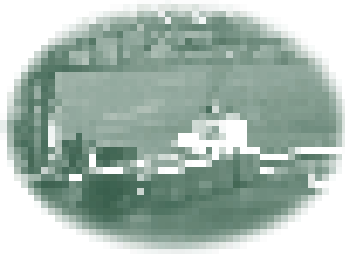
Guidance

for the Development of the

State Transportation Improvement Program



STIP Guidance

December 1996

Guidance
for the Development of the State Transportation Improvement Program (STIP)

December, 1996

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The information contained in this document is available in alternative formats upon request.

GUIDANCE
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TABLE OF CONTENTS

Page

APPENDICES

GUIDANCE
FOR THE DEVELOPMENT OF THE STATE TRANSPORTATION IMPROVEMENT PROGRAM (STIP)

LIST OF FIGURES

ACRONYMS

ATIP	Area Transportation Improvement Program
ATP	Area Transportation Partnership
BIA	Bureau of Indian Affairs
BRRP	Bridge Replacement and Rehabilitation Program
CMAQ	Congestion Mitigation and Air Quality
CO	Carbon Monoxide
DNR	Department of Natural Resources
DOT	Department of Transportation
EPA	Environmental Protection Agency
ER	Emergency Relief
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HES	Hazard Elimination Safety
HIP	Highway Improvement Program
HOV	High-Occupancy-Vehicle
IRR	Indian Reservation Roads
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITS	Intelligent Transportation System
IVHS	Intelligent Vehicle Highway Systems
MIS	Major Investment Study
Mn/DOT	Minnesota Department of Transportation
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
NHS	National Highway System
OIM	Office of Investment Management
PL	Planning
RDC	Regional Development Commissions
SFY	State Fiscal Year
SPR	State Planning and Research
STIP	State Transportation Improvement Program
STP	Surface Transportation Program
STURAA	1987 Surface Transportation and Uniform Relocation Assistance Act
TEA	Transportation Enhancement Activity
TH	Trunk Highway
TIP	Transportation Improvement Programs
TMA	Transportation Management Area
TPIC	Transportation Program Investment Committee
TRIM	Transportation Research and Investment Management Division
US DOT	Federal Department of Transportation

INTRODUCTION

Purpose

This document has been prepared to assist in the development of the State Transportation Improvement Program (STIP). The document is intended for use by the transportation partners involved in this process and, by design, provides an overall general framework of the Area Transportation Improvement Program (ATIP)/State Transportation Improvement Program (STIP) process. Any questions with regard to content or relating to the process should be directed to the appropriate District office. A list of Mn/DOT Transportation District Offices is provided in Appendix A.

ISTEA Requirements for STIP

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) created a new focus for transportation. The ISTEA theme emphasizes a seamless intermodal transportation system for the movement of people and goods. ISTEA requires the development of a Statewide Transportation Improvement Program or STIP for all areas of the state. The ISTEA is based on the premise that a mature transportation system exists and the emphasis is on preservation and operational improvements.

The STIP must include the capital and most non-capital transportation projects proposed for funding under Title 23 United States Code (USC) (highways) and Title 49 USC (transit). The STIP must also contain all regionally significant transportation projects that require an action by the Federal Highway Administration (FHWA) or the Federal Transit Authority (FTA) whether or not funding from either agency is anticipated. For informational purposes, the STIP should also include all regionally significant projects regardless of jurisdiction, mode or source of funding.

The STIP must include a priority list of transportation projects for at least a three year time-frame. However, the STIP may include projects for a longer time period with additional years considered informational only by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). Minnesota currently limits its STIP to a three year time-frame.

The projects in the STIP must be consistent with the Statewide Transportation Plan also required under ISTEA. The STIP must be

financially constrained by year and must indicate whether the transportation system is being adequately operated and maintained. The STIP must include sufficient financial information to demonstrate which projects are to be implemented using current revenues. If additional funding sources are proposed for some projects, strategies for ensuring the availability and likelihood of additional funding are necessary.

The following types of projects may be excluded from the STIP if the state so chooses:

- Safety projects funded under the Surface Transportation Assistance Act of 1982, Section 402, as amended (primarily concerning education and enforcement activities);
- Intelligent Transportation System (ITS), formerly called Intelligent Vehicle Highway Systems (IVHS) planning grants funded under ISTEA, Section 6055b;
- Transit planning grants funded under the Federal Transit Act, Sections 8 or 26;
- Metropolitan Planning Projects (PL funds);
- State Planning and Research projects (SPR), except those funded with National Highway System (NHS) or Surface Transportation Program (STP) funds; and
- Emergency Relief (ER) projects (except those involving functional, locational, or capacity changes).

The STIP will include the final Transportation Improvement Program (TIP) forwarded by the Metropolitan Planning Organizations (MPOs). The MPO TIP is subject to an air quality conformity determination if the MPO is a non-attainment or maintenance area for air quality as identified by the US Environmental Protection Agency (EPA). The state must certify that a transportation planning process is being carried out in accordance with the applicable requirements. The FHWA and FTA may jointly approve the STIP for no more than a two year period. The FTA may separately approve operating assistance for specific projects or programs, if necessary.

Public Participation

ISTEA requires an opportunity for early and continuous involvement in the development of the Statewide Transportation Plan and the STIP. Public involvement is also a mandatory component of the MPO planning process under ISTEA. The public involvement process may be informal, although the Twin Cities Metropolitan Council, which is a Transportation Management Area

(TMA), must hold a formal public meeting. The Statewide Transportation Plan and the STIP must be published and made available for public review and comment. The state shall also provide for public comment on existing or proposed procedures for public involvement.

The MPOs and Regional Development Commissions (RDCs) are made up of policy bodies that include elected officials and technical committees involving transportation professionals and people with special interests. MPOs and RDCs operate in the public forum and represent the respective constituencies within the cities and counties. The general public also has ready access to the individuals on the policy and technical committees and to the activities of the MPOs and RDCs. Additionally, MPOs have public participation plans and use them in conjunction with the development of their TIPs.

The planning activities of local government are an essential part of integrated regional planning processes. Long-range transportation planning is one part of the comprehensive land use planning carried out by local units of government. Citizen participation is an integral part of these planning processes at the local level.

Additional opportunities for public involvement should supplement the planning process. These opportunities may take the form of public meetings, public notices and legal notices. Timely information exchange on transportation issues is the responsibility of the participants in the planning and programming process.

The information provided in a 1994 report entitled “Innovations in Public Involvement for Transportation Planning” which was distributed by FHWA and FTA to state Departments of Transportation (DOTs) and MPOs has been included in a more comprehensive document entitled “Public Involvement Techniques for Transportation Decision-making.” This new document, published by FHWA and FTA in September 1996, highlights a comprehensive collection of public involvement techniques that provide the building blocks state and local transportation agency need to develop effective public involvement programs. Mn/DOT has distributed both documents to MPOs, RDCs, the District offices and Metro Division.

FEDERAL PROGRAMS

Federal Aid Highway Funding (Title 23)

The Federal Aid Highway Program includes two systems with specific funding, the Interstate System and the National Highway System (NHS). The Interstate System is actually a component of the NHS. The Interstate System includes three funding components as follows:

- Interstate Completion;
- Interstate Substitution; and
- Interstate Maintenance.

The Interstate Maintenance Program is available to rehabilitate, restore and resurface the Interstate System. Reconstruction is also eligible if it does not add any capacity via additional single-occupant-vehicle (SOV) lanes. High-Occupancy-Vehicle (HOV) and auxiliary lanes are eligible for this funding. Capacity additions to the Interstate System may only be from the NHS or Surface Transportation Program (STP) funding. The NHS, including the Interstate System has been approved by Congress and includes approximately 4,000 miles of highways within Minnesota.

The Surface Transportation Program (STP) is a program, which is designed to address specific issues identified by Congress and issues raised within a state which are of national significance. The STP funding may be spent on any road not functionally classified as a local or minor collector and on other eligible activities. The STP funding includes minimum apportionment provisions over the life of the act, as follows:

- 10 percent for enhancement activities;
- 10 percent for safety activities;
- 24 percent for Transportation Management Areas (Twin Cities Area);
- 26 percent for other areas of the state (includes 110 percent of 1991 secondary funding for rural areas under 5,000 population); and
- 30 percent for any area of the state.

ISTEA includes several equity adjustment categories that are utilized somewhat similar to the STP funding. (Minnesota receives only the hold harmless adjustment at this time). The equity adjustments are used to return a fair share to each of the states and fall into the five following categories:

- Minimum allocation;

- Donor state bonus;
- Reimbursement;
- Hold Harmless; and
- 90 percent of payments.

The Congestion Mitigation and Air Quality Improvement Program (CMAQ) directs funding toward transportation projects in air quality non-attainment areas and maintenance areas. CMAQ projects are expected to contribute to meeting the national ambient air quality standards. The Twin Cities, Duluth and St. Cloud are eligible for the utilization of CMAQ funds.

The Bridge Replacement and Rehabilitation Program (BRRP) provides assistance for any eligible bridge on a public road. The state must spend between 15 and 35 percent of the BRRP funding on projects not otherwise eligible for STP funding (off system bridges). STP funding for bridge projects may be used on any federally eligible bridge project on a public road and is not restricted by functional classification.

The Federal Lands Highways Program funding is managed by FHWA Regional Headquarters. There is limited state authority over this category of funding (see Appendix B). The Federal Lands Highways Program includes the following categories of roads:

- Indian Reservation Roads (IRR);
- Parkways and Park Highways; and
- Public Lands Highways, which includes the former Forest Highways category.

