department of Defense—
Army Corps of Engineers.
Department of Transportation—
Coast Guard.

URBAN

Congestion in Urban Areas, Housing and Building Displacement

Department of Transportation—
Federal Highway Administration.
tion.
Federal Highway Administration.
Office of Economic Opportunity.
Department of Housing and Urban Development.
Department of the Interior—
Bureau of Outdoor Recreation.

Environmental Effects With Special Impact in Low-Income Neighborhoods

Department of the Interior—
National Park Service.
Office of Economic Opportunity.
Department of Housing and Urban Development (urban areas).
Department of Commerce (economic development areas).
Economic Development Administration.
Department of Transportation—
Urban Mass Transportation Administration.

Rodent Control

Department of Health, Education, and Welfare (Health aspects).
Department of Housing and Urban Development (urban areas).

Urban Planning

Department of Transportation—
Federal Highway Administration
Department of Housing and Urban Development.
Environmental Protection Agency.
Department of the Interior—
Geological Survey.
Bureau of Outdoor Recreation.
Department of Commerce—
Economic Development Administration.

WATER

Water Quality and Water Pollution Control

Department of Agriculture—
Soil Conservation Service.
Forest Service.
Department of the Interior—
Bureau of Reclamation.
Bureau of Land Management.
Bureau of Sports Fisheries and Wildlife.
Bureau of Outdoor Recreation.
Geological Survey.
Office of Saline Water.
Environmental Protection Agency—
Water Quality Office.
Department of Health, Education, and Welfare (Health aspects).
Department of Defense—
Army Corps of Engineers.
Department of the Navy (ship pollution control).
Department of Transportation—
Coast Guard (oil spills, ship sanitation).
Department of Commerce—
National Oceanic and Atmospheric Administration.

Marine Pollution

Department of Commerce—
National Oceanic and Atmospheric Administration.
Department of Transportation—
Coast Guard.
Department of Defense—
Army Corps of Engineers.
Office of Oceanographer of the Navy.

River and Canal Regulation and Stream Channelization

Department of Agriculture—
Soil Conservation Service.
Department of Defense—
Army Corps of Engineers.

Department of the Interior—
Bureau of Reclamation.
Geological Survey.
ureau of Sport Fisheries and Wildlife.
Department of Transportation—
Coast Guard.

WILDLIFE

Environmental Protection Agency.
Department of Agriculture—
Forest Service.
Soil Conservation Service.
Department of the Interior—
Bureau of Sport Fisheries and Wildlife.
Bureau of Land Management.
Bureau of Outdoor Recreation.

FEDERAL AGENCY OFFICES FOR RECEIVING AND COORDINATING COMMENTS UPON ENVIRONMENTAL IMPACT STATEMENTS

ADVISORY COUNCIL ON HISTORIC PRESERVATION

Robert Garvey, Executive Director, Suite 618, 801 19th Street NW., Washington, DC 20006, 343–8607.

DEPARTMENT OF AGRICULTURE

Dr. T. C. Byerly, Office of the Secretary, Washington, D.C., 20350, 388–7803.

APPALACHIAN REGIONAL COMMISSION

Orville H. Lerch, Alternate Federal Co-Chairman, 1666 Connecticut Avenue NW., Washington, DC 20235, 967–4103.

DEPARTMENT OF THE ARMY (CORPS OF ENGINEERS)

Col. J. B. Newman, Executive Director of Civil Works, Office of the Chief of Engineers, Washington, D.C. 20314, 693–7168.

ATOMIC ENERGY COMMISSION

For nonregulatory matters: Joseph J. DiNunno, Director, Office of Environmental Affairs, Washington, D.C. 20545, 973–5391.

For regulatory matters: Christopher L. Henderson, Assistant Director for Regulation, Washington, D.C. 20545, 973–7531.

DEPARTMENT OF COMMERCE

Dr. Sydney R. Galler, Deputy Assistant Secretary for Environmental Affairs, Washington, D.C. 20230, 967–4335.

DEPARTMENT OF DEFENSE

Dr. Louis M. Rousselot, Assistant Secretary for Defense (Health and Environment), Room 3E172, The Pentagon, Washington, DC 20301, 697–2111.

DELAWARE RIVER BASIN COMMISSION

W. Brinton Whitall, Secretary, Post Office Box 360, Trenton, NJ 08603, 609–883–9500.

ENVIRONMENTAL PROTECTION AGENCY

Charles Fabrikant, Director of Impact Statements Office, 1626 K Street NW., Washington, DC 20460, 632–7719.

FEDERAL POWER COMMISSION

Frederick H. Warren, Commission's Advisor on Environmental Quality, 441 G Street NW., Washington, DC 20426, 386–6084.

GENERAL SERVICES ADMINISTRATION

Rod Kreger, Deputy Administrator, General Services Administration–AD, Washington, D.C. 20405, 343–6077.

Alternate contact: Aaron Woloshin, Director, Office of Environmental Affairs, General Services Administration–ADF, 343–4161.

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

Roger O. Egeberg, Assistant Secretary for Health and Science Affairs, HEW North Building, Washington, D.C. 20202, 963–4254.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT[1]

Charles Orlebeke, Deputy Under Secretary, 451 Seventh Street SW., Washington, DC 20410, 755–6960.

Alternate contact: George Wright, Office of the Deputy Under Secretary, 755–8192.

[1] Contact the Deputy Under Secretary with regard to environmental impacts of legislation, policy statements, program regulations and procedures, and precedent-making project decisions. For all other HUD consultation, contact the HUD Regional Administrator in whose jurisdiction the project lies, as follows:

James J. Barry, Regional Administrator I, Attention: Environmental Clearance Officer, Room 405, John F. Kennedy Federal Building, Boston, MA 02203, 617–223–4066.

S. William Green, Regional Administrator II, Attention: Environmental Clearance Officer, 26 Federal Plaza, New York, NY 10007, 212–264–8068.

Warren P. Phelan, Regional Administrator III, Attention: Environmental Clearance Officer, Curtis Building, Sixth and Walnut Street, Philadelphia, PA 19106, 215–597–2560.

Edward H. Baxter, Regional Administrator IV, Attention: Environmental Clearance Officer, Peachtree-Seventh Building, Atlanta, GA 30323, 404–526–5585.

George Vavoulis, Regional Administrator V, Attention: Environmental Clearance Officer, 360 North Michigan Avenue, Chicago, IL 60601, 312–353–5680.

DEPARTMENT OF THE INTERIOR

Jack O. Horton, Deputy Assistant Secretary for Programs, Washington, D.C. 20240, 343–6181.

NATIONAL CAPITAL PLANNING COMMISSION

Charles H. Conrad, Executive Director, Washington, D.C. 20576, 382–1163.

OFFICE OF ECONOMIC OPPORTUNITY

Frank Carlucci, Director, 1200 19th Street, NW., Washington, DC 20506, 254–6000.

SUSQUEHANA RIVER BASIN COMMISSION

Alan J. Summerville, Water Resources Coordinator, Department of Environmental Resources, 105 South Office Building, Harrisburg, PA. 17120, 717–787–2315.

TENNESSEE VALLEY AUTHORITY

Dr. Francis Gartrell, Director of Environmental Research and Development, 720 Edney Building, Chattanooga, TN 37401, 615–755–2002.

DEPARTMENT OF TRANSPORTATION

Herbert F. DeSimone, Assistant Secretary for Environment and Urban Systems, Washington, D.C. 20590, 426–4563.

DEPARTMENT OF TREASURY

Richard E. Slitor, Assistant Director, Office of Tax Analysis, Washington, D.C. 20220, 964–2797.

DEPARTMENT OF STATE

Christian Herter, Jr., Special Assistant to the Secretary for Environmental Affairs, Washington, D.C. 20520, 632–7964.

[FR Doc.71–5705 Filed 4–22–71;8:50 am]

Richard L. Morgan, Regional Administrator VI, Attention: Environmental Clearance Officer, Federal Office Building, 819 Taylor Street, Fort Worth, TX 76102, 817–334–2867.

Harry T. Morley, Jr., Regional Administrator VII, Attention: Environmental Clearance Officer, 911 Walnut Street, Kansas City, MO 64106, 816–374–2661.

Robert C. Rosenheim, Regional Administrator VIII, Attention: Environmental Clearance Officer, Samsonite Building, 1051 South Broadway, Denver, CO 80209, 303–837–4061.

Robert H. Baida, Regional Administrator IX, Attention: Environmental Clearance Officer, 450 Golden Gate Avenue, Post Office Box 36003, San Francisco, CA 94102, 415–556–4752.

Oscar P. Pederson, Regional Administrator X, Attention: Environmental Clearance Officer, Room 226, Arcade Plaza Building, Seattle, WA 98101, 206–583–5415.

Selections from PPM 20-8, dated January 14, 1969, for use with the National Environmental Policy Act guidelines:

5. COORDINATION

a. When a State highway department begins considering the development or improvement of a traffic corridor in a particular area, it shall solicit the views of that State's resources, recreation, and planning agencies, and of those Federal agencies and local public officials and agencies, and public advisory groups which the State highway department knows or believes might be interested in or affected by the development or improvement.

6. HEARING REQUIREMENTS

a. Both a corridor public hearing and a design public hearing must be held, or an opportunity afforded for those hearings, with respect to each Federal-aid highway project that:

(1) Is on a new location; or

(2) Would have a substantially different social, economic or environmental effect; or

(3) Would essentially change the layout or function of connecting roads or streets.

However, with respect to secondary road programs, two hearings are not required on a project covered by paragraph 6(a)(1) or (2) unless it will carry an average of 750 vehicles a day in the year following its completion.

b. A single combined corridor and highway design public hearing must be held, or the opportunity for such a hearing afforded, on all other projects before route location approval, except as provided in paragraph 6.c. below.

c. Hearings are not required for those projects that are solely for such improvements as resurfacing, widening existing lanes, adding auxiliary lanes, replacing existing grade separation structures, installing traffic control devices or similar improvements, unless the project:

(1) Requires the acquisition of additional right-of-way; or

(2) Would have an adverse effect upon abutting real property; or

(3) Would change the layout or function of connecting roads or streets or of the facility being improved.

7. OPPORTUNITY FOR PUBLIC HEARINGS

a. A State may satisfy the requirements for a public hearing by (1) holding a public hearing, or (2) publishing two notices of opportunity for public hearing and holding a public hearing if any written requests for such a hearing are received. The procedure for requesting a public hearing shall be explained in the notice. The deadline for submission of such a request may not be less than 21 days after the date of publication of the first notice of opportunity for public hearing, and no less than 14 days after the date of publication of the second notice of opportunity for public hearing.