Congress has designated 539 special demonstration projects; 22 of which are in Minnesota. These projects are categorized into the following six broad groupings:

- High Cost Bridges;
- Congestion relief;
- High Priority NHS Corridors;
- Rural and Urban Access;
- Priority Intermodal; and
- Innovative Projects.

There are also several special "demonstration" projects that have received funding from other federal highway authorization and appropriations acts.

Other special categories of funding include National Recreational Trails managed by the Department of Natural Resources, (DNR), National High-Speed Ground Transportation, Safety Belts and

Motorcycle Helmets, and Motor Carrier Safety. Most of these categories are managed by the FHWA Headquarters.

Federal Transit Assistance (Title 49)

A portion of the federal gas tax is placed in the Mass Transit Account of the Federal Highway Trust Fund. These funds, and general fund appropriations, are reserved for transit purposes and are managed by the FTA. Transit funding authorized by ISTEA is managed in several ways. The largest amount is distributed to the states by formula; other program funds are discretionary and some are earmarked for specific projects. FTA transit allocations may be administered by the state or be granted directly to the transit agency.

In Minnesota, FTA transit allocations for rural and small urban transit capital and operating assistance is managed by Mn/DOT's Office of Transit (OT). These formula programs include the Elderly and Persons with Disabilities Program (capital assistance) and the Non-urbanized Area Formula Program (capital and operating assistance). Federal capital and operating assistance for urbanized areas over 50,000 population (Urbanized Area Formula Program) is provided directly to the urbanized area transit agency (Twin Cities Metropolitan Council) by FTA. In addition, FTA works directly with the states and/or transit agencies in urbanized areas to allocate discretionary capital funds under the Capital Program for major capital needs such as fleet replacement and construction of transit facilities.

Transit capital and operating projects that receive FTA funds must appear in the STIP. Transit capital assistance is an eligible use of FHWA federal Surface Transportation Program (STP) funds.

TRANSPORTATION INVESTMENT PROCESS

The Transportation Investment Process (Figure 1) provides for an interrelationship between elected officials and transportation agencies. The Transportation Investment Process relies on the planning activities of the state, Mn/DOT, cities, counties, MPOs, RDCs and other transportation partners.

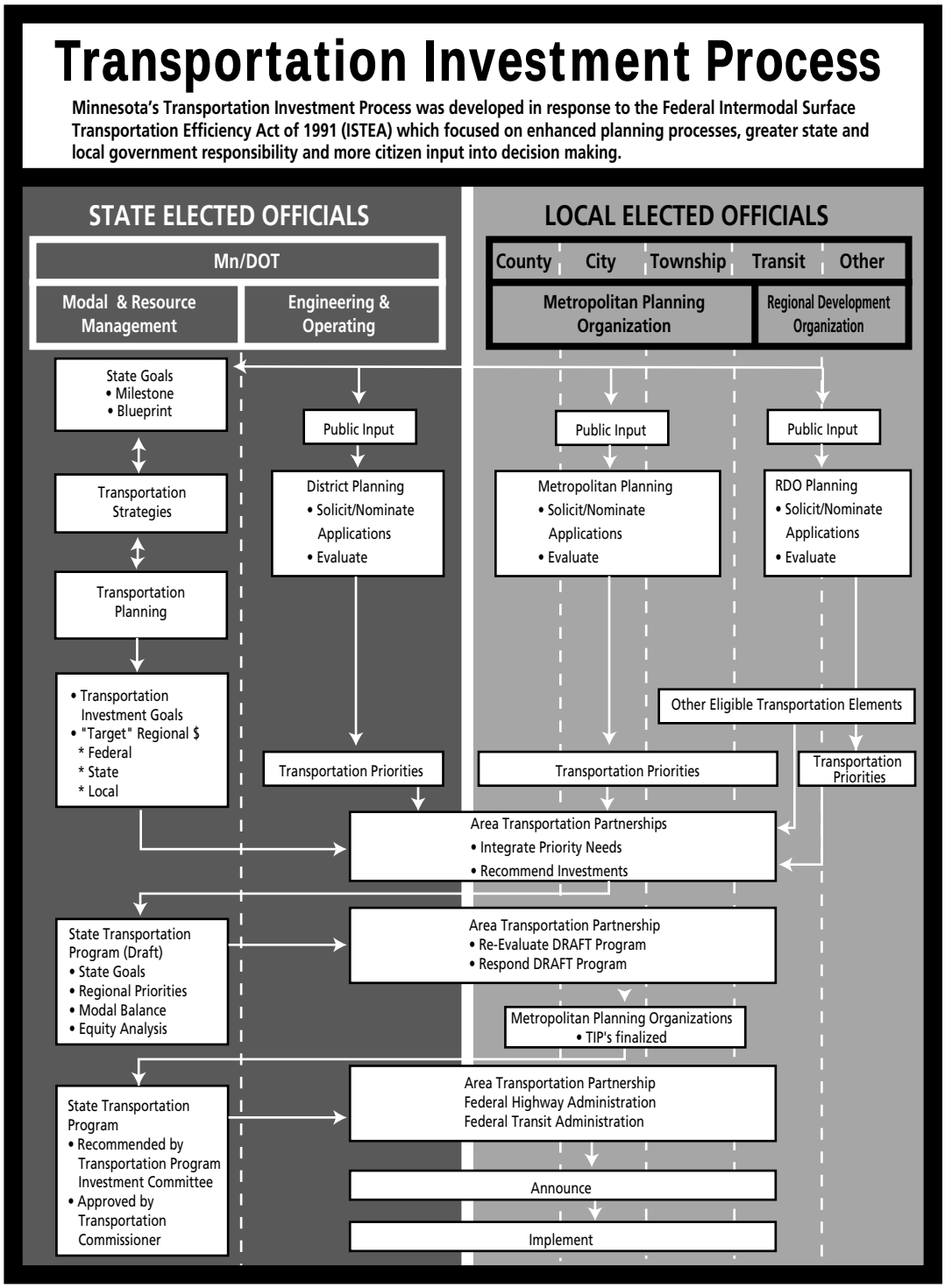
The key factors reflected in the process include flexibility, transferability, predictability and cooperation. The objective of the process is to develop a new, integrated procedure for making federal transportation investment decisions within Minnesota. The process allows for evolutionary change to meet the priority needs. The basic principles guiding the process are:

- A statement of statewide goals, objectives, and strategies;
- Comprehensive planning with local, regional and state involvement;
- Planning for all modes of transportation integrated into one process;
- Multi-county geographic regions as the basis for investment decisions;
- An emphasis on the preservation and management of existing systems;
- Flexible regional funding targets;
- Prioritized area wide transportation investments;
- Fairness, equity and accessibility; and
- Use of ISTEA management systems to assist in planning and priority decisions.

The process chart (Figure 1) displays the partnerships and activities necessary to produce a STIP.

Transportation Investment Goals, Objectives and Direction

The Transportation Investment Process is driven by a declaration of statewide goals and objectives and those transportation strategies/directions described in national and state legislation. The statewide investment goals are drawn from statewide planning and policy studies and are to be used as an aid in determining priorities. Mn/DOT's transportation investment priorities should be used by the District/ATPs in developing their ATIPs.


Transportation Investment Process
Minnesota's Transportation Investment Process was developed in response to the Federal Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) which focused on enhanced planning processes, greater state and local government responsibility and more citizen input into decision making.
STATE ELECTED OFFICIALS
LOCAL ELECTED OFFICIALS
Mn/DOT
Modal & Resource Management
Engineering & Operating
County
City
Township
Transit
Other
Metropolitan Planning Organization
Regional Development Organization
State Goals
• Milestone
• Blueprint
Transportation Strategies
Transportation Planning
• Transportation Investment Goals
• "Target" Regional $
* Federal
* State
* Local
Public Input
District Planning
• Solicit/Nominate Applications
• Evaluate
Public Input
Metropolitan Planning
• Solicit/Nominate Applications
• Evaluate
Public Input
RDO Planning
• Solicit/Nominate Applications
• Evaluate
Other Eligible Transportation Elements
Transportation Priorities
Transportation Priorities
Transportation Priorities
Area Transportation Partnerships
• Integrate Priority Needs
• Recommend Investments
State Transportation Program (Draft)
• State Goals
• Regional Priorities
• Modal Balance
• Equity Analysis
Area Transportation Partnership
• Re-Evaluate DRAFT Program
• Respond DRAFT Program
Metropolitan Planning Organizations
• TIP's finalized
State Transportation Program
• Recommended by Transportation Program Investment Committee
• Approved by Transportation Commissioner
Area Transportation Partnership
Federal Highway Administration
Federal Transit Administration
Announce
Implement

Mn/DOT Transportation Investment Goals

Basic Mn/DOT principles for making transportation investment priorities emphasize preservation and management of existing systems over capital improvements with safety as a key criteria involved in all. The four specific priority goals are shown in the following table.

PRIORITY	GOAL	INVESTMENT
1	Preservation	30% to 40%
2	Management and Operations	5% to 15%
3	Replacement	25% to 35%
4	Expansion	15% to 25%

The definitions for the four investment goals are as follows:

- **Preservation** is to maintain existing systems at a minimum level that will provide for the safe movement of people and freight. Focus is on activities that retain or restore the existing condition without necessarily extending the service life or adding capacity. "Preservation" includes traditional program categories of road repair, resurfacing, reconditioning and bridge repair. Transit projects considered under "Preservation" include operating assistance for existing transit service, bus rehabilitation/refurbishing, bus replacement with same size bus, bus replacement due to end of useful life and facility repair (garage, terminals, shelters).

- **Management and Operation** is to safely and efficiently manage and operate existing systems, effectively addressing critical safety and operations programs through minor and moderate cost improvements. "Management and operation" includes traditional program categories of cooperative agreements, safety capacity, safety high hazard, traffic management, and other miscellaneous categories such as right-of-way, enhancements, junkyard screening, planning, rest area/beautification, and safety rail. Transit activities include administration, training, studies and planning activities.

- **Replacement** is to enhance economic development by replacing eligible system pieces or elements; reduce barriers such as weight restrictions, bottlenecks and system disruptions. "Replacement" includes traditional program categories of bridge replacement and reconstruction. Transit projects under "Replacement" include bus replacement with larger size bus.

- **Expansion** is to attain a competitive advantage for the state by reducing travel times and maintaining mobility; alternatives that do not favor drive alone person/vehicle should generally receive priority over adding all purpose road lanes. "Expansion" includes the traditional program category of major construction. Transit "Expansion" projects include operating assistance for new transit service, fleet expansion and construction of new facilities.

Program categories are defined in Appendix G.

Additional planning and investment guidance is provided by 1) the Statewide Transportation Plan; 2) Mn/DOT's modal and highway goals; 3) management systems; and 4) ISTEA focus areas.

Statewide Transportation Plan Direction

The Minnesota Statewide Transportation Plan was published in January of 1995. The plan provides citizens and transportation providers throughout the state with a policy framework to help guide Minnesota's transportation future. A Summary of the 1995 Plan including guidelines for implementing three Plan policies, was published in January 1996. The Statewide Transportation Plan is a work in progress. Mn/DOT is required by Minnesota Statute §174.01 to update the plan every two years with the next update scheduled for January 1997. The Transportation Districts and Metro Division should integrate the Statewide Transportation Plan guidelines and recommendations into their planning and transportation investment activities. Projects selected for the STIP should be consistent with the policy statements and directions established in the Statewide Transportation Plan.

The three policies addressed in the January 1996 Plan Summary that will affect transportation planning and decision-making are highlighted below:

- Preserve essential elements of the transportation system. This policy recommends that performance measures for state expended transportation funds should be adopted. It further recommended that Mn/DOT's Transportation Districts and Metro Division should be responsible for integrating these performance measures into their planning and programming functions. To this end, a Preservation Measures Work Team is in the process of establishing the performance measures to be used. Upon approval and adoption of the measures by Mn/DOT, the Districts and the Metro Division with support from the Central Office will integrate them into the investment decision-making process.

- Enhance access for economic development. This policy provides guidelines under the two distinct categories of enhancing economic activity and responding to business development. The information provides guidelines for both planning and investment decision-making activities.

- Enhance safety and access in important interregional travel corridors. This policy recommends that primary consideration for state transportation investments should be given to interregional corridors that connect and serve regional centers in Minnesota and the upper Midwest. A definition of a regional center and an interregional corridor is provided with the recommendation that Mn/DOT Districts and Metro Division use the information in assessing inter- and intra-regional mobility and access needs. Additional resource information will be available with the 1997 Plan update.

Modal and Highway Goals

The Transportation Districts and the Metro Division should be familiar with Mn/DOT modal and highway goals and incorporate them into their planning and investment decision-making activities. The following Mn/DOT modal and highway goals are drawn from statewide planning and policy studies:

- Bicycle. The Mn/DOT bicycle transportation goals are to develop and maintain roadways, bikeways and support facilities that encourage safe, convenient and pleasant bike travel. An additional goal include developing and coordinating safe, efficient and

responsive bicycle transportation network to accommodate the basic utilitarian and recreational needs of the state's citizens and its visitors.

- Transit. The Mn/DOT transit goals are to increase the use and operation of existing transportation facilities and provide new service so that a coordinated public transit system is available to meet the needs of transit dependent people and the general public of Minnesota.

- Rail. Mn/DOT Rail goals are to provide for a safe, economical, and energy efficient system, as well as, to preserve opportunities that might exist for future rail and transportation uses. Additionally, the goals emphasize the promotion and enhancement of safety at all public railroad-highway grade crossings in the state.

- Ports and Waterways. Port and Waterway goals are to help ensure the continued effective development and operation of the water transportation networks that serve the state.

- Aeronautics. The aeronautics goals are to provide airports to ninety percent of the population within 30 minutes driving time (60 minutes to scheduled air service); and a paved and lighted 5000+ foot runway with instrument approach to cities over 25,000 population.

- Highways. Mn/DOT highway goals emphasize preservation and efficient management and operation of existing systems over major, new capital expenditures. In addition the goals stress maintenance of the existing accessibility of the state aided public highway systems and in maintaining the state's low accident rates. The goals also aim to reduce transportation costs by reducing travel times and reducing barriers of weight restrictions, bottlenecks and system disruptions; to enhance the environment and avoiding or mitigating transportation impacts; and to eliminate weight restrictions on Market Artery routes through investments and minimizing spring weight restriction on commercial access routes through risk taking.

Lastly, the goals encourage consideration of the function of a roadway in guiding type and scope of improvements considered and to give more consideration of NHS routes for improvements and non-NHS routes for preservation.

Management Systems

In response to ISTEA, Mn/DOT has put effort into the development of management systems to support planning and investment decision-making activities. Some of the management systems have been developed to the point where they are now available resources for use by the Transportation Districts and Metro Division. Available management systems include the Pavement Management System (PMS), the Bridge Management System (BMS), the Safety Management System, the TMA Congestion Management System and the Public Transportation Facilities and Equipment Management System (PTMS). The remaining management systems are being developed and Mn/DOT has established a Team to integrate the management systems with planning.

ISTEA Focus Areas for Planning

The ISTEA focus areas should be considered in partner's planning and transportation investment efforts. These include:

- International border crossings and access to ports, intermodal transportation facilities and scenic areas, monuments and historic sites, military installations, and appropriate bicycle and pedestrian facilities;
- Connectivity among metropolitan areas;
- Efficient use of existing transportation facilities;
- Social, economic, energy and environmental effects of transportation priorities;
- Transit services expansion, coordination and enhancement;
- Consistency of transportation priorities and land use/economic development plans;
- Identification of needs through use of the required management systems;
- Innovative financing; and
- Non-metropolitan areas' transportation needs.

Target Regional Funding for Federal Highway Funds

Target regional federal funding is an estimate of the federal highway funding available for the Area Transportation Improvement Program (ATIP). "Targets" provide a beginning point in establishing a priority list of projects for the development of the regional ATIP and the STIP. The actual funding available for a specific year will be different than the estimated funding for the average year of the three year STIP. The average annual target will vary with the time-frame, available federal aid highway funding and the priorities of the area and the state. Targets should be considered to assist with the process to prioritize investments that emerge from a planning process. **All projects (including timber bridges, forest highways, intelligent transportation systems (ITS) and scenic byways) are included in the "target". The only exceptions are federal demonstration projects and IRR projects**.

Target Formula

Fiscal years prior to 2000 in the STIP will use flexible target funding based on an economic formula. The formula will use contributions to the highway trust fund and area income. The contributions to the trust fund is the basic factor used to determine the regional share or target. The regional contribution as a percent of the revenues paid into the state and federal trust funds is the initial calculation. The regional income compared to the average statewide income is then calculated. The ratio of the average regional income compared to the average statewide income is used to enter a lookup table to determine an adjustment to the basic share for each region. Each District/ATP of the state has a target of no less than 90% of the share of the contributions to the trust fund.

The target formula for year 2000 and beyond is based on a 40/60 split between system size and system usage. Factors measuring system size and system usage are used as proxies for existing deficiencies and reflect future usage rather than a backlog of existing deficiencies. System size factors are included in the formula to reflect Mn/DOT's commitment to preserve and maintain the roadway system throughout the entire state. The usage factors capture the impact of vehicle use on the system and the contribution made by users to the highway trust fund from the different regions of the state.

The Mn/DOT priority goals indicate that 30 to 40 percent of Minnesota's investment in the transportation system should be in preservation activities. The most direct measure of need is the size

of the system to be preserved. The size of the system is weighted at 40 percent of the formula. The size factors include total statewide bridge area, federal aid lane miles and public transportation/buses. The weight given to each of these factors roughly approximate the balance among the dollars spent on bridges, roadways and transit projects included in the STIP.

The usage measure, representing 60 percent of the formula, is split equally between present usage and future usage. The present usage factors are total vehicle-miles of travel (VMT) and heavy commercial vehicle-miles of travel (HCVMT). HCVMT is included in total VMT. However, to give additional weight to heavy commercial traffic due to road damage, HCVMT is also included in the formula as a separate factor. The two factors of VMT and HCVMT are routinely collected by Mn/DOT.

The target formula includes the state demographer's forecast of population for the year 2020 to represent future system usage. A better measure might be projected VMT, but a forecast of VMT is not available by county (only current VMT is available by county). Analysis of the state demographer's 1995 projected population and 1995 VMT as reported by Mn/DOT showed a 0.99 correlation between population and VMT. Therefore, Mn/DOT concluded that population is a reasonable proxy for future usage of the system.

The target funding level is not the same as the list of projects selected as the regional share of the draft STIP. There is no assurance that the list of projects selected will equal target levels. See Appendix E for further discussion on the target formula.

Estimated Federal Aid Highway Funding

The flexible funding level is based on an estimate of the federal aid highway funds available for projects for the three years of the STIP. The estimate of federal aid highway funds includes all sources of federal funds except special demonstration project funding which is earmarked by Congress. Federal funds are classified as either formula or allocated. Formula funds are distributed to the states by a legislated formula. Formula funds include several equity adjustment categories. Allocated funds are distributed to the states based on administrative formulas, nationwide competition, eligibility criteria and Congressional mandate or priority. Funding estimates will be provided to the District/ATPs annually in a memo from the Office of Investment Management. See Appendix F.