8. PUBLIC HEARING PROCEDURES

a. Notice of public hearing:

(1) When a public hearing is to be held a notice of public hearing shall be published at least twice in a newspaper having general circulation in the vicinity of the proposed undertaking. The notice should also be published in any newspaper having a substantial circulation in the area concerned; such as foreign language newspapers and local community newspapers. The first of the required publications shall be from 30 to 40 days before the date of the hearing, and the second shall be from 5 to 12 days before the date of the hearing. The timing of additional publications is optional.

(2) In addition to publishing a formal notice of public hearing, the State highway department shall mail copies of the notice to appropriate news media, the State's resource, recreation, and planning agencies, and appropriate representatives of the Departments of Interior and Housing and Urban Development. The State highway department shall also mail copies to other federal agencies, and local public officials, public advisory groups and agencies who have requested notice of hearing and other groups or agencies who, by nature of their function, interest, or responsibility the highway department knows or believes might be interested in or affected by the proposal.

(3) Each notice of public hearing shall specify the date, time, and place of the hearing and shall contain a description of the proposal. To promote public understanding, the inclusion of a map or other drawing as part of the notice is encouraged. The notice of public hearing shall specify that maps, drawings, and other pertinent information developed by the State highway department and written views received as a result of the coordination outlined in Paragraph 5.a will be available for public inspection and copying and shall specify where this information is available.

PURCHASING COPIES OF ENVIRONMENTAL STATEMENTS

1. A copy of any draft or final environmental statement prepared by a Federal agency can be obtained by sending report number or order number and payment, and return address to the National Technical Information Service, Department of Commerce, Springfield, Virginia 22151.

2. The report number can be obtained from the FHWA or HA while the order number is found at the end of the summary of each statement in the 102 Monitor which is published by the Council on Environmental Quality (722 Jackson Place, NW., Washington, D.C. 20006) and sent to State clearinghouses and other interested agencies.

3. Payment is normally $3.00. Copies over 300 pages require $6.00 and will be noted in the 102 Monitor.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

POLICY AND PROCEDURE MEMORANDUM

Transmittal 293

90.4

June 1, 1973

PROCESS GUIDELINES (SOCIAL, ECONOMIC, AND ENVIRONMENTAL EFFECTS ON HIGHWAY PROJECTS)

Par.
1. Purpose
2. Authority
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9. Identification of Social, Economic, and Environmental Effects
10. Consideration of Alternative Courses of Action
11. Involvement of Other Agencies and the Public
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1. PURPOSE

To provide to Highway Agencies and Federal Highway Administration (FHWA) field offices guidelines for the development of Action Plans to assure that adequate consideration is given to possible social, economic, and environmental effects of proposed highway projects and that the decisions on such projects are made in the best overall public interest. These guidelines identify issues to be considered in reviewing the present organization and processes of a Highway Agency as they relate to social, economic, and environmental considerations, and in developing desirable improvements. The guidelines recognize the unique situation of each State and do not prescribe specific organizations or procedures.

2. AUTHORITY

Section 109(h), Title 23, United States Code, directs the following: "Not later than July 1, 1972, the Secretary, after consultation with appropriate Federal and State officials, shall submit to Congress, and not later than 90 days after such submission, promulgate guidelines designed to assure that possible adverse economic, social, and environmental effects relating to any proposed project on any Federal-aid system have been fully considered in developing such project, and that the final decisions on the project are made in the best overall public interest, taking into consideration the need for fast, safe and efficient transportation, public services, and the costs of eliminating or minimizing such adverse effects and the following:

(1) air, noise, and water pollution;

(2) destruction or disruption of manmade and natural resources, esthetic values, community cohesion and the availability of public facilities and services;

(3) adverse employment effects, and tax and property value losses;

(4) injurious displacement of people, businesses and farms; and

(5) disruption of desirable community and regional growth.

Such guidelines shall apply to all proposed projects with respect to which plans, specifications and estimates are approved by the Secretary after the issuance of such guidelines."

3. DEFINITIONS

a. Highway Agency - The State highway department or State department of transportation with the primary responsibility for initiating and carrying forward the planning, design, and construction of Federal-aid highway projects.

b. Human Environment - The aggregate of all external conditions and influences (esthetic, ecological, biological, cultural, social, economic, historical, etc.) that affect the lives of humans.

c. Environmental Effects - The totality of the effects of a highway project on the human and natural environment.

d. A-95 Clearinghouse - Those agencies and offices in States, metropolitan areas, and multi-State regions which perform the coordination functions called for in Office of Management and Budget (OMB) Circular A-95.

e. The following definitions are provided solely to clarify the terms "system planning," "location," and "design" as they are used in these guidelines. A Highway Agency may choose to use different definitions in responding to these guidelines. If not stated otherwise, the following definitions will be assumed to be applicable.

(1) System Planning - Regional analysis of transportation needs and the identification of transportation corridors.

(2) Location - From the end of system planning through location approval.

(3) Design - From location approval through the approval of plans, specifications, and estimates.

4. POLICY

* a. It is the FHWA's policy that full consideration shall be given to social, economic, and environmental effects throughout the planning of highway projects including system planning, location, and design; that provisions for ensuring such consideration shall be incorporated in the decisionmaking process; and that decisions shall be made in the best overall public interest, taking into consideration the need for fast, safe, and efficient transportation, public services, and the costs of eliminating or minimizing possible adverse social, economic, and environmental effects.

b. The process by which decisions are reached should be such as to merit public confidence in the Highway Agency. To achieve this objective, it is the FHWA's policy that:

(1) Social, economic, and environmental effects be identified and studied early enough to permit analysis and consideration while alternatives are being formulated and evaluated.

(2) Other agencies and the public be involved in project development early enough to influence technical studies and final decisions.

(3) Appropriate consideration be given to reasonable alternatives, including the alternative of not building the project and alternative modes.

* 5. APPLICATION

a. These guidelines apply to highway agencies that propose projects on any Federal-aid system for which plans, specifications, and estimates are approved by the FHWA.

b. These guidelines apply to all processes that will be used for all Federal-aid projects, including Secondary Road Plan projects.

c. These guidelines apply to system planning decisions, including those made in the urban transportation planning process established by 23 U.S.C. 134, and to project decisions made during the location and design stages.

d. These guidelines and the Action Plan shall only be applied to the future development of on-going projects and to future projects. They are not retroactive, and shall not apply to any step or steps taken in the development of a project prior to the time of the implementation of the parts of the Action Plan applicable thereto.

6. PROCEDURES

a. To meet the requirements of these guidelines, each Highway Agency shall develop an Action Plan which describes the organization to be utilized and the processes to be followed in the development of Federal-aid highway projects from initial system planning through design.

b. The Action Plan should be consistent with the requirements of PPM's 20-8, 90-1, and of other applicable directives.

* c. Involvement of the public and local, State, and Federal officials and agencies, including A-95 clearinghouses and the 23 U.S.C. 134 metropolitan transportation planning process agencies, should be sought throughout the development of the Action Plan. Comments should be solicited during the draft and final stage of development of the Action Plan.

* d. The Action Plan submitted to the Governor of the State and to the FHWA should be accompanied by a description of the procedures followed in developing the Action Plan; the steps taken to involve the public and other agencies during development of the Plan; and a summary of comments received on the Plan (including the sources of such comments) and the State's disposition of these comments.

e. The FHWA, through its division and regional offices, will consult with the State in the development of the Action Plan and, within the limits of its resources, will be prepared to assist or advise.

f. The Action Plan shall be submitted to the Governor of the State for review and approval as a means of obtaining a high degree of interagency and intergovernmental coordination. Approval by the Governor may occur prior to submittal of the Action Plan to the FHWA, or, if desired by the State, may occur concurrently with FHWA approval.

g. The Action Plan should be submitted to the FHWA not later than June 15, 1973, for approval. The FHWA will not give location approval on projects after November 1, 1973, unless the Action Plan has been approved.

* h. Review and approval of the Action Plan and revisions thereto will be the responsibility of the Regional Federal Highway Administrator.

7. IMPLEMENTATION AND REVISION

a. The FHWA shall review the States' implementation of their Action Plans at appropriate intervals. The FHWA may withhold location approvals, or such other project approvals as it deems appropriate, if the Action Plan is not being followed.

b. The Action Plan shall be implemented as quickly as feasible. A program of staged implementation for the period up to November 1, 1974, shall be developed and described in the Action Plan. It is expected that all aspects of the Action Plan will be implemented by this date. If the Highway Agency believes that any provision in its Action Plan cannot be implemented prior to November 1, 1974, it shall present a schedule for the implementation of such provisions to the FHWA, which will consider the proposed schedule on a case-by-case basis.

c. If the schedule for implementation set forth in an approved Action Plan is not met, the FHWA may withhold location approvals or such other project approvals as it deems appropriate.

* d. An approved Action Plan may be revised to meet changed circumstances or to permit adoption of improved procedures or assignments of responsibilities.

(1) The Action Plan should identify the assignment of responsibility for developing Action Plan revisions.

(2) Paragraph 6f (Governor's approval) shall apply to revision of the Action Plan; except that the Highway Agency, with the Governor's approval, may include a provision in the Action Plan to allow all or some type of revisions in the approved Action Plan without review and approval by the Governor. In such instances, the Action Plan should include a description of the types of such revisions.

(3) The Highway Agency in consultation with the FHWA shall determine the extent to which involvement of the public and other agencies is necessary in the development of proposed Action Plan revisions.

8. CONTENTS OF THE ACTION PLAN

The Action Plan shall indicate the procedures to be followed in developing highway projects, including organizational structure and assignments of responsibility by the chief administrative officer of the Highway Agency to positions or units within the Agency. Where participation of other agencies or consultants will be utilized, this should be so indicated. The topics to be covered by the Action Plan are outlined in the following paragraphs of this PPM.

9. IDENTIFICATION OF SOCIAL, ECONOMIC, AND ENVIRONMENTAL EFFECTS

* a. Identification of potential social, economic, and environmental effects, both beneficial and adverse, of alternative courses of action should be made as early in the study process as feasible. Timely information on such effects should be produced so that the development and consideration of alternatives and studies can be influenced accordingly. Further, the costs, financial and otherwise, of eliminating or minimizing possible adverse social, economic, and environmental effects should be determined.

b. The Action Plan should identify:

(1) The assignment of responsibility for:

(a) Providing information on social, economic, and environmental effects of alternative courses of action during system planning, location, and design stages.

(b) Controlling the technical quality of social, economic, and environmental studies.