Reserves of Federal Aid Highway Funding

Federal aid highway funds are reserved by Mn/DOT for administration and an adjustment fund. The administrative reserve includes state highway planning and research (SPR), metropolitan planning (PL), Section 402 safety funds for education and enforcement, and engineering and contingencies for construction projects.

State Planning and Research (SPR) funds are used by Mn/DOT for planning activities including statewide studies, the development of management systems and for research. PL funds are distributed to the MPOs to support activities undertaken within the metropolitan area by the MPOs. The FHWA Highway Safety Program, sometimes called the 402 Program, is for guidelines and programs relating to highway, driver and vehicle safety. Funds for the 402 Program are managed by the Department of Public Safety. The major portion of the administrative reserve is available for construction engineering and contingencies. The administrative reserve will continue to be reviewed. A federal adjustment fund is reserved for projects that are statewide in nature or to balance the program across the state.

Special Demonstration Project Funding

Mn/DOT continues to resist the setting aside of federal aid highway funding for special demonstration projects. Mn/DOT will neither solicit projects nor support the actions of others in this regard. Mn/DOT recognizes the practice of Congressional project selection may continue. If special projects are identified within Minnesota, Mn/DOT will attempt to accommodate these projects by working through the Area Transportation Partnership (ATP) process to schedule the project within a reasonable time-frame that does not unduly distort existing project schedules. The special demonstration project funding is outside of the target funding level. However, the special demonstration projects divert matching funds from other priorities. Therefore, Mn/DOT will reserve state funds to be used for statewide and regional transportation adjustments.

Allocated Federal Aid Highway Funding

Allocated funds include many varied categories of federal aid. Allocations of categorical funding generally consist of several small projects, are distributed across several areas of the state, and may not be identified within the time-frame for STIP development. These allocated funds are included within the flexible estimates. Allocations of individual categories of funding that add up to less than $1 million may routinely be added to a ATIP. Some of these categories are Indian Reservation Roads, the Forest Highways portion of Public Lands, Scenic Byways and Timber Bridges.

Categorical Funding

Formula funds are distributed to the states within various categories. Each category of federal aid highway funding has an authorized level of funding established by ISTEA. The annual categorical funding is generally available for four years. After that time the funding for individual categories lapses and is not available within the state. Special attention to this lapse potential is advisable. The Office of Investment Management (OIM) will provide status reports of categorical trends to the Transportation Program Investment Committee (TPIC).

Mn/DOT has chosen not to identify subtargets for either specific categories or for specific levels of government. The lack of planning input into categorical issues and the historic balances in some categories of funding are some of the reasons for discouraging subtargets. The statewide plan and the management systems are available to assist in prioritizing projects. The use of subtargets may be desired by the ATPs for the development of the ATIPs. The use of subtargets should occur only as a result of the planning process and not as a consideration of previous or historic funding.

Advance Construction

Advance construction will continue to be used as a short term (normally three to six months) technique for managing federal funding availability allowing projects to get started prior to actual availability of the obligation authority. This technique typically occurs during the last few months of the federal fiscal year when the remaining obligation authority or apportionment is low. Numerous constraints must be met before construction can be advanced. All normal authorization procedures should be followed and projects must be authorized by the FHWA prior to advertisement. The state has to be able to identify how all remaining obligation authority will be used for the current year.

A project that uses the advanced construction technique must show up in the STIP in the year in which the project was originally scheduled. A detailed procedure for advanced construction for local projects is being developed and will be provided to the partners upon completion.

This technique should not be confused with 1991 state legislation which permits local road authorities to advance the entire cost of a trunk highway project subject to repayment at the original date in the STIP. These local advances are limited by Mn/DOT's Debt Management Schedule or a $10 million maximum per year. These projects must be included in the three year STIP before they can be

advanced. They also must be included in the STIP updates in the year of payback.

DISTRICT/AREA TRANSPORTATION PARTNERSHIPS

The public response to ISTEA in Minnesota, was a request for a substate geographic focus on transportation decisions. The Transportation Investment Process uses District/Area Transportation Partnerships (ATP) as the geographic basis for integrating the priorities within the regions of the state. Whereas, the federal aid highway funding is included within the District/ATP Area Transportation Partnership decision-making process, the federal transit funding is not. Information should be shared on as many programs and funding sources as possible in order to assure good transportation decisions. This includes state and local funded projects along with federal transit projects.

ATP Boundaries

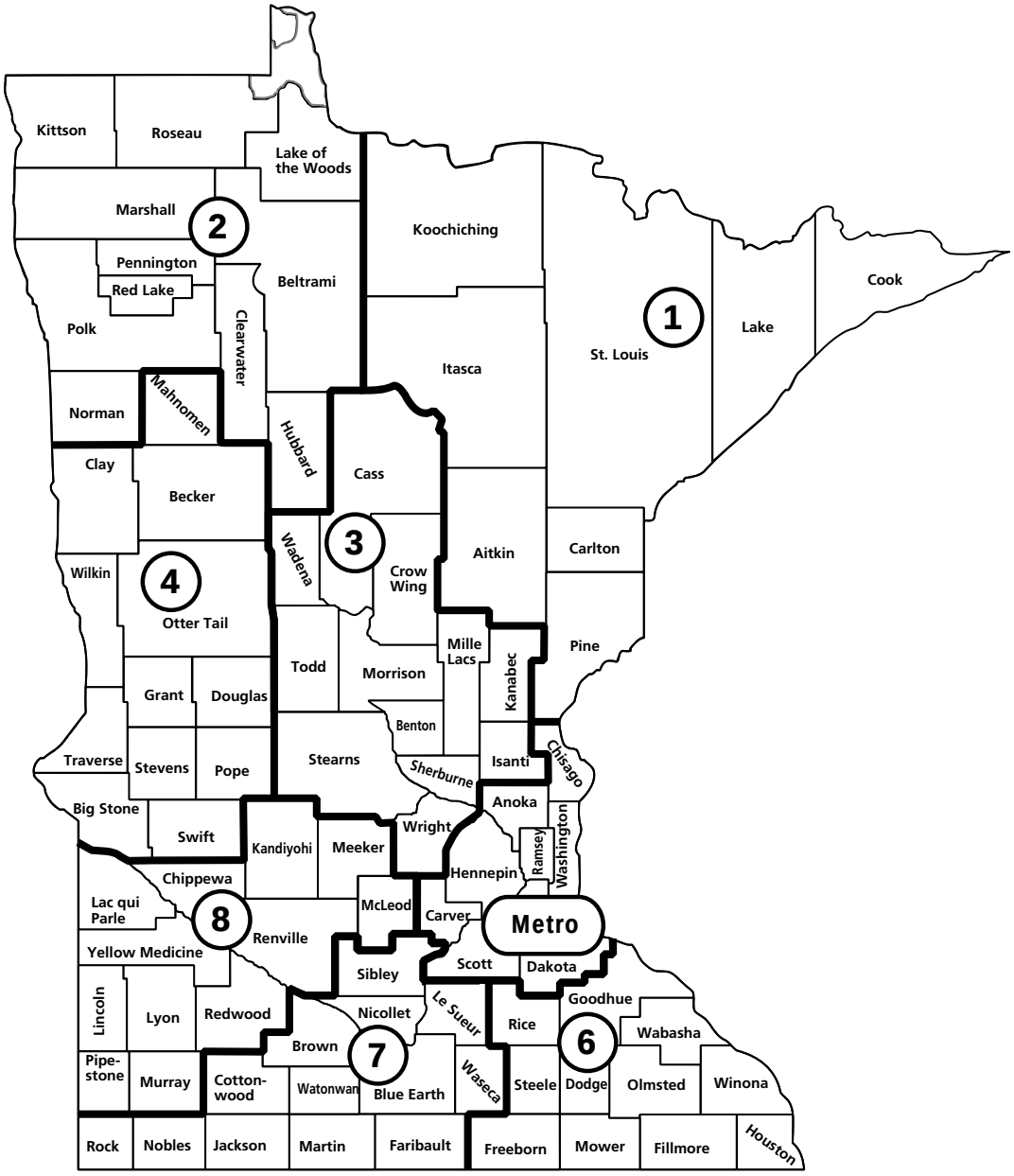
The ATP boundaries generally follow the Mn/DOT District State Aid boundaries. The use of District State Aid boundaries help the Districts and the Metro Division in their coordination and staffing role to the ATPs. Nine of the 10 counties who experienced a District/RDC boundary overlap, chose to remain affiliated with their respective Mn/DOT District. Aitkin County, however, chose to remain with their respective RDC and is now affiliated with the District 1/ATP rather than the District 3/ATP. See Figure 2, ATP Boundaries.

ATP Membership

The Executive Directors, the Policy Committee Chairs or the Technical Committee Chairs of partnership MPOs and RDCs, and the District Transportation Engineer should either comprise the minimal membership of the District/ATP or select the District/ATP membership. They should also establish basic rules regarding the tenure, replacement, etc., of District/ATP membership. District/ATP members should be familiar with planning processes, and have broad, multi-modal and multi-jurisdictional perspectives and sensitivities. Each District, RDC and MPO shall be a member of an District/ATP. A transit representative should also be a member of the District/ATP.

Partnership planning is the keystone that will make the integration of priority lists easier for the District/ATPs. Special interests, citizens, non-traditional partners and professionals must be appropriately involved in the planning processes that are the foundation of project selection and priority setting. Priority setting, involving trade-offs among various needs, can best be

Area Transportation Partnerships



accomplished by a group that respects the planning process, and where each member has a broad perspective.

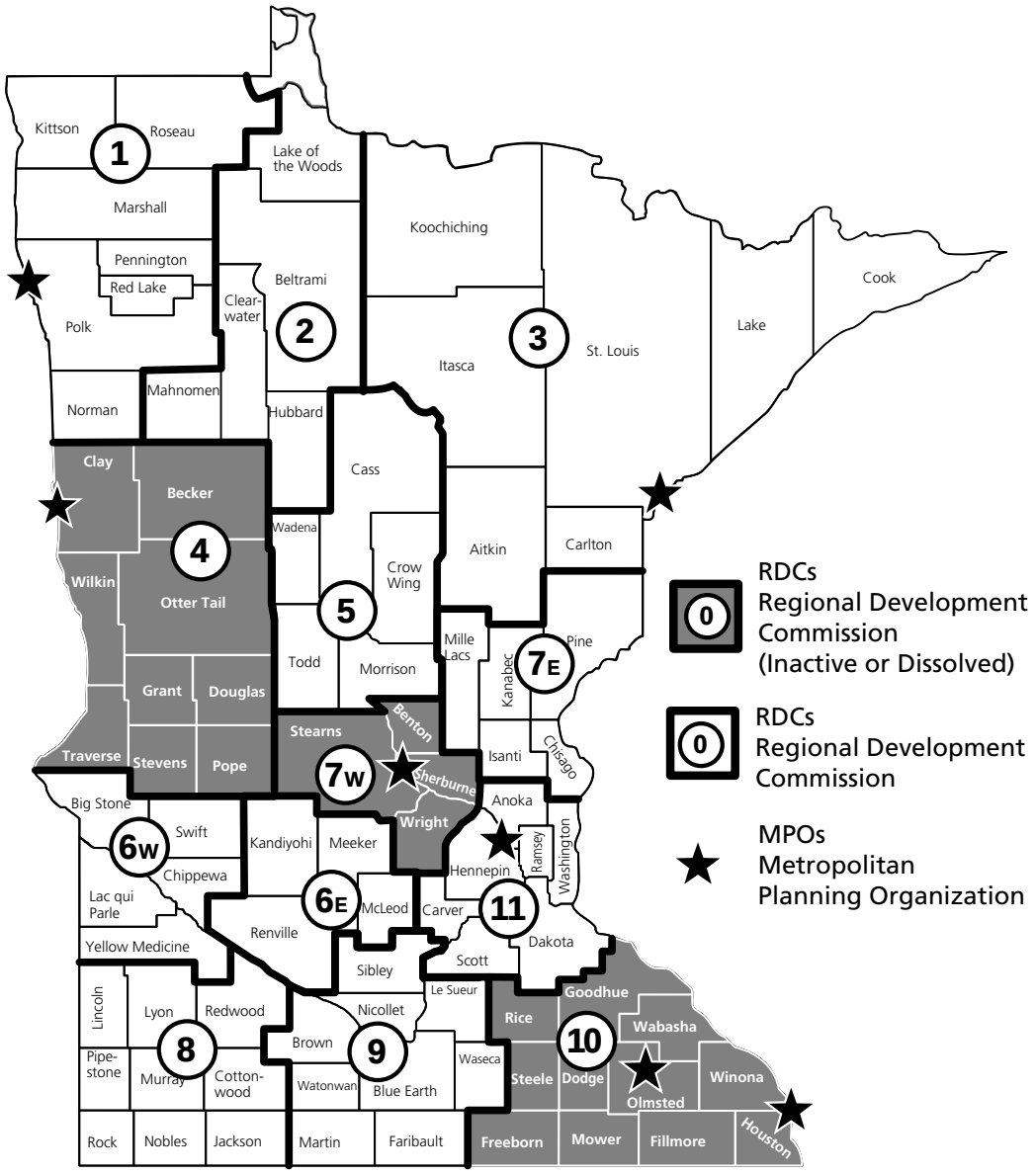
Roles of Partners

District/Area Transportation Partnership (ATP)
The primary role of an District/ATP is to bring together the transportation improvement recommendations of the RDCs, MPOs, Mn/DOT and other partners into an integrated list of transportation investments, the Area Transportation Improvement Program (ATIP). They should also ensure implementation of that program through program management. Each District/ATP will receive a prioritized list of transportation projects from the MPO, RDC(s) and Mn/DOT District. The District/ATPs are responsible for integrating these priority lists into an ATIP. The priority lists into an ATIP. The District/ATPs should respect the order of projects on MPO, RDC and District lists in the integration process. District/ATPs are also expected to review and comment on the draft STIP. Additional roles that may be considered by the District/ATPs include establishing criteria for project selection, participating with the District in the development of policies and procedures for managing the program and developing/reviewing priority lists of projects for programs that are not included in the target.

The District/ATPs are expected to document their ATIP development process on an annual basis in a report to OIM. The report should follow the format provided in Appendix D. The report should be forwarded to OIM during the comment period on the draft STIP.

Metropolitan Planning Organization (MPO)
The MPOs are to be a full member of the appropriate District/ATP. MPO transportation planning processes are well established and should be useful to the District/ATP. MPO candidate projects and priorities developed through their TIP process are input into the District/ATP priority decision making process of developing an ATIP. The final MPO TIP must reflect the final STIP. The MPO should also include, for informational purposes, all Mn/DOT state funded transportation projects. It is the responsibility of the MPO to provide the Mn/DOT Districts with project updates on all FTA Urbanized Area Formula Program funded projects. This will ensure that the project tracking system (ARTEMIS) is kept current. Figure 3 shows the location of Minnesota MPOs.

Metropolitan Planning Organizations (MPOs) and Regional Development Commissions (RDCs)



Transportation Management Area (TMA)
MPOs over 200,000 population are TMAs. The Twin Cities Metropolitan Area is the only TMA in Minnesota. TMAs are unique in that ISTEA gives them significantly more authority and responsibility than other MPOs. The TMAs control a significant portion of ISTEA funding, especially the urban guarantee portion of the Surface Transportation Program (STP). The TMA must provide the Metro Division with a list of their projects. It is also the responsibility of the TMA to provide the Mn/DOT Metro Division with project updates on all FTA Urbanized Area Formula Program funded projects. This will ensure that the project tracking system (ARTEMIS) is kept current.

Regional Development Commission (RDC)
RDCs are in the best position to reflect regional needs and priorities. They are encouraged to enhance their transportation (and, in some cases, comprehensive) planning so that it can be more useful in determining transportation priorities. RDCs will be members of appropriate District/ATPs. RDCs should act as a regional clearinghouse for developing regional transportation priorities reflecting the needs of counties, non-traditional partners, cities, transit providers, etc. If an RDC feels that it is unable to adequately address this function at this time **or is inactive**, the Districts will be responsible for this function. Figure 3 shows Minnesota RDCs and their boundaries.

Local Governments
Counties and cities are responsible for their own planning and are involved in the planning activities of RDCs, MPOs and Mn/DOT Districts. Counties and cities develop and submit candidate projects and priorities to the appropriate partner (RDC, MPO, District) as input for developing the "regional/metro" priority lists. Counties and cities should have valid long-range plans and fiscally responsible capital improvement programs. Information on proposed state and locally funded local projects should be available to the District/ATPs as necessary to assist with integration of projects.

Mn/DOT District Offices and Metro Division

The Districts and Metro Division will ensure that a process exists to solicit projects/develop priorities from all sources (excluding those solicited by the RDC or MPO). In developing priority lists for the District/ATP, the District should be knowledgeable of all Mn/DOT programs (modal, special, district) and the programs of other partners (DNR, Historical Societies) to be able to successfully coordinate and integrate their respective projects into a priority list.

Mn/DOT will be a member of the District/ATP and the Districts and Metro Division will act as staff to the District/ATPs for preparing lists, data, and schedules and will ensure communication with Mn/DOT Central Office and among the partners. The Districts and Metro Division will ensure that all projects are solicited and prioritized and that a ATIP is developed. The Districts and Metro Division are encouraged to improve their transportation planning so that it can be more useful in determining transportation priorities. The Districts and Metro Division will be responsible for management of the regional portion of the STIP in accordance with policies and procedures developed through the District/ATP or Metro Division.

Mn/DOT Central Office

Those offices within Mn/DOT that have had responsibilities for programs, such as Transit, Rail, Environmental Services, Traffic, etc., need to provide information to the Districts and Metro Division during the project solicitation process time-frame in order for the Districts and Metro Division to reflect these projects and priorities in the District priority list. The District (and partnership agencies) need to be informed of the purpose and value of these programs. These Mn/DOT offices should also be proactive in District, RDC and MPO transportation planning processes in order for the regions to be knowledgeable and thus able to reflect all transportation needs in the broadest terms of ISTEA intent.

The Office of Investment Management (OIM) is responsible for developing and assigning target funding values to assist in the District/ATP process of developing an ATIP, and developing, monitoring, managing and evaluating the regional portion of the STIP. OIM is also responsible for the STIP amendment process, and ISTEA implementation.

A committee within Mn/DOT's Central Office that plays an active role in how ISTEA is implemented in Minnesota is the ISTEA Work Group. The ISTEA Work Group provides recommendations and input to OIM on issues relating to federal initiatives, ISTEA activities, and Minnesota's transportation investment process. The Work Group has an open membership and has had representation from the Division of State Aid, the Metro Division and the Offices of Investment Management, Transit, Rail, Environmental Services, Bridge and Traffic Engineering. Meetings are held on a bi-weekly basis with attendance dependent on agenda topics. District representation is encouraged, as is representation from other partners. A Statewide District/ATP Meeting is hosted annually by OIM and provides the opportunity for the ISTEA Work Group

members and District/ATP representatives to share experiences and address issues and concerns.