(c) Monitoring current social, economic, and environmental research; monitoring environmental effects of completed projects, where appropriate; and disseminating "state-of-the-art" information within the agency.

(2) Procedures to be followed to ensure that timely information on social, economic, and environmental effects:

(a) Is developed in parallel with alternatives and related engineering data, so that the development and selection of alternatives and other elements of technical studies can be influenced appropriately.

(b) Indicates the manner and extent to which specific groups and interests

are beneficially and/or adversely affected by alternative proposed highway improvements.

(c) Is made available to other agencies and to the public early in studies.

(d) Is developed with participation of staffs of local agencies and interested citizens.

(e) Is developed sufficiently to allow for the estimation of costs, financial or otherwise, of eliminating or minimizing identified adverse effects.

10. CONSIDERATION OF ALTERNATIVE COURSES OF ACTION

a. Alternatives considered should include, where appropriate, alternative types and scales of highway improvements and other transportation modes. The option of no highway improvement should be considered and used as a reference point for determining the beneficial and adverse effects of other alternatives. Appropriate alternatives which might minimize or avoid adverse social, economic, or environmental effects should be studied and described, particularly in terms of impacts upon specific groups and in relationship to 42 U.S.C. 2000d-2000d-4 (Title VI of the Civil Rights Act 1964) and 42 U.S.C. 3601-3619 (Title VIII of the Civil Rights Act of 1968).

b. The Action Plan should identify the assignment of responsibility and the procedures to be followed to ensure that:

(1) The consequences of the no-highway-improvement option are set forth, with data of a level of completeness and of detail consistent with that developed for other alternatives.

(2) A range of alternatives appropriate to the stage is considered at each stage from system studies through final design.

(3) The development of new transportation modes or the improvement of other modes are adequately considered, where appropriate.

(4) Non-transportation components, such as replacement housing, joint development, multiple use of rights-of-way, etc., are in coordination with transportation components.

(5) Suggestions from outside the Agency are given careful consideration.

11. INVOLVEMENT OF OTHER AGENCIES AND THE PUBLIC

a. The President has directed Federal agencies to "develop procedures to insure the fullest practicable provision of timely public information and understanding of Federal plans and programs with environmental impact in order to obtain the views of interested parties" (Executive Order 11514). Policy and Procedure Memorandum 20-8 contains similar provisions. Interested parties should have adequate opportunities to express their views early enough in the study process to influence the course of studies, as well as the actions taken. Information about the existence, status, and results of studies should be made available to the public throughout those studies. The required public hearings (PPM 20-8) should be only one component of the agency's program to obtain public involvement.

b. The Action Plan should identify the assignment of responsibility and procedures to be followed:

(1) To ensure that information is made available to other agencies and the public throughout the duration of project studies, and that such information is as clear and comprehensible as practicable concerning:

(a) The alternatives being considered.

(b) The effects of alternatives, both beneficial and adverse, and the manner and extent to which specific groups are affected.

(c) Right-of-way and relocation assistance programs and relocation plans.

(d) The proposed time schedule of project development, including major points of public interest.

* (2) To clearly indicate the organizational unit or units within the Highway Agency to which the public can go for information outlined in paragraph 11b(1), and for assistance to clarify or interpret the information.

(3) To ensure that interested parties, including local governments and metropolitan, regional, State and Federal agencies, and the public have an opportunity to participate in an open exchange of views throughout the stages of project development.

(4) To select and coordinate procedures, in addition to formal public hearings, to be used to inform and involve the public.

(5) To utilize appropriate agencies with area-wide responsibilities to assist in the coordination of viewpoints during project development.

(6) To involve appropriately the organization which is officially established in urbanized areas of over 50,000 population to conduct continuing, comprehensive, cooperative transportation planning (consistent with PPM 50-9 and IM 50-3-71).

12. SYSTEMATIC INTERDISCIPLINARY APPROACH

a. United States Code, Title 42, Section 4332 (National Environmental Policy Act, 1969) requires that agencies use "a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man's environment."

* b. The Action Plan should indicate procedural arrangements and assignments of responsibilities which will be necessary to meet this requirement, including:

(1) The organization and staffing of interdisciplinary project groups which are systematic and interdisciplinary in approach, including the possible use of consultants and representatives of other State or local agencies.

(2) Recruitment and training of personnel with skills which are appropriate to add on a full-time basis, and the development of appropriate career patterns, including management opportunities.

(3) Additional training for present personnel to enhance their capabilities to work effectively in an interdisciplinary environment.

13. DECISIONMAKING PROCESS

a. The process of reaching various decisions on highway improvement projects should be reviewed to assure that it provides for the appropriate consideration of all economic, social, environmental, and transportation factors as required by these guidelines.

b. The Action Plan should identify:

(1) The processes through which other State and local agencies, government officials, and private groups may contribute to reaching decisions, and the authority, if any, which other agencies or government officials can exercise over decisions.

(2) Different decision processes, if any, for various categories of projects (e.g., Interstate, Primary, Secondary, TOPICS) and for various geographic regions of the State (e.g., in various urban and rural regions) to reflect local differences in the nature of potential environmental effects or in the structure of local governments and institutions.

(3) The processes to be used to obtain participation in decisions by officials of appropriate agencies in other States for those situations in which the potential social, economic, and environmental effects are of interstate concern.

14. INTERRELATION OF SYSTEM AND PROJECT DECISIONS

a. Many significant economic, social, and environmental effects of a proposed project are difficult to anticipate at the system planning stage and become clear only during location and design studies. Conversely many significant environmental effects of a proposed project are set at the system's planning stage. Decisions at the system and project stages shall be made with consideration of their social, economic, environmental, and transportation effects to the extent possible at each stage.

b. The Action Plan should identify:

(1) Procedures to be followed to:

(a) Ensure that potential social, economic, and environmental effects are identified insofar as practicable in system planning studies as well as in later stages of location and design.

(b) Provide for reconsideration of earlier decisions which may be occasioned by results of further study, the availability of additional information, or the passage of time between decisions.

(2) Assignment of responsibility for ensuring that project studies are effectively coordinated with system planning on a continuing basis.

15. LEVELS OF ACTION BY PROJECT CATEGORY

a. A Highway Agency may develop different procedures to be followed depending upon the economic, social, environmental, or transportation significance of the highway section to be developed. Different procedures may also be adopted for various categories of projects, such as TOPICS, new route locations, or secondary roads, and for various regions of the State, such as urban areas or zones of particular environmental significance.

b. The Action Plan should identify:

(1) The categories which the Highway Agency will use to distinguish the different degrees of effort which under normal circumstances will be devoted to various types of projects.

(2) Assignment of responsibility for determining, initially and in periodic reviews, the category of each ongoing highway project.

(3) Procedures to be followed for each category (including identification of impacts, public involvement, decision process, and other issues covered in these guidelines).

16. RESPONSIBILITY FOR IMPLEMENTATION

Assignment of responsibility for implementation of the Action Plan should be identified.

17. FISCAL AND OTHER RESOURCES

a. An important component of the Action Plan is identification of resources of the Highway Agency and of other agencies required to perform the identified procedures and execute the assigned responsibilities.

b. The Action Plan should identify:

(1) The resources of the Highway Agency (in terms of personnel and funding) that will be utilized in implementing and carrying out the Action Plan.

(2) Resources that are available in other agencies to provide necessary information on social, economic, and environmental effects.

(3) Programs for the addition of trained personnel or fiscal or other resources to either the Highway Agency itself or other agencies.

18. CONSISTENCY WITH EXISTING LAWS AND DIRECTIVES

The Highway Agency should identify and report, either in the Action Plan or otherwise, areas where existing Federal and State laws and administrative directives prevent or hamper full compliance with these guidelines. Where appropriate, recommendations and proposed actions to overcome such difficulties should be described.

R. R. Bartelsmeyer
Acting Federal Highway Administrator

APPENDIX C

TITLE	DESCRIPTION
Approval of Plans	Laws of Minnesota-Chapter 312
U.S. Department of Agriculture Forest Service	Memorandum of understanding on procedures related to highways over national forests lands.
Minnesota Department of Natural Resources	Memorandum of understanding regarding highway construction and public interest in fish, wildlife and public recreational resources.
Sample agreement executed with state, regional and local clearinghouses.	
MHD Design Memorandum 72-3	Procedures for identification and reduction of environmental impacts on highway projects.
MHD Design Memorandum 73-2	Availability of information to the public.
Interdisciplinary resource (skills needed and presently utilized).	

LAWS OF MINNESOTA

1969

CHAPTER 312

161.17 APPROVAL OF PLANS. Subdivision 1. [Repealed, 1969 c 312 s 8]

Subd. 2. **Interstate system.** It is hereby declared that construction of the interstate system of highways will vitally affect the future development of the cities, villages, and boroughs through which these routes pass and such municipalities should have an important role in the development of this highway system; that on the other hand the future planning and programming of construction projects over a period of years is necessary to take maximum advantage of federal aid and to build a unified and coordinated interstate system; that excessive delay in local approval of plans for construction of one segment may seriously impede completion of the entire system and adversely affect other municipalities along the interstate routes; that the mutual exchange of information and close cooperation between the department and local governing bodies should be encouraged by improved administrative processes for securing orderly review of plans and the resolution of differences over interstate routes and projects; and that the provisions of subdivision 1 for local approval of trunk highway plans must be modified for the interstate highway system in the light of these various considerations. Before the commissioner proceeds with the preparation of the final plans for the construction, reconstruction, or improvement of any route on the interstate system lying within any city, village, or borough, he shall submit to its governing body preliminary plans covering the route location. The preliminary plans shall be submitted as part of a report containing such supporting data that the commissioner deems helpful to the governing body in appraising the plans submitted.