Solicitation of Projects

Development of MPO, RDC and District priority lists and ultimately the ATIP, depends upon the project solicitation process. Solicitation of projects will be done by Districts, MPOs and RDCs. The Districts are responsible for initiating the process and ensuring its completion. The Districts (or RDCs) solicit rural and small urban area projects ensuring that all partners, including non-traditional partners, are involved. Each program/use of funds should be considered in project solicitation.

Programs recommending specific candidate projects should provide this information along with project justification to the appropriate partner early in the STIP process. Partners will evaluate and integrate all special program candidate projects into their own transportation priority lists. The priority order of projects on program lists should be respected.

Federal formula funds should generally not be used for right-of-way (with exception of enhancement provision for the acquisition of easements and scenic or historic sites), Preliminary Engineering, Construction Engineering and Contingencies. Although eligible for reimbursement for federal formula funds, these are not considered by Mn/DOT to be economical uses of such funds. Planning activities are eligible for federal formula funds. Planning includes those activities that take place before the selection of a preferred alternative. The use of federal formula funds for any non-construction purposes shall be identified as an individual item in the appropriate year of the ATIP, or they are not eligible for authorization.

ATIP Development

The District/ATP integrates the prioritized project lists submitted by the partners. The planning process of the partners should provide direction to the District/ATPs in integrating priorities, as should the Statewide Investment Goals. While area funding targets include primarily federal aid highway funding, the District/ATPs must include in their ATIPs all projects from the following sources of funding: 1) federal aid highway; 2) state trunk highway; 3) FTA (both transit capital and operating); and 4) project match from other entities. For informational purposes, ATIPs should include all "regionally significant" projects, federally funded or not. A

"regionally significant" project is a project that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals) and would normally be included in the modeling of a metropolitan area's transportation network.

The ATIP prepared by the District/ATPs and submitted to OIM should be in the form of one integrated list organized by year of all federal and state projects OR two lists, one state and the other federal. The Districts and Metro Division have been notified of the information needed for each project listed in the ATIP. The District office will submit the ATIP with all required information in the Paradox database format. See Appendix H for the Paradox data format for ATIP submittal.

The state fiscal year is used for the STIP. State and federal fiscal year funding is managed largely on the basis of the state fiscal year which begins July 1, as opposed to the federal fiscal year which begins October 1. Managing the expenditure of federal aid usually occurs within a time-frame that closely matches the state fiscal year. Federal aid is generally utilized between October and June because this allows the scheduling of contract lettings in the winter and spring for the summer construction season. The objective is to use federal funds in the year they are provided and to be eligible for redistribution of federal spending authority, not used by other states, in August. Expenditures during July through September generally include only small state funded projects which may be completed during the same construction season. The state fiscal year includes only the approved expenditures between July 1st of one year and June 30th of the following year. Mn/DOT contracts that are "let" in June and "encumbered" in July are charged to the year in which they are "encumbered". Federal funds may possibly be spent after June of the state fiscal year (July - September) if recommended by the District/ATP and approved by Mn/DOT.

The following additional guidelines are provided for ATIP development:

1. Significant transportation projects, that require environmental documentation in the form of an Environmental Impact Statement or an Environmental Assessment, should have the appropriate draft document completed, or be identified as part of a comprehensive transportation plan, prior to inclusion of the project in the STIP.

Some significant transportation projects will also require preparation of a Major Investment Study (MIS). The MIS shall be completed, or MIS requirements met, prior to inclusion of the project in the STIP. The MIS should provide input into the preparation of environmental documents, or may be prepared concurrently with the draft environmental document. Mn/DOT has prepared a draft Guide for Major Investment Studies.

The intent is to provide for meaningful evaluation of alternatives, provide public involvement in selection of the preferred alternative, and avoid commitments to significant transportation improvements before they are fully evaluated. Additionally, the period of time required to prepare these documents and complete the project development process for projects of this type is typically longer than the time frame provided by the STIP.

Projects that are not anticipated to have any significant impacts are typically documented and classified as Categorical Exclusions. These projects can usually have environmental documentation prepared, and have project development completed, following inclusion of the project in the STIP.

2. Overmatching is the practice of using more than the required 20 percent of non-federal funds as the match on a federally funded project. State match on federally funded trunk highway projects will be limited to the 20 percent match. A 20 percent match is generally desirable on non-trunk highway projects, however, flexibility may be used in matching federal funds if they are needed to facilitate the project. In general, consistency in the percent of match should be practiced within each District/ATP. Projects should be selected based on project merit and not on the size of the match. An exception to this would be where individual District/ATP selection criteria assign extra points to a project with a higher match.

3. The ATIPs must be fiscally constrained and must not include any contingency projects for the first two years. The first year of the ATIP should include all of the specific projects expected to be

identified/selected through the project selection process. Minor projects not considered to be of an appropriate scale for individual identification in the second or third year may be grouped by function, work type and/or geographic area. Grouped projects should not exceed $1 million and/or 10% (whichever is greater) of the annual program. Grouped projects, that are not specifically identified, cannot be automatically advanced through the process. Advancing grouped projects will require a STIP amendment. If any portion of the grouped projects is within a metropolitan area, that portion must also be included in the MPO TIP.

4. The District/ATPs are responsible for integrating the priorities of all other Highway and Transit Capital activities using federal aid under Title 1 of ISTEA and/or Title 23 USC. The Surface Transportation Program (STP) includes specific funding for Transportation Enhancement Activities (TEA) and Safety Construction projects.

   Enhancement projects may be identified as a line item in a transportation project, a combined project administered with another transportation project or a stand-alone project. Individual enhancement projects must be identified in the first year of the STIP, however, funds may be set aside for enhancement projects in the second and third years of the STIP. Questions regarding enhancements should be directed to the appropriate Mn/DOT District Office. See Appendix B for more specific information on Enhancement projects and funding.

   The STP funding for Safety Construction activities includes Hazard Elimination Safety (HES) and Rail-Highway Safety. These categories have traditionally been monitored by the Office of Traffic Engineering and the Office of Freight, Railroads and Waterways, respectively. These functional areas still retain a role in the identification of projects, the review of project funding eligibility, and project selection. Close coordination with these offices is essential. See Appendix B for more information on the HES and Rail-Highway Safety programs.

Limited transit capital assistance funds are provided through FTA. Transit capital assistance is also eligible use of flexible federal STP funds and; therefore, is part of the District/ATP process. The blending of FTA and STP funds on one project, however, is strongly discouraged by the FTA. Transit capital and operating projects that receive FTA funds must appear in the STIP. Project selection for the Elderly and Persons with Disabilities Program and the Nonurbanized Area Formula Program is made by the Mn/DOT Office of Transit and information is provided to the MPOs and Districts for inclusion in the TIPs/ATIP. MPOs with Urbanized Area Formula Program projects in their TIPs should also provide project information to the District/ATPs for inclusion in the ATIPs. Discretionary Capital Program projects are not to be included in the TIP/ATIP/STIP unless funds are available or committed for those projects. Both the Office of Transit and MPOs should provide the Districts with project status updates so the project tracking system (ARTEMIS) can be kept current.

DRAFT STIP DEVELOPMENT - PROJECT SELECTION

The draft ATIPs will be combined into a list of STIP candidates and cross tabulated to determine the funding uses. The project lists will be analyzed with respect to the state goals, the regional priorities, the targets, the balance between modes, the various federal categories and the historic funding. Other parameters may also be utilized. For example, the list of projects included in the ATIPs can be divided up into four groups based on an equal number of projects and/or project costs. The analysis of the candidate STIP would be summarized along these quartiles to determine the various mixes and the consistency with the same factors.

Mn/DOT OIM will automatically roll any projects of a given fiscal year that do not make the cut for funding in that fiscal year to the top of the list of projects for the following fiscal year unless otherwise directed by the District/ATP.

State Goals

The investment priorities have been identified as system 1) preservation; 2) management and operational improvement; 3) replacement; and 4) expansion. Safety is a key criteria involved in all investment priorities. These priorities will be the most important factor in developing the draft STIP. The ATIPs will be analyzed to determine the fit with the priorities. Analysis of the four investment priorities will be used to determine the initial impact of various funding levels for each area. The priorities will be an integral factor in determining where to "draw the line" within each ATIP. The other goals and objectives will also be considerations and constraints in developing a draft STIP.

Regional Priorities

The prioritized list of federal aid highway projects will be evaluated for regional priorities. The priorities in the ATIP will be honored. However, the targets are flexible and are not allocations or guarantees. Each ATIP will be subjected to a consistency analysis with the other ATIPs. The fit with the priorities will be important in determining the portion of the ATIP that is funded within the STIP.

Program Balance

Program balance means that all eligible activities are considered for funding in the ATIPs. That does not mean that each ATIP must include all eligible activities or that all eligible activities should be funded. However, the current intent is to utilize 50 to 90 percent of the available funding within each category of federal funding, subject to the availability of obligation authority on a statewide basis. Some categories of federal highway aid may utilize 100 percent of the available funding. Transit capital assistance, car pool facilities, bicycle and pedestrian facilities, traffic monitoring and management and transportation control measures are some of the factors that will be considered in determining the Draft STIP. It will be critical to assure that the STIP accounts for the funding for all projects that utilize FHWA and FTA assistance. In addition, regionally significant projects must be included in the STIP. The District/ATP may suggest the possible category of federal funds for the projects in the ATIP. OIM will determine the proposed category of funding. The actual category of funding will be determined at the time the project is authorized and will be subject to possible change during the management of the program.

Equity Analysis

Equity has not and will not be defined for developing shares of the draft STIP. The analysis of the draft STIP will present information to the interested parties. The determination of equity will be based on the perception of the project proponents. Several factors such as state-local, highway-transit, freight-passenger, geographic, etc., will be considered in the development of a draft STIP. There are no guaranteed ranges for project selection around the target funding levels. The targets are considered to be flexible. It is anticipated the draft STIP will be close to many of the regional targets. However, it is probable that there will be significant variations between the targets and the project priorities selected for the draft STIP in individual years and individual areas of the state.