Any public hearing on location of an interstate route held in compliance with federal requirements shall be held at least one month after submission to the governing body of the report provided for in this subdivision. After the public hearing, when the commissioner has prepared final plans, he shall submit the final plans

to the governing body for approval. If the governing body does not approve the final plans within three months after submitted, the commissioner may refer the plans to (1) the Twin Cities Metropolitan Area Planning Commission, if the project is within the area of its jurisdiction, or (2) the municipal advisory committee on state-aid rules and regulations established under section 162.09, subdivision 2, if the project is elsewhere in the state. If a member of the advisory committee is from the municipality concerned he shall be excused. If the plans are so referred, the commission or committee shall give the commissioner and the governing body ample opportunity to present the case for or against approval of the plans so referred. Not later than three months after such hearings and independent study as it deems desirable, it shall approve or disapprove such plans, making such additional recommendations consistent with state and federal requirements as it deems appropriate, and it shall submit a written report containing its findings and recommendations to the commissioner and the governing body. The commissioner shall not proceed with the proposed construction, reconstruction, or improvement except in accordance with plans approved by the governing body or, if referred to the commission or committee, until after the commission or committee has made its report, and then only after the governing body has had an additional 90 days within which to consider the plans originally submitted or such modified plans as may be submitted to it by the commissioner following the report of the commission or committee. If within such 90-day period, the governing body does not approve the plans submitted to it, and if the commissioner then wishes to proceed with the project according to plans differing substantially from the plans recommended by the commission or committee in its report, he shall, before proceeding with the project, file a written report with the commission or committee and the governing body stating fully his reasons for doing so. Whenever plans are referred to the Twin Cities Metropolitan Area Planning Commission, the commission shall be reimbursed from the trunk highway fund for actual and necessary expenses incurred by the commission in staff work incident to consideration of plans and action thereon by the commission. Whenever plans are referred to the advisory committee on rules and regulations, members of the committee shall be paid their necessary expenses to the same extent and in the same manner as for its duties in considering the commissioner's rules and regulations.

[1957 c 500 art 2 s 17]

161.172 ROUTING AND CONSTRUCTION THROUGH MUNICIPALITIES; DEFINITIONS. Subdivision 1. As used in sections 161.171 to 161.177, the terms defined in this section have the meanings given them.

Subd. 2. "Commissioner" means the commissioner of highways.

Subd. 3. "Governing body of a municipality" means the duly elected council of a municipality.

Subd. 4. "Municipality" means any city, village, or borough within the state.

Subd. 5. "Metropolitan area" includes the counties of Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington, presently under the jurisdiction, for metropolitan area planning and co-ordination purposes, of the metropolitan council established pursuant to chapter 473B, which council is hereinafter referred to as "agency".

Subd. 6. "Layout plan" means a preliminary plan for the proposed construction or reconstruction of a highway facility which plan indicates the proposed locations, elevation, width of lanes, and the type and location of proposed roadway intersections or interchanges together with the approximate location, width, and length of bridges and the approximate right of way limits and access locations, where applicable.

Subd. 7. "Construction plan" means the plan sheets, profiles, typical cross-sections and supplemental drawings which show the location, character, dimensions and details of the highway construction or improvement work to be done, and which are substantially in conformance with the plan which will be submitted to prospective bidders.

[1969 c 912 s 1]

161.173 MUNICIPALITIES TO CONSENT. Except for routes on the interstate system, no state trunk highway or any part thereof, located within the corporate limits of any municipality, shall be constructed or improved without the consent of the governing body of such municipality, unless the procedures prescribed by sections 161.172 to 161.177 shall have been followed by the commissioner of

highways. This section shall not limit the power of the commissioner to regulate traffic or install traffic control devices or other safety devices on trunk highways located within municipalities.

Nothing contained in this section shall be construed as in any way limiting the commissioner's discretion to determine the priority and programming of trunk highway construction.

[1969 c 312 s 2]

161.173 SUBMISSION OF CORRIDOR PROPOSAL. The commissioner shall submit to the governing body of each municipality wherein a trunk highway is proposed to be constructed or improved, and to the governing body of each municipality adjacent to any such municipality, a report containing: a statement of the need for this proposed construction or improvement, a description of alternate routes which were considered by the commissioner and an explanation of the advantages and disadvantages in the selection of any route considered. The report shall also contain for each alternate, the following information: general alignment and profile, approximate points of access, highway classification, an approximate cost estimate, relation to existing and planned regional and local development and to other transportation routes and facilities, and a statement of the expected general effect on present and future use of the property within the corridor. Where a state trunk highway is proposed to be constructed or improved within the metropolitan area, a copy of the report shall also be submitted to the metropolitan council established by chapter 473B, and the metropolitan transit commission established by chapter 473A. In all areas of the state a copy of the report shall be sent to established regional, county and municipal planning commissions in the area affected by the highway project. Not less than 45 nor more than 90 days, or as otherwise mutually agreed, after the report has been submitted, the commissioner shall hold a public hearing on the proposed highway construction or improvement at such time and place within any municipality wherein a portion of the proposed construction or improvement is located, as the commissioner shall determine. Not less than 30 days before the hearing the commissioner shall mail notice thereof to the governing body of each municipality or agency entitled to receive a copy of the report, and shall cause notice of the hearing to be published at least once each week for two successive weeks in a newspaper or newspapers having general circulation in such municipalities, the second publication to be not less than five days before the date of the hearing. The notice shall state the date, time, place and purpose of the hearing, shall describe the proposed or actual general location of the highway to be constructed or improved, and shall state where the report may be inspected prior to the hearing by any interested person. The hearing shall be conducted by the commissioner or his designee, and shall be transcribed and a record thereof mailed to each municipality or agency entitled to receive a copy of the report. All interested persons shall be permitted to present their views on the proposed highway construction or improvement. The hearing may be continued as often as necessary. Within 120 days after the hearing is completed, the governing body of each municipality or agency entitled to receive a copy of the report shall submit to the commissioner its approval or disapproval of the report. If all or any part of the report is disapproved, the municipality or agency shall state the reasons for such disapproval and suggested changes in the report. The commissioner shall, before preparing additional plans for the proposed highway construction or improvement, submit to the governing body of each municipality or agency disapproving the report, a statement accepting or rejecting any suggested changes and the reasons for his acceptance or rejection.

[1969 c 312 s 3]

161.174 SUBMISSION OF LAYOUT PLANS. The commissioner shall submit to the governing body of each municipality wherein a highway is proposed to be constructed or improved, a proposed layout plan for the highway construction or improvement containing: the proposed location, elevation, width and geometrics of the construction or improvement, together with a statement of the reasons therefor. Said plan shall also contain: approximate right-of-way limits; a tentative schedule for right-of-way acquisition, if known; proposed access points; frontage roads; separation structures and interchanges; location of utilities, when known; landscaping, illumination, a tentative construction schedule, if known; and the estimated cost of the construction or improvement. The commissioner shall submit more than one layout plan. Each such plan shall also be submitted to the metropolitan council and

the metropolitan transit commission if any portion of the proposed highway construction or improvement is located in the metropolitan area. In all areas of the state a copy of the layout plan shall be sent to established regional, county and municipal planning commissions in the area affected by the highway project. Not less than 90 nor more than 120 days after said plan has been submitted, the commissioner shall hold a public hearing on the proposed highway construction or improvement at such time and place within any municipality wherein a portion of the construction or improvement is located, as the commissioner shall determine. The hearing shall be noticed, held and conducted in the manner provided in section 161.173, except that the commissioner shall mail notice of the hearing only to those municipalities and agencies entitled to receive a copy of the layout plan. The hearing shall be transcribed and a record thereof made available to each municipality or agency entitled to receive a copy of said plan. Within 180 days after the hearing is completed, the commissioner shall formally adopt a layout plan. A copy of the layout plan as adopted shall be submitted to each municipality or agency entitled to receive a copy of the proposed plan, together with the reasons for any change in the plan as presented at the hearing. Within 120 days after the receipt of the adopted layout plan, each such municipality or agency shall submit to the commissioner its approval or disapproval of the layout plan and the reasons for such disapproval, and proposed alternatives, which may include a recommendation of no highway. Such alternatives submitted by a municipality located within the metropolitan area shall, upon request of the municipality, be reviewed by the metropolitan council in order to determine whether such alternatives are likely to meet minimum federal requirements. The metropolitan council is authorized to provide whatever assistance it deems advisable to the submitting municipality in order to assist it in arriving at an alternative which meets minimum federal requirements. If said plan or any part thereof is not disapproved within such period, the commissioner may proceed to prepare final construction plans and specifications for the highway construction or improvement consistent with the adopted layout plan, and may acquire the necessary right-of-way. If the layout plan or any part thereof is disapproved by any municipality or agency, and the commissioner determines to proceed with the plan without modifications, he shall proceed in the manner provided in section 161.175. If the commissioner determines to proceed with the plan with modifications, he shall submit the modified layout plan to the municipalities and agencies entitled to receive the original layout plan in the manner described above, for approval or disapproval by each such municipality or agency within 60 days after receipt of the modified layout plan. If the modified layout plan or any part thereof is not disapproved by any municipality or agency within 60 days after its receipt, the commissioner may proceed to prepare final construction plans and specifications consistent with the modified layout plan, and may acquire the necessary right-of-way. If the modified plan is disapproved by any municipality and the commissioner determines to proceed with the plan without additional modification, he shall proceed in the manner provided in section 161.175. If the layout plan is disapproved, either as originally submitted or as modified and the commissioner does not act pursuant to section 161.175, within one year from the date of the completion of the hearing, any objecting municipality entitled to receive a copy of the layout plan by virtue of this section may invoke the appellate procedure pursuant to section 161.175, in the same manner as the same might be invoked by the commissioner. In the event the appellate procedure is invoked by either the commissioner or the municipality, the commissioner shall hold a public hearing prior to the appointment of an appeal board. Such hearing shall be limited to the proposed alternative layout plans.

[*1969 c 312 s 4*]

161.175 APPEAL BOARD. Upon the request of the commissioner an appeal board shall be appointed. One of the members shall be selected by the governor and one by the governing body of the municipality involved. If more than one municipality is involved in the proposal the governing bodies of the municipalities involved shall appoint one member. This appointment shall be made by resolutions of the governing bodies of said municipalities which resolutions shall be submitted to the governor. When the governor has received resolutions from a majority of the municipalities involved designating the same person, said person shall be deemed appointed. If a majority of the municipalities which must include all disapproving municipalities have not agreed on the same person and submitted such resolutions to the governor within 60 days after receipt of the commissioner's re-

quest for an appeal board by the commissioner, then the chief justice of the supreme court shall appoint such member upon application by the commissioner upon five days notice to all municipalities involved. The two members so selected shall select a third member. If they cannot agree on a third member within 30 days after the last member was appointed, then the chief justice of the supreme court shall appoint the third member upon application of the commissioner after five days notice to the first two members. The three persons so selected and appointed shall serve as a highway appeal board and as such board they shall choose a chairman from among their members and they shall have such duties and exercise such powers as are hereinafter provided. Members of the board shall not be employees or consultants of any counties, the state of Minnesota, or any of the municipalities involved in the proposal.

[1969 c 312 s 5]

161.176 POWERS OF APPEAL BOARD. Subdivision 1. The highway appeal board shall, on notice to the commissioner and the affected municipalities, hold an appeal hearing on the entire highway layout plan as proposed by the commissioner, and alternates consistent with minimum federal requirements that are presented by the disapproving municipalities. The board shall take into consideration all aspects of the proposal including highway design, economic development, aesthetics, urban and rural planning, agriculture, transportation planning, and all other factors concerning highways. After considering all the evidence in the record, the appeal board shall issue an order approving the commissioner's proposed highway layout plan or one of the alternatives. The appeal board shall be limited in its ruling to any previously submitted layout plan of the commissioner or an alternate presented by the community in response to the commissioner. A copy of the order and a memorandum setting forth the reasons therefor shall be filed with the secretary of state, and shall be mailed to the commissioner and each municipality or agency entitled to receive notice of the layout hearing. If the cost is not substantially in excess of his programmed estimates for projects included in his current construction program the commissioner shall construct the plan approved by the board in accordance with the original program schedule.

Subd. 2. The chairman of the board, or any member thereof, shall have the power to subpoena witnesses; to administer oaths, and to compel the production of books, records, and other evidence. The rules of evidence and procedure for the trial of civil matters shall apply, but such rules may be modified by the board when it is deemed necessary. All evidence, including records and documents in the possession of the board of which it desires to avail itself, shall be offered and made a part of the record in the proceeding, and no other factual information or evidence shall be considered in the determination of the matter. Documentary evidence may be received in the form of copies or excerpts, or by incorporation by reference. The board shall cause a record of all proceedings before it to be made and filed with the chairman of the board. Copies thereof shall be made available upon such terms and conditions as the board shall prescribe.

Subd. 3. Members of the highway appeal board shall receive per diem compensation in the amount of $100 for the time spent in disposing of matters presented to the board. Board members shall be reimbursed for all reasonable expenses incurred by them in the performance of their duties including all costs incurred in connection with any hearing.

Subd. 4. Each party to the appeal shall submit to the appeal board an itemized list of the expenses incurred in preparing its layout plan and presenting the appeal. The appeal board may determine what portion, if any, of a municipality's expenses incurred for the services and disbursements of persons not regularly employed by the municipality will be reimbursed from the trunk highway fund.

[1969 c 312 s 6]

161.177 CONSTRUCTION PLANS AND SPECIFICATIONS. Not less than 120 days before the date specified by the commissioner for the receipt of construction bids for the construction or improvement of any state trunk highway within any municipality, the commissioner shall submit to the governing body of each municipality or agency entitled to receive a copy of the layout plan therefor under section 161.174, a copy of as complete a set of construction plans as is possible which will be issued to prospective bidders. All such plans shall be in accordance with the highway construction or improvement layout plan as approved under section 161.174, or section 161.176. If the construction plans are not in accordance with

the layout plan as approved, the governing body of any municipality or agency entitled to receive notice of the hearing under section 161.174, within 60 days after the receipt of such construction plans, may request the establishment of a highway appeal board as provided in section 161.175, and the highway appeal board shall approve the plans following the procedures outlined in that section, except that action and comment is limited to changes from or additions to the layout. Changes in design capacity required to accommodate increased traffic forecasts shall not be considered deviations from the layout. A copy of any plans prepared to affect any highway construction or improvement plan previously approved by the highway appeal board, shall also be sent to the chairman of the board. If the construction plans are not in accordance with the layout plan approved by the board under section 161.176, the board, within 60 days after the receipt of such plans, shall issue its order directing the commissioner to withhold any advertisement for construction bids until the plans are revised to comply with the plan approved by the board, or are approved by the board. If no municipality or agency requests the establishment of a highway appeal board, or the highway appeal board does not issue its order, as provided above, the commissioner may proceed to advertise for construction bids.

[*1969 c 312 s 7*]

161.18 M.S. 1957 [Repealed, 1959 c 500 art 6 s 13]

161.18 PRIOR EASEMENTS TO VEST IN STATE. When any road or highway, including any city, village, or borough street or portion thereof, is taken over by the state as a trunk highway, the state as to any such road, street, or highway or portion thereof, without compensation paid therefor, shall be vested with all rights, titles, easements, and appurtenances thereto appertaining, held by or vested in any of the political subdivisions of the state prior to the time such road, street, or highway is taken over by the state.

[*1959 c 500 art 2 s 18*]

161.19 M.S. 1957 [Repealed, 1959 c 500 art 6 s 13]

161.19 CERTAIN RECORDS OBTAINED AND FILED. Upon the written request of the commissioner the clerk of any court, the auditor of any county, the clerk of any town, or the recorder or clerk of any city, village, or borough shall furnish a copy of the proceedings, documents, and plats, if any, relating to the establishment of any road or the procuring of the right of way of any road which has been or may be taken over by the state of Minnesota as a trunk highway. The copy shall be filed in the records of the commissioner and shall be prima facie evidence of the existence of the road as described therein. The legal fee for the copies shall be paid from the trunk highway fund.

[*1959 c 500 art 2 s 19*]

161.20 GENERAL POWERS OF THE COMMISSIONER. Subdivision 1. **To carry out the provisions of Constitution.** The commissioner shall carry out the provisions of article XVI, section 2 of the constitution of the state of Minnesota.

Subd. 2. **Acquisition of property; buildings; relocation of corners; agreements with railroads; contracts.** He is authorized to acquire by purchase, gift, or by eminent domain proceedings as provided by law, in fee or such lesser estate as he deems necessary, all lands and properties necessary in laying out, constructing, maintaining, and improving the trunk highway system; to locate, construct, reconstruct, improve, and maintain the trunk highway system; to purchase all road material, machinery, tools, and supplies necessary for the construction, maintenance, and improvement thereof; to construct necessary buildings, or rent or acquire by purchase, gift, or condemnation, grounds, and buildings necessary for the storing and housing of such material, machinery, tools, and supplies or necessary for office space for employees or for providing for driver license examinations; to maintain, repair, or remodel such buildings as may be necessary; to make agreements with any county for the relocation or re-establishment, by the county, of section, quarter section, or meander corners originally established by the United States, when such relocation or re-establishment is necessary in order to write land acquisition descriptions or by reason of the construction, reconstruction, improvement, or maintenance of a trunk highway; to contract on an equitable basis with railroad companies for the installation and reinstallation of safety devices at trunk highway-railroad grade crossings, and for the construction, reconstruction and maintenance of bridges and approaches existing or necessary for the separation of grades at railroad and trunk highway intersections; and in carrying out

MEMORANDUM OF UNDERSTANDING ON PROCEDURES RELATED TO HIGHWAYS OVER NATIONAL FOREST LANDS

This memorandum of understanding by and between the Minnesota State Highway Commission, hereinafter called the "State," and the Regional Forester of the Eastern Region, United States Department of Agriculture Forest Service, hereinafter called the "Forest Service," establishes procedures for coordinating the location, construction, maintenance, signing, access, and other matters related to State Highway use and occupancy of National Forest Lands.

It is mutually recognized that:

The State is responsible for planning, designing, constructing, and perpetuating public highways of the State Highway System for the safety and benefit of the using public, and

The Forest Service is responsible for the protection and multiple use management of National Forest lands and resources for the use and benefit of the people of the United States, and is vitally interested in the development of a public highway system which will integrate with other Forest transportation facilities and provide access for use and enjoyment of the National Forests, and

The State will need authorization to use National Forest lands for highway rights-of-way, waste areas, and material sources for highway construction and maintenance, and

Since many National Forest access, development, and administrative facilities are appurtenant or adjacent to public highways, the Forest Service will need to confer with the State before developing physical improvements which may have an effect on highway administration, and

Lack of advance coordination and full understanding can result in differences which are often costly and time-consuming to reconcile, and

In recognition of the responsibilities, interests and limitations set forth above, the mutual benefits of established procedures to facilitate agreement on specific highway matters on National Forest lands, the State and the Forest Service mutually agree as follows:

I. Highway Location

A. Planning

1. The State will:

a. Keep the Forest Supervisor currently informed of route reconnaissance studies for highway locations involving National Forest land.

b. Give the Forest Supervisor the termini of the proposed project and sufficient other information to determine accurately the affected areas. Provide a reconnaissance map, including contours if possible, showing alternate highway alignments along with such other information as the State prepares for the Location Public Hearing.

c. Meet with the Forest Supervisor to resolve conflicts.

d. Notify the Forest Supervisor of the date, time and place of the Location Public Hearing.

e. Following the Public Hearing notify the Forest Supervisor of the alignment recommended and provide 2 copies of the Location Study Report.

2. The Forest Supervisor will:

a. Upon receiving the State's reconnaissance information, study the area and inform the State of any possible conflicts on each of the proposed alignments at the earliest possible date.

b. Meet with the State as may be requested to resolve conflicts to the greatest extent possible prior to the Location Public Hearing.

c. Provide written comments on the proposed alignments describing the effects upon the Forest, which comments the State may use at the Public Hearing and in the Location Study Report.

d. Attend the Location Public Hearing if considered desirable to do so.

B. Surveys

1. The State will:

a. Notify the Forest Supervisor of Planned Location Surveys across National Forest land.

b. Instruct its employees and/or consultants responsible for field work on ground surveys or controls to contact the District Ranger before starting work.

2. The Forest Service, through the District Ranger, will:

a. Furnish available data and information on such matters as land corner locations, property line boundaries, maps and access routes.

b. Specify requirements and limitations related to clearing survey lines and material source investigations. (Written instructions will be furnished.)

C. Plan Review

1. The State will:

a. Furnish the Forest Supervisor with two sets of preliminary plans to allow for a reasonable length of time for Forest Service review. A reasonable length of time is considered to be a minimum of two weeks.

b. Arrange for a joint field review of the preliminary plan prior to the Design Public Hearing. At this time items such as sediment traps, access points, portions of old road to be obliterated, etc., will be located.

c. Furnish copies of the preliminary plans and other information as the State prepares for the Design Public Hearing, should it be different from that furnished above.

d. Notify the Forest Supervisor of the date, time and place of the Design Public Hearing.

e. Furnish 2 copies of the Design Study Report.

2. The Forest Service will:

a. Within a reasonable time after the preliminary plans review, normally at the joint field review, advise the State of any recommended changes in plans.

b. Provide information on the need for detours for National Forest traffic, maintenance of Forest Service roads used for detours during construction, use of Forest Service roads for work roads, replacement of Forest Service facilities and signs.

c. Provide written comments on the proposed preliminary plans, including suggested planning to minimize harm to the Forest, which comments the State may use at the Public Hearing and in the Design Study Report. These comments should include a statement of concurrence with the preliminary plans and appropriate alternates shown thereon.

d. Attend the Design Public Hearing if considered desirable to do so.

e. As soon as possible after receipt of the Design Study Report, provide information on the designation of merchantable right-of-way timber, areas for storage or disposal of clearing and grubbing debris, and disposal sites for excess excavation; so the State can make proper provisions for these items in the final plans and special provisions.