Draft STIP Review

The Draft STIP will be circulated back to the District/ATP, as shown in the transportation investment process, for review and comment. The District/ATP and the respective participants may review and comment. Any requests for additions or funding changes must be accompanied by offsetting funding recommendations. It is possible to consider modest realignment of the regional priorities in the Draft STIP. However, significant realignment will require

reanalysis and reconsideration of the portion of the ATIP that is to be included in the Draft STIP.

Projects that are not included in the Draft STIP should be reevaluated. The scope of the projects should be reconsidered, not merely placed in a future year. A responsible investment strategy for the post-STIP period should be developed by the Districts and the Metro Division to ensure some predictability for project delivery. Each Mn/DOT District and Metro Division will develop a Project Work Plan and Project Studies Plan for district/division initiated projects for the seven years beyond the STIP. These plans will enable functional groups involved in early project development activities to plan their workloads. The plans also encourage an assessment of the financial feasibility of the projects. The projects included in these plans should be regularly reviewed for consistency with the long range system plan for the district. The District/ATP should also be made aware of these project planning and development activities. See Appendix C for specific information on Project Work Plans and Project Studies Plans.

STIP MANAGEMENT

ISTEA requires a project selection process which "selects" the projects for implementation from the STIP. Thus, the first year of the STIP is deemed to be selected for implementation. Mn/DOT's OIM is responsible for managing the statewide project selection process. OIM is responsible for the statewide coordination with the STIP and an expedited selection process included within the second or third years of the STIP.

Mn/DOT Transportation District Offices and Metro Division are responsible for management of the regional portion of the STIP. The District/ATP may establish criteria and procedures for managing the ATIP. These criteria and procedures should be documented on the District/ATP Documentation Form (Appendix D). The District Offices will manage the requests for changes in the list of projects selected for implementation and are responsible for obtaining District/ATP direction and concurrence in any changes as necessary.

The District/ATP procedures should allow for any federal project included in the STIP to be advanced or delayed without a STIP amendment if the financial balance is maintained within each fiscal year. Unless otherwise directed by the District/ATP, all projects will be authorized and funded by OIM at the percent match identified in the STIP. This will include changes in actual cost at letting, overruns, and supplemental agreements. These changes in cost will be utilized by the Districts and Metro Division in managing the regional ATIP. The District/ATP may establish criteria where funding procedures other than the percentage identified in the STIP should be implemented by the District and OIM. These criteria should identify what the District/ATP feels are significant changes in scope or cost or which may warrant further consideration by the District/ATP, and procedures to address these significant project changes.

Reauthorization

The Reauthorization process applies to federally funded projects included within the STIP. The process is especially applicable to the projects selected for the first year of the STIP. STIP priorities must be followed by all partners. New projects using federal funds cannot be added to the STIP without going through a formal STIP amendment process. Each District has the responsibility to manage the ATIP in the context of its final list of projects in the STIP. Any change resulting from scope creep, faulty original estimates,

unanticipated environmental/historical considerations, supplemental agreements and cost overruns, changes in revenue, or project slippage must be managed within the regional ATIP. Some of the ways of dealing with these factors include, but are not limited to, capping federal funds, down scoping, overmatching, advancing and deferring projects.

Project managers are responsible for informing Districts and Metro Division of any changes in scope, cost, or timing. The Districts and Metro Division, in accordance with District/ATP policies or direction, are responsible for approving most changes in costs and schedules. These changes must then be promptly communicated to OIM for entry into the project scheduling system (ARTEMIS). The Mn/DOT Districts and Metro Division will be responsible for informing partners of these changes and for keeping project information up to date. The Mn/DOT Districts and Metro Division must adjust current or subsequent years of the STIP to reflect any approved adjustments to the ATIP. MPOs must amend their TIP, as necessary.

OIM is responsible for monitoring current STIP spending schedules using ARTEMIS and other tools to ensure statewide spending is within authorized limits and available program revenue. OIM will also assign federal appropriation codes to projects and monitor availability of project funds as well as annually report any changes from approved STIP spending. If necessary, OIM will transfer funds among federal appropriation codes to accomplish the approved list of projects within the STIP and make applications for federal discretionary funds. OIM also has the responsibility of advising the Districts and Metro Division of existing or likely financial problems.

Federal formula funding is not allocated to specific projects or areas of the state. The Districts and Metro Division must receive the concurrence of OIM if the project selection process is to be used to select a project in the second or third year of the STIP for inclusion in the first year of the STIP. The commitment to the STIP is a commitment to the list of projects included in the STIP. A secondary commitment is to the overall cost of the complete list of projects. Of lesser reliability is the mix of federal, state and local funding for the specific projects in the STIP. It is Mn/DOT's intent to maximize the flexibility available under ISTEA in order to deliver a program of projects.

STIP Amendment Process

Once the STIP is approved by the state, FHWA and FTA, and concurred to by the U.S. Environmental Protection Agency (EPA) there may be a need to amend the STIP to reflect changes. Changes which could trigger the need for a STIP amendment would include adding a new project to the first year of the STIP or, significantly changing the scope or cost of a project in the first year. New projects or significant changes in the second or third year of the STIP would typically wait for the next STIP update rather than process an amendment. An attempt should be made to keep STIP amendments to a minimum.

STIP amendments are initiated by the partners in consultation with the District/ATP. Amendments to the ATIP, as well as, MPO TIP amendments should be considered by the District/ATP, submitted to the appropriate District or Metro Division, for concurrence, and forwarded to OIM. OIM will then approve the MPO TIP amendment or STIP amendment and request FHWA/FTA approval of the STIP amendment. The amendment of a MPO TIP for an area designated as a non-attainment or maintenance area requires air quality conformity determination, unless the amendment includes only "neutral" projects for air quality purposes. Approval of a STIP amendment at the state and federal level is dependent upon appropriate public involvement and continued financial constraint of the STIP. OIM will be responsible for processing and coordinating STIP amendments, and notifying the Districts and Metro Division of the status of STIP amendments. The Districts and Metro Division are responsible for notifying the appropriate partners.

STIP Analysis and Feedback

Each year the STIP will be analyzed by Mn/DOT OIM and recommended actions will be given to each District/ATP in a separate report. The analysis will focus on how the STIP addressed Statewide Goals and Objective. It will also look at the different funding categories and their funding status. The analysis should alert District/ATPs to which funds are in danger of lapsing (more required to be spent in future ATIPs), and what needs to be done to keep the ATIP in balance so that the last year(s) of the ISTEA are not overly constrained by the need to meet required minimum spending levels.

SCHEDULE FOR THE STIP

A need to accelerate the annual schedule of developing the STIP exists. The STIP must be reviewed and approved by the appropriate federal agencies prior to the September 30th end of the federal fiscal year. Longer term, the federal approval should occur by June 1st to be on time for the transportation investment process. Ultimately, it may be desirable to develop a four year or longer STIP on a two year interval.

The annual STIP schedule is as follows:

AGENT	ACTIVITY	TIME-LINE
Dist/ATP/MPO	Project Solicitation	November - January
Dist/ATP/MPO	Evaluation Due	February 28
Dist/ATP/MPO	Public Comment Period	March
Dist/ATP/MPO	ATIP Due in Central Office	April 15
OIM	Draft STIP Developed	May 1
Dist/ATP/MPO	Review Draft STIP	May - June
Dist/ATP/MPO	Public Review	May - June
MPO	Develop TIP	May - June
MPO	Public Review	May - June
Dist/ATP/MPO	Comments & Documentation Due	July 1
OIM	Final Draft STIP Developed	July 15
Dist/ATP/MPO	Review Final Draft TIP/STIP Due	July 30
Mn/DOT	Review & Approval of STIP	July 30
Mn/DOT	Submittal to Federal Agencies	August 1
US DOT	Review & Approve STIP	August - September
US DOT	Approved STIP	September 30

APPENDIX A

MN/DOT TRANSPORTATION DISTRICT OFFICES

Mn/DOT Transportation District Offices

LIST OF MN/DOT TRANSPORTATION DISTRICT OFFICES			
District	**Address**	**Phone**	**Fax**
1	1123 Mesaba Avenue Duluth, MN 55811	218/723-4870	218/723-4774
2	401 Paul Bunyan Drive SE Box 490 Bemidji, MN 56601	218/755-3800	218/755-2028
3	1991 Industrial Park Road Baxter, MN 56401	218/828-2460	218/828-2210
4	1000 Highway 10 West PO Box 666 Detroit Lakes, MN 56502	218/847-1500	218/847-1583
6	2900 48th Street NW Box 6177 Rochester, MN 55903-6177	507/285-7350	507/285-7355
7	501 S. Victory Drive PO Box 4039 Mankato, MN 56002	507/389-6351	507/389-6281
8	2505 Transportation Road PO Box 768 Willmar, MN 56201	320/231-5195	320/231-5168
Metro	Water's Edge Building 1500 W. Co. Rd. B2 Roseville, MN 55113	612/582-1000	612/582-1131

APPENDIX B

SPECIAL PROGRAMS INFORMATION

Minnesota Railroad-Highway Grade Crossing Improvement Safety Program

The purpose of the Minnesota Railroad Grade Crossing Safety Improvement Program is to promote and enhance safety at all public railroad-highway grade crossings in the state.

During the past twenty years, the Minnesota Department of Transportation (Mn/DOT), in conjunction with the state's counties, cities, and railroads, have installed active warning devices at over 1,000 railroad-highway grade crossings and installed over 250 grade crossing surfaces in the state. These projects have been funded under the Minnesota Railroad Grade Crossing Safety Improvement Program using federal funds with matching state, local and railroad funds.