D. Plan Approval: Approval of final plans and specifications by the Forest Service will be required. Such approval does not relate to highway engineering functional items, but acknowledges that Forest Service requirements relating to service needs and impacts on National Forest lands have been met.

E. Right-of-Way Approval and Authorization:

1. For roads on the Federal Aid System or that will be constructed in whole or in part with Federal Aid Funds:

The State will request the right-of-way from the Bureau of Public Roads. Following their approval of the request, BPR will request the R/W from the Forest Supervisor who will grant right of entry subject to such stipulations as are deemed necessary. The BPR will in turn grant right of entry to the State and initiate preparation of a Highway easement deed. (This procedure is found in detail in the BPR Policy and Procedure Memorandum 80-8.)

2. For other public roads:

The State will present the road plans and specifications in duplicate to the Forest Supervisor with a written request for right-of-way. A USDA easement will be prepared and issued by the Forest Supervisor to the State. This will authorize construction in accord with the approved plan and will contain stipulations which will supplement the approved plans.

3. For non-public roads:

These are access roads needed during the construction of public roads and for such uses as access to gravel or fill sources. The State will submit plans, specifications and a written request for right-of-way to the Forest Supervisor. Such right-of-way will be authorized by a Special Use Permit.

II. Construction and Maintenance

A. Construction

1. The State will:

a. Control construction under its contracts to assure work is in accordance with approved plans and agreements.

b. Have the District Engineer or consultant contact the Forest Supervisor for agreement prior to starting work under changed conditions which develop prior to or during construction, and which alter the land use aspect of approved plans.

c. Have the District Engineer or consultant advise the Forest Supervisor in writing of award of construction contract and furnish the name and title of his on-the-job representative.

2. The Forest Service will:

a. Advise the Forest Supervisor to consult with the District Engineer or his designated representative on matters pertaining to project construction.

b. If the work is not in conformance with the plans and the specifications as approved, the F.S. and D.E. will mutually decide and agree what must be accomplished to complete the project within the terms of the contract.

B. Maintenance

1. The State will: Coordinate with the Forest Supervisor all maintenance activities which involve additional clearing, slash disposal, disposal of slough material, changes in road drainage patterns, materials source and storage, and similar actions which involve National Forest lands outside the granted right-of-way.

2. The Forest Service will:

a. Expedite review and agreement on maintenance items requiring Forest Service concurrence.

b. Assist State maintenance forces with matters related to equipment parking and materials storage, materials sources, designating slough and slide material disposal areas.

c. Advise the State of planned Forest Service activities which may have an impact on highway maintenance.

III. Signing (with granted ROW)

A. Traffic Control Signing

1. Regulatory and warning signs are under the jurisdiction of the State and will be installed and maintained by the State without additional Forest Service authorization.

2. Route markers, all destination signing at junctions of highways, other major road intersections and distance type guide signs along the route shall be installed and maintained by the State.

B. Other Signing

1. Authorization for all other signs, including all signs relating to a use of private land, must be obtained from the Forest Supervisor.

2. The State will be consulted on the location of any sign proposed for erection within the ROW by the Forest Service.

C. General Conditions: Signing shall conform to mounting height, location and lateral placement provisions of the Uniform Manual on Traffic Control Devices.

IV. Access Control

A. All new Forest Service approaches to an existing State or U.S. Highway on National Forest land will require approval by the State prior to construction.

B. The Forest Service will stipulate in its permits to others that approval for road construction over National Forest land within the State right-of-way is contingent upon approval by the State for connections to State and U.S. Highways.

C. Approved permanent new approaches to existing State and U.S. Highways on National Forest land will be at the expense of the Forest Service or its permittee.

V. Conclusion

A. District Engineers and/or the State's consultants and Forest Supervisors are encouraged to consult with each other and to agree on such matters as fall within their scope of responsibility. Matters which require consideration at a higher level should be referred to the State Highway Engineer and the Regional Forester.

B. This memorandum may be amended or supplemented by mutual agreement between the signers or their successors. This memorandum may be terminated by either party through written notice to the others.

C. We have read the foregoing and agree to accept and abide by the procedures herein.

MINNESOTA STATE HIGHWAY DEPARTMENT

Date: _____ By: _____
Commissioner

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

Date: _____ By: _____
Regional Forester

A MEMORANDUM OF UNDERSTANDING BETWEEN THE HIGHWAY DEPARTMENT AND THE DEPARTMENT OF NATURAL RESOURCES(1) OF THE STATE OF MINNESOTA REGARDING HIGHWAY CONSTRUCTION AND PUBLIC INTERESTS IN FISH, WILDLIFE AND PUBLIC RECREATIONAL RESOURCES

The purpose of this Memorandum of Understanding is to establish a regular procedure on all highway construction projects to give due consideration to the needs of fish and wildlife resources and their natural habitat, and also to public recreational resources and other natural resources within areas under jurisdiction or supervision of the Department of Natural Resources.

Recognizing that the Minnesota Department of Highways is responsible for the planning, construction and maintenance of the entire state trunk highway system, and has certain responsibilities for construction on County and Municipal Federal Aid Secondary routes; and also recognizing that the Minnesota Department of Natural Resources has the important task of conserving and promoting the wise use and management of the state's natural resources - its lands, minerals, waters, forests, wildlife, and the operation of the State recreational system; it is therefore appropriate for these two State of Minnesota Departments to express a willingness to do everything possible to avoid or reduce harmful effects on any of these resources resulting from highway construction.

In some instances it may be possible to improve or enhance the value of natural resources in the process of making highway improvements, providing it does not interfere with the highway project purposes or increase highway fund expenditures.

Both State Departments recognize that the objectives of this Memorandum of Understanding can best be realized through close coordination and cooperation

(1) Formerly Department of Conservation.

between their respective staffs during the planning stages of highway construction projects and through a greater understanding of each others problems.

For this purpose a systematic procedure of coordination is herein established whereby programmed highway construction projects which might affect fish, wildlife, public recreational, and other natural resources will be reviewed by the Department of Natural Resources. They shall in turn transfer information to the Highway Department stating the scope or details of their interest as it might affect the planned highway construction. The overall objective shall be to establish and maintain a close liaison between the two Departments concerning fish, wildlife, public recreational, and other natural resource conservation interests as related to highway planning and construction.

Basic procedures to accomplish this purpose are outlined as follows:

PROGRAM

1. Copies of all current highway construction programs for Regular and Interstate trunk highways shall be transmitted to the Department of Natural Resources by the Highway Department Program Engineer on a regular distribution basis. He shall also furnish lists of County and Municipal Federal Aid Secondary road projects, with approximate letting dates for each, at the earliest time they are available.

2. The Department of Natural Resources shall review the highway construction programs and within a reasonable time request additional information from the Highway Department Program Engineer on those projects where they think the highway construction might have an effect upon fish, wildlife, and public

recreational, and other natural resources. "Within a reasonable time" in this connection shall also be interpreted to mean that consistent with staff limitations of the Department of Natural Resources, consideration shall be given to the stage of planning of a project and its scheduled letting date, to the end that disruptions to a Highway Department program will be minimized by any recommended alterations.

LOCATION

1. When the Highway Department proposes the location or reconstruction of a roadway which may have an effect upon fish, wildlife, public recreational, and other natural resources the Road Design Engineer will submit sufficient information to the Department of Natural Resources to determine accurately the affected areas.

2. The Department of Natural Resources will be notified of the date, time and place of the Location Public Hearing.

3. Upon receipt of the Highway Department location proposal, the Department of Natural Resources will provide written comments to the Highway Department Road Design Engineer describing the effects upon fish, wildlife, public recreation and other natural resources which comments the Highway Department may use at the Public Hearing and will consider in the Location Study Report.

DESIGN

1. If the proposed roadway design may have an effect upon the environment of fish, wildlife, public recreation or other natural resources, the Highway Department Road Design Engineer will transmit

a copy of the preliminary plan (if different from that furnished previously) to the Department of Natural Resources for review prior to holding a Design Public Hearing.

2. The Department of Natural Resources will be notified of the date, time and place of the Design Public Hearing.

3. The Department of Natural Resources will provide written comments to the Highway Department Road Design Engineer on the preliminary plans including suggestions for planning to minimize harm to, or to enhance, the environment of fish, wildlife, public recreation or other natural resources, which comments may be used at the Public Hearing and will be considered in the Design Study Report.

As evidence that adequate consideration is being given to local fish, wildlife, public recreational and other natural resource needs on each Federal-Aid highway project, the Federal Highway Administration (FHWA) has ordered that certain information be submitted prior to receiving FHWA project approval. Specific items of information required by the FHWA which must be provided by the procedure established in this Memorandum include the following:

a. A permit from the Department of Natural Resources in those situations in which a permit is required pursuant to Minnesota Statutes, Chapter 105.

b. A statement by the Department of Natural Resources setting forth views as to the significance of the area in question and the effects of the Highway Department proposal.

c. A description of the measures planned as project expenditures to minimize the effect of the proposed construction on fish, wildlife, public recreational, and other natural resources.

d. A description of any measures proposed by the State Department of Natural Resources to accomplish this purpose which differ from those proposed by the State Highway Department.

e. To the extent that measures proposed by the State Highway Department and the State Department of Natural Resources differ, an explanation of the factors considered by the State Highway Department in arriving at its decision.

Proposals offered by the Department of Natural Resources shall specify a desirable end result with specific plan recommendations being made whenever possible. If costs resulting from such proposals are not eligible for highway Federal-Aid participation the proposed method of financing shall be stated.

The procedures outlined herein shall be effected immediately and continuously until mutually decided otherwise by both State Departments.

This "MEMORANDUM OF UNDERSTANDING BETWEEN THE HIGHWAY DEPARTMENT AND THE DEPARTMENT OF NATURAL RESOURCES OF THE STATE OF MINNESOTA REGARDING HIGHWAY CONSTRUCTION AND PUBLIC INTEREST IN FISH, WILDLIFE AND PUBLIC RECREATIONAL RESOURCES" shall replace and supersede the MEMORANDUM OF UNDERSTANDING signed by former Commissioner of Highways, John R. Jamieson and Commissioner of Conservation, Wayne H. Olson in July, 1966, entitled as follows: "A MEMORANDUM OF UNDERSTANDING BETWEEN THE HIGHWAY AND CONSERVATION DEPARTMENTS OF THE STATE OF MINNESOTA REGARDING HIGHWAY CONSTRUCTION UTILIZING FEDERAL AID FUNDS AND PUBLIC INTERESTS IN FISH AND WILDLIFE RESOURCES AND PUBLIC RECREATIONAL RESOURCES".

For Minnesota Highway Department

W. A. Erickson

for N. T. Waldor
Commissioner of Highways

3/2/71
Dated

For Minnesota Department of Natural Resources

R. L. Herbst
Commissioner of Natural Resources

By: C B Buckman

C. B. Buckman, Deputy
Commissioner of Natural Resources

AN AGREEMENT BETWEEN THE MINNESOTA HIGHWAY DEPARTMENT AND THE ROCHESTER-OLMSTED COUNCIL OF GOVERNMENTS, THE DESIGNATED METROPOLITAN CLEARINGHOUSE, REGARDING FEDERAL AID HIGHWAY PROJECT NOTIFICATION AND REVIEW PROCEDURES AS REQUIRED BY TITLE IV OF THE INTERGOVERNMENTAL COOPERATION ACT OF 1968

The purpose of this agreement is to establish a basic procedure for the evaluation, review and coordination of highway projects in accordance with Bureau of the Budget Circular A-95 and Federal Highway Administration Instructional Memorandum 50-1-70, and subsequent amendments thereto, and to identify certain types of projects which may be exempted from these requirements pursuant to these documents. The basic procedure shall be the clearinghouse review process as described in the above Circular and Instructional Memorandum.

Keeping in mind the objectives of the 1968 Act which states that "to the maximum extent possible, consistent with national objectives, all Fed eral Aid for development purposes shall be consistent with and further the objectives of State, Regional and local planning", it is imperative that:

1. The clearinghouse review take place at the earliest possible time which will be at the long-range (5 year ±) construction program, route location approval, or design approval stage whichever occurs first, or the Highway Planning and Research Work Program stage in the case of highway planning projects, and
2. That certain categories of work having little or no impact on local or state development programs be exempted.

With regard to the early notification by construction program referred to in Paragraph 1 above, that document will consist of an itemized list of projects described by location, type of work, estimated cost, and tentative letting date, if known. Individual projects which develop subsequent to preparation and dissemination of the formal Highway Construction Programs will be handled on a project by project basis.

Projects of little or no impact on development as referred to in (2) would normally fall in any one of the following categories:

1. Improving present facility within existing right of way with no major changes in access and no significant change in roadway function. Examples of the types of projects in this category are:
    a. Seal coating
    b. Pavement Resurfacing
    c. Shoulder improvements (widening and/or surfacing)
    d. Turning lanes
    e. Channelization
    f. Grading and surfacing for vertical and horizontal sight distance, drainage, and other corrections
    g. Lighting, signing, signals, and fencing
2. Improvements for which a substantial portion of right of way had been acquired by September 30, 1969.
3. Subsequent stages of construction necessary to complete a project to an ultimate design as implied in the original submittal reviewed by the clearinghouse.

With regard to Federally funded highway planning projects which would be included in the Highway Planning and Research Work Program, it is agreed that the clearinghouse will be furnished a copy of the annual work program prior to its submittal to the Federal Highway Administration for approval.

After the clearinghouse review, the Minnesota Highway Department will be notified as promptly as possible of those projects that may be of interest as well as those with no issues involved. Should further information be required regarding any specific project(s) in order to resolve a possible issue, it will be furnished upon request. In any case, the clearinghouse will have thirty (30) days after receipt of a program or individual project notification to inform the State Highway Department that there is or is not an interest in the proposed project(s). No response within the specified period shall be construed to mean that the clearinghouse has no interest in the project(s).

Those people within the Highway Department responsible for the various phases of this notification procedure are (1) the Director of the Office of Program Planning for Construction Program preparation and dissemination, (2) the Road Design Engineer for all details relative to location and design, (3) the State Aid Engineer for Municipal and County Highway projects, and (4) the Director of the Office of System Planning for highway planning projects. All clearinghouse requests and/or comments shall be directed to the appropriate individual responsible for the action required.

Although omitted from the review and comment requirements of the Intergovernmental Cooperation Act of 1968 and the procedures agreed to herein, the State Highway Maintenance and Resurfacing Program and the Safety Improvement Program will be furnished for information purposes by the Minnesota Highway Department.

FOR MINNESOTA HIGHWAY DEPARTMENT

Ray Lappegaard
Commissioner of Highways

Date: 4/30/73

FOR ROCHESTER-OLMSTED COUNCIL OF GOVERNMENTS

R. Daniel Castle
Executive Director

Date: 4/13/73

ENGINEERING MEMORANDUM

DESIGN AND RIGHT OF WAY DIVISION

DESIGN NO. 72-5

September 5, 1972

TO : Distribution List 57-D

FROM : W. S. Ekern
Deputy Commissioner and Chief Engineer

SUBJECT: Procedures for Identification and Reduction of Environmental Impacts on Highway Projects

The attached outline contains procedural changes requested by the Department of Natural Resources in the Identification and Reduction of Environmental Impacts on Highway Projects. This outline documents the procedure for obtaining formal DNR comments relative to highway proposals, but is not intended to discourage in any way local coordination between MHD and DNR personnel.

This Memorandum supersedes Design Memorandum No. 72-1 dated February 1, 1972.

The cooperation of everyone involved in the application of these procedures is requested.

W. S. Ekern

W. S. Ekern
Deputy Commissioner and Chief Engineer

Procedure for Identification and Reduction of Environmental Impacts on Highway Projects

The following outline presents a procedure for involvement of the Environmental Services Section, the Office of Materials, the Office of Transportation Planning, the Department of Natural Resources and the Historical Society in the identification and reduction of environmental impacts in highway location and design. The outline is divided into three major stages: Early Involvement (Route Location Stage), Intermediate Involvement (Preliminary Design Stage) and Final Involvement (Detailed Design Stage - Construction Plans). The involvement of each agency, office or section is itemized under each stage for a typical project of average complexity. More or less effort may be required on any particular project, and this outline is presented as a guide or check-list to assist in coordinating highway location and design with the environment for the best possible result on man's total environment.

Primary responsibility for implementation of these procedures is assigned to the Districts. Secondary responsibility is assigned to the Office of Road Design to assist the Districts in implementing the procedures, to perform assigned tasks and to provide guidance and liaison. The various agencies, offices and sections referred to in the outline have been contacted and have agreed to perform the services requested in accordance with these procedures.

The outline is limited in scope. It covers the period from the time a project is programmed, or otherwise considered approved for programming, to the completion of construction plans. It does not include transportation system planning, evaluation of needs, priority setting or other planning functions. Also it does not include highway construction.

Limiting this outline to Design Functions does not mean that environmental concerns can be ignored during construction. However, it is expected that these concerns can be better provided for in the special provisions and in the design itself, so that construction will result in an acceptable and pleasing environment with the least possible negative effects and hopefully significant positive effects. The construction engineer must control his projects in a manner which will obtain the best possible environmental result.

The areas of expertise available from the various agencies, offices and sections are listed at the end of the outline.

A. Early Involvement (Route Location Stage)

1. Reconnaissance for selection of alternate routes (or corridors).

a. Environmental Services Section

(1) Identify areas of environmental significance in the study area as an aid in selecting alternate routes or corridors.

(2) Provide the District and the Office of Road Design with specific comments on each environmental area as to its importance or priority in the study area and point out the possible routes which would have the least impact.

b. Department of Natural Resources (DNR)

(1) MHD District requests Office of Road Design to contact DNR Bureau of Planning and arrange for a field review with DNR personnel. General information concerning the route location and potential alternatives shall be transmitted to DNR at this time. A two-week notice of meeting date, time, and place should be given to DNR.

DNR Bureau of Planning will contact Division Coordinators who will be responsible for contacting the appropriate field and central office personnel within their Divisions.

The meeting will entail a discussion, review, and study of the project area and potential alternatives for possible adverse impact on the environment and jurisdictional resources of the DNR.

At this time no final decisions on the DNR Departmental reply will emanate from any DNR personnel.

(2) MHD will document the results of the field review and transmit to DNR Bureau of Planning through MHD Office of Road Design.

DNR field investigators will submit their comments to DNR Division Coordinators for review and concurrence at the Division level. The Coordinator will then submit Division reply to the Bureau of Planning for inclusion in DNR reply.

(3) A DNR Departmental reply on the project area and potential alternatives will be sent from Bureau of Planning to MHD Office of Road Design. The Office of Road Design will inform MHD District.

c. Minnesota Historical Society (MHS)

(1) MHD (Office of Road Design) to furnish MHS preliminary maps of the study area with possible alternate routes if they can be determined at this early stage.

(2) MHS to make field review of the study area to identify possible historical, archaeological and paleontological sites.

(3) MHS to document findings in the study area with an estimate of the significance of identified areas. This information shall be transmitted to MHD District and Office of Road Design.

d. Office of System Planning

(1) Conduct environmental, economic and social studies in the study area.

(2) Report results of these studies to the District and the Office of Road Design.

2. Analysis of environmental impacts on selected alternate routes. (Basis for Draft Environmental Statement)

a. Environmental Services Section

(1) Conduct detailed field and office review of alternate routes.

(2) Prepare specific detailed comments on each alternate for consideration by the District and C.O. staff in selection of a preferred alternate and for use in the Draft Environmental Statement.

b. Department of Natural Resources

(1) MHD Central Office will consult DNR Bureau of Planning for explanation of DNR Departmental comments made at the reconnaissance stage. Changes in MHD project since the previous review should be sent to the Office of Road Design for transmittal to DNR Bureau of Planning. DNR will review changes and identify alternatives or areas which have the least detrimental effects on the environment and the jurisdictional resources of the DNR.

c. Minnesota Historical Society

(1) Conduct supplementary field studies on alternate routes as may be indicated by original reconnaissance.

(2) Make written report to MHD on analysis of impacts on alternate routes which will be used in the Draft Environmental Statement.

d. Office of System Planning

(1) Conduct environmental, economic and social studies on the alternate routes.

(2) Report the results of these studies to the District and the Office of Road Design for use in the Draft Environmental Statement.

3. Review of Draft Environmental Statement

a. Environmental Services Section

(1) Review the preliminary draft E.I.S. as prepared by the District and recommend appropriate changes.

(2) Review the draft E.I.S. as transmitted to other agencies.

b. Department of Natural Resources

(1) Review draft E.I.S. - regular distribution - normal review in accordance with PPM 90-1. Furnish appropriate comments.

This may require detailed designs at alternate stream, lake, or other locations as requested by DNR.

4. Participation in the Location Public Hearing

a. Environmental Services Section

(1) When appropriate, the Environmental Services Section should participate in the public hearing process to answer inquiries or statements which may be brought up or made by environmentalists. They can provide input on a variety of environmental issues which will thereby become a part of the hearing transcript. All pertinent issues should be covered by testimony.

b. Department of Natural Resources

(1) Prior to the public hearing, differences between MHD and DNR concerning the environmental impact of the project should come to near settlement. Detailed designs at alternate stream, lake, or other locations as furnished at time of E.I.S. review should be available as exhibits. Effort should be made to determine an acceptable design at the time of establishing the location of the highway so permits are not a problem at a later stage of project development.

(2) The DNR may participate in the MHD public hearing or furnish a statement to be read into the record.

c. Minnesota Historical Society

(1) Participate in location public hearing when appropriate. Testimony regarding historical or archaeological sites should be introduced into the hearing transcript and brought to public attention whenever these matters are important in the selection of the alternate routes.

5. Respond to Review Comments (Draft E.I.S.)

   a. Environmental Services Section

      (1) Review comments received from review agencies and prepare responses for inclusion into the Final E.I.S.

   b. Office of System Planning

      (1) Respond to review comments when appropriate (basis for Final E.I.S.)

6. Review Final E.I.S. and indicate anticipated further involvement in design.

   a. Environmental Services Section

      (1) Review the preliminary draft of the Final E.I.S. and recommend changes as appropriate.

      (2) Review the Final E.I.S. as transmitted to FHWA.

      (3) Indicate in writing anticipated further involvement in the design process.

   b. Department of Natural Resources

      (1) DNR to receive a copy of the final EIS as transmitted to FHWA. Office of Road Design to transmit to DNR Bureau of Planning.

   c. Office of System Planning

      (1) Review the Final E.I.S. as appropriate.

      (2) Indicate in writing anticipated further involvement in the design process.

7. Review Location Study Report

   a. Environmental Services Section

      (1) Review Location Study Report and furnish appropriate comments for inclusion.

   b. Department of Natural Resources

      (1) MHD to furnish DNR a copy of the Location Study Report.

   c. Minnesota Historical Society

      (1) MHD will furnish map of selected route for further investigation by MHS (See Agreement No. 55699).

B. Intermediate Involvement (Preliminary Design Stage)

1. Assist in layout development.

a. Environmental Services Section

(1) Vista view development and general aesthetics.

(2) Independent roadway alignment.

(3) Safety rest areas.

(4) Mounding.

(5) Noise control - plantings and aesthetics of structures.

(6) Tree transplanting.

b. Office of Materials

(1) Erosion control (also Hydraulics Unit, Office of Road Design).

(2) Soil conservation.

(3) Vegetation establishment.

(4) Geology.

(5) Ground water (aquifers).

(6) Soil mechanics (foundations).

c. Department of Natural Resources

(1) Detailed field review if necessary of chosen alignment by MHD and DNR personnel. Coordinate and document as described in reconnaissance stage (A.1.b.)

(2) Coordinate layout development through the DNR Bureau of Planning, so comments from all five DNR Divisions can be considered in the preliminary planning. (MHD to transmit layouts to DNR for Departmental comment.)

(3) Resolution of problems through cooperative effort and determination of cost participation by DNR, if any.

d. Minnesota Historical Society

(1) Review all historic sites or districts with the Preliminary Design Engineer.

(a) Relocation of existing monuments or buildings.

(b) Establishment of new monuments, sites or districts.

(2) Review all archaeological and paleontological sites with Preliminary Design Engineer.

(a) Preservation of significant sites through Geometric Design.

(b) Salvage of significant sites which do not require preservation.

(c) Make proper arrangements for disposition of minor sites.

e. Office of System Planning

(1) Preliminary Design Engineer to follow up on any further involvement recommended at the Location Stage.

2. Participation in the Design Public Hearing.

a. Environmental Services Section

(1) When appropriate, the Environmental Services Section should participate in the public hearing process to answer inquiries or statements on environmental issues.

b. Department of Natural Resources

(1) The DNR may participate in the public hearing or furnish a statement to be read into the record.

(2) The DNR will consider holding a joint hearing with MHD when all major environmental problems have been resolved.

c. Minnesota Historical Society

(1) When appropriate, the MHS should participate in the public hearing process to the extent necessary to resolve the highway design.

3. Review Design Study Report

a. Environmental Services Section

(1) Review Design Study Report and furnish appropriate comments.

b. Department of Natural Resources

(1) MHD to furnish DNR a copy of the Design Study Report.

4. Obtain Permits

a. Department of Natural Resources

(1) Request permits from the Division of Waters, Soils and Minerals. (Design details to be developed at this time as necessary.)

(2) Negotiate land exchanges.

b. Corps of Engineers

(1) Request permits as required.

c. Pollution Control Agency

(1) Request permits as required.

d. Other agencies

(1) Request permits as required.

C. Final Involvement (Detailed Design Stage - Construction Plans)

1. Design Engineer to review location and preliminary design studies prior to starting the construction plans with the following:

a. Environmental Services Section

b. Department of Natural Resources

(1) DNR will provide or will assist MHD in the design details of:

(a) Drainage control structures.

(b) Trails (hiking, bicycling, snowmobiling, etc.)

(c) Access facilities.

c. Minnesota Historical Society

(1) Review historical sites and districts, and archaeological and paleontological areas.

(2) Location of monuments or markers.

(3) Access to historical and archaeological areas.

2. Assist in development of construction plans and special provisions.

a. Environmental Services Section

(1) Alignment development.

(2) Aesthetics

(3) Landscaping (preparation of landscape plans).

(4) Rest areas and waysides.

b. Office of Materials

(1) Erosion control (also Hydraulics Unit, Office of Road Design).

(2) Soil conservation.

(3) Vegetation establishment.

(4) Geology.

(5) Ground water.

(6) Soil mechanics (foundations).

3. Review of Final Plans (MHD to furnish plans)

a. Environmental Services Section

(1) Review specific details as may be required.

b. Department of Natural Resources

(1) Review for compliance with permit conditions, requested design features and general understandings.

c. Minnesota Historical Society

(1) Review specific design details for compliance with general understandings.

The general areas of expertise available from the agencies listed in the outline are as follows:

A. Environmental Services Section

1. Landscape architecture and design.

2. Forestry

3. Horticultural science

4. Agricultural science

5. Agricultural economics

6. Agricultural engineering - soil, water and drainage.

7. Land tenure and usage.

8. Ecology - plant and animal.

9. Wildlife management

10. Botany

11. Geography

12. Architecture

13. City planning

14. Natural resource planning

B. Office of Materials

1. Erosion prevention

2. Soil conservation

3. Vegetation establishment

4. Grass land management

5. Soil science

6. Weed science

7. Geology

8. Ground water (aquifers).

9. Soil mechanics (foundations).

C. Department of Natural Resources

The DNR is organized into five major Divisions each having considerable expertise in its areas of jurisdiction. The titles of the Divisions probably will be adequate here to identify the services that can be provided.

1. Division of Waters, Soils and Minerals.

2. Division of Enforcement and Field Service.

3. Division of Lands and Forestry.

4. Division of Game and Fish

5. Division of Parks and Recreation.

D. Minnesota Historical Society

1. Archaeology

2. Historical sites - monuments

3. Historical buildings

4. Historical districts

E. Office of System Planning

1. Social science

2. Economics

3. Planning

ENGINEERING MEMORANDUM
DESIGN AND RIGHT OF WAY DIVISION
DESIGN NO. 73-2
January 16, 1973

TO : Distribution List 57-D

FROM : W. S. Ekern
Deputy Commissioner and Chief Engineer

SUBJECT: Availability of Information to the Public

The public has the right of access to information relating to highway proposals. In order to provide uniformity throughout the State, this memo defines the basic policy on availability of public hearing information, preliminary planning reports, study reports and environmental statements.

Public Hearing Information - Copies of the printed text of public hearing transcripts shall be made available to all interested parties free of charge at the District Office and the Office of Road Design (Road Plans Information, Room 609). Exhibits such as layouts, plans, photos, etc., will be available for review and tracing by all interested parties at the District Office and Office of Road Design.

Preliminary Planning Reports - These reports are defined as documentation and communication devices used during planning phases and are not to be confused with study reports which document decisions. These reports, when prepared, shall be made available to interested agencies, and governmental subdivisions free of charge. (In the case of Chapter 312, this would be mandatory procedure.) These reports shall also be made available for public inspection and copying at the District Office and Office of Road Design (Room 609).

Study Reports - Location and Design Study Reports shall be made available to interested agencies and governmental subdivisions free of charge. These reports shall also be made available for public inspection and copying at the District Office and Office of Road Design (Room 609). In addition, these reports shall be available for sale to the public. Charges to be made in accordance with the fee schedule below.

Environmental Statements - All environmental statements shall be available for review and copying at the District Office, Office of Road Design, Federal Highway Administration Division Office, and appropriate clearinghouses. In areas of the State quite removed from a District office, the District Engineer should attempt to make statements available for public review at municipal or county offices conveniently accessible to the public.

Negative Declarations shall be made available free of charge to any agency, governmental subdivision or individual, upon request, at the District Office or Office of Road Design.

Draft and final environmental statements shall be made available free of charge to any interested agency or governmental subdivision. Other interested parties may purchase copies of these statements at the District Office or Office of Road Design. Charges are to be made in accordance with the listed fee schedule.

Fee schedule for reports and environmental statements:

Minimum charge of $3.00 up to 50 pages;
$5.00 up to 100 pages;
$7.00 up to 150 pages;
Plus postage when applicable.
Charges for documents more than 150 pages in length will be individually determined.

This policy becomes effective immediately.

W S Ekern

W. S. Ekern
Deputy Commissioner & Chief Engineer

Listed below are some of the suggested interdisciplinary resource needs of the Minnesota Highway Department.

Natural/Physical	Social/Economic	Environmental Design Arts
*Forester (Resource Economics)	*Agricultural Economist	Architect
*Natural Resource Geographer	Economist	*Landscape Architect
Biologist	Urban Sociologist	Urban Planner
*Ecologist (Plant)	Rural Sociologist	*Landscape Architect/Regional Resource Analyst
Ecologist (Wildlife)	Economic Geographer	
Soil and Water Resource Analysts		Graphic Arts Specialist
*Horticulturalist		

Those disciplines marked with an * are presently being utilized.