The following types of projects are eligible for funding under this program:

1. Various types of signals and signal upgrades
2. Signs and pavement markings
3. Highway over Rail Grade separations
4. Lighting
5. Crossing surfaces
6. Crossing closures and roadway relocations
7. Improved sight conditions
8. Improved crossing alignments and/or grades

Since the 1987 Surface Transportation and Uniform Relocation Assistance Act, Minnesota received approximately $4 million per year, subject to obligation limits, for grade crossing safety enhancements. Under ISTEA, approximately $4 million per year continues to be targeted for grade crossing safety. However, there is greater flexibility under ISTEA to increase or decrease this amount, depending on the needs of other transportation programs, including other safety areas.

Hazard Elimination Safety (HES) Program

Hazard Elimination Safety (HES) is a federally funded safety program with a current budget of about $3.5 million per year. The object of this program is to identify, implement and evaluate cost-effective construction safety projects.

Based on the requirements of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, the HES fund is made available to all local agencies within Minnesota and can be applied to all public roadways except possibly interstate highways. To participate in the HES program, all interested local agencies within the designated Minnesota regions must complete the necessary studies, computations and forms according to the established eligibility criteria set by Mn/DOT's Office of Traffic Engineering. Completed forms for HES projects must be returned to the appropriate Mn/DOT District Office to be submitted along with Mn/DOT's HES projects to the Mn/DOT Office of Traffic Engineering for verification, so that projects qualify based on established criteria. The list of qualified HES projects will be returned to the Mn/DOT District Office within that region to be included in the overall regional list of projects to be submitted to Area Transportation Partnership (District/ATP) for integration in the STIP.

Lists of nominated HES projects from all partners along with all the appropriate information should be forwarded to the Office of Traffic Engineering prior to the set scheduled date for integration of area lists by District/ATPs. Please leave ample time (minimum of three weeks) for the qualification process.

Minnesota Department of Transportation

Memo

Office of Traffic Engineering
Mail Stop 725, Suite 250
1500 W. County Road B2
Roseville, MN 55113

Office Tel: 612-582-1060
Fax: 612-582-1033

August 12, 1996

To: Addressees

From: Darab Bouzarjomehri
State Traffic Safety Engineer

Subject: Revised Accident Costs for Highway Safety Improvement Program

Accident costs for use in benefit/cost computations are reviewed periodically for updates based on the average cost of accidents obtained from the four largest insurance carriers in Minnesota. This information, gathered by the Metropolitan Division's Office of Traffic Engineering, was used in conjunction with facts taken from the Department of Public Safety's Minnesota Motor Vehicle Crash Facts publication for 1995.

The following revised accident costs should be used in the process of selecting and implementing safety improvement projects immediately:

Accident Type	**Present Accident Costs**	**Revised Accident Costs**
Property Damage	$ 2,000.00	$ 2,700.00
Personal Injury	$ 26,500.00	$ 30,500.00
Fatal	$ 500,000.00	$ 500,000.00

These accident costs were approved by the FHWA on August 6, 1996 with the understanding that the revised accident figures will apply to new projects that will be initially prioritized beginning in calendar year 1997, and that it will not be applied retroactively to projects already included in a priority listing.

The attached revised chart for benefit-cost calculations has the new costs, and should be used beginning calendar year 1997. Please replaced this sheet in HES, road design, standards or pre-design manuals with the new revised attached sheet.

If you have any questions regarding this revision, please contact me.

Addressees: District Traffic Engineers
Glenn Korfhage - Standards, M.S. 696
Abby Mckenzie - Investment Mgmt, M.S. 440
Richard Dalton - Pre-Design, M.S. 676
Shawn Chambers - Investment Mgmt, M.S. 440

cc: Mike Robinson
Mike Gillen
File

Hazard Elimination Safety Benefit-Cost Calculation Fiscal Year 19_____

Control Section (C.S.)	*T.H./Roadway*
Location	
Reference Point/s (R.P.)	
State,County,City or Township	

A. *Proposed Work*

B. *Project Cost*

C. *Traffic Growth Factor **

D. *Capital Recovery*

1. Percent Interest ...6%...
*2. Project Service Life (n) ** .....*
*3. Capital Recovery Factor *** .....*

E. *Anticipated Accident Reduction*

1. Property Damage (PD).....%
2. Personal Injury (PI) .....%
3. Fatal (F) .....%

F. *3 Years Accident History*

Type	*19*	*19*	*19*	*Total Acc.*
PD				
PI				
F				

G. *Accident Forecast*

Type	*Total Acc.*	*÷ Years*	*= Avg. Acc.*
PD			
PI			
F			

H. *Average Cost Per Accident*

Type	*Avg. Acc.*	*Cost($) †*	*Total*
PD		*2,700*	*1.*
PI		*30,500*	*2.*
F		*500,000*	*3.*
Total			

I. *Annual Cost = (B x D_3)*

J. *Annual Benefit=*
$Cx[(E_1xH_1)+(E_2xH_2)+(E_3xH_3)]$

K. *Benefit/cost = J / I*

*Accident Rate ****

*Severity Rate ****

† Recommended Accident Costs PD = $ 2,700 , PI = $ 30,500 , F = $ 500,000 (As approved by FHWA)

Comments:

* *See Traffic Growth Factor's Chart Attached*
** *See FHWA recommended Service Life Criteria Attached*
See Capital Recovery Factor's Chart Attached
**** *See Formulas Attached*

Mn/DOT ***
Traffic Engineering
August 12, 1996

Scenic Byways Program

A Scenic Byways Program was established in Section 1047 of the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) with allocated funds for planning, design and development of state scenic byways programs.

Allocated funds totaling $50 million were available on a nationwide, competitive basis for planning, design and development of state scenic byways programs. Section 1047(d) of ISTEA made the following amounts available out of its Highway Trust Fund: $1 million in FFY 1992, $3 million in FFY 1993, $4 million in FFY 1994 and $14 million in each of FFYs 1995-1997.

Applications for Scenic Byway funds were solicited by the Federal Highway Administration. A state submittal of proposals for Scenic Byway funds was prepared by the Mn/DOT Office of Environmental Services and submitted to the FHWA through the Office of Investment Management and regional FHWA office. Projects on state designated Scenic Byways are eligible for these funds.

The final solicitation for funds under this program occurred in the Spring of 1996. With FHWA's announcement of the selected projects in October of 1996, any Minnesota projects will be amended into the 1997-99 STIP. Future funding under this program is dependent on the inclusion of a Scenic Byways Program in the next federal transportation bill.

Transportation Enhancements Program

The following ten activities which are listed in Title I, Section 1007(c) are eligible for enhancement funding:

1. Provision of facilities for pedestrians and bicycles.
2. Acquisition of scenic easements and scenic or historic sites.
3. Scenic or historic highway programs.
4. Landscaping and other scenic beautification.
5. Historic preservation.
6. Rehabilitation and operation or historic transportation buildings, structures or facilities (including historic railroad facilities and canals).
7. Preservation of abandoned railway corridors (including the conversion and use thereof for pedestrian or bicycle trails).
8. Control and removal of outdoor advertising.
9. Archaeological planning and research.
10. Mitigation of water pollution due to highway runoff.

See the October 13, 1995 memo from OIM, "Project Eligibility Guidelines for Transportation Enhancement Projects," for specific guidance on project eligibility. Since the Guidelines were established, an administrative action has established an account to provide construction financing for non-state aid entities.

The National Highway System (NHS) Designation Act of 1995 provides additional flexibility in the funding of Enhancement projects. It allows project applicants to apply private cash contributions, in-kind donations of materials and services, and funding from federal agency sources against the 20 percent local share. The Act also provides states with the option to meet the 20 percent local share requirement for STP projects at the total state program level, allowing individual projects to be funded at 100 percent federal funds if other projects have a local share exceeding 20 percent. This provides additional flexibility to fund projects where applicants are not able to come up with cash or in-kind contributions for the 20 percent local share. Decisions to use these options may be made at the District/ATP level.

STATE OF MINNESOTA

DEPARTMENT OF TRANSPORTATION **Office Memorandum**

DATE: October 13, 1995

PHONE: 296-8478

TO: Transportation District Engineers
Metro Division Engineer

FROM: Al Schenkelberg, Director
Office of Investment Management

SUBJECT: Project Eligibility Guidelines for Transportation Enhancement Projects

The attached Project Eligibility Guidelines have been developed to clarify eligibility questions surrounding Transportation Enhancement projects to be included in the 1997-1999 STIP. Area Transportation Partnerships should use these guidelines to make sure that they are considering only those candidate projects that meet these requirements.

If there are good projects where there is still some questions about eligibility, the Offices of Investment Management, State Aid and Environmental Services will help the ATPs make a determination or to help a project proposer make changes to make their project eligible.

Attachment

cc: Lawrence Foote, MS 620
Pat Murphy, MS 500
Pat Hughes, MS 120
John Sandahl, MS 120
Dennis Adams, MS 620
Paul Stine, MS 500
Mark Anderson, MS 620
Brian Vollum, Waters Edge
District Planners
State Aid Engineers

MINNESOTA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION ENHANCEMENTS
PROJECT ELIGIBILITY GUIDELINES
for STIP DEVELOPMENT

INTRODUCTION

This document is intended to clarify eligibility issues regarding ISTEA Transportation Enhancement projects for development of the FY 1997-1999 STIP. These eligibility guidelines will apply to Transportation Enhancement projects programmed for the FY 1997-1999 STIP.

This information should be used to generate eligible projects that are consistent with area transportation objectives. Ideally, enhancement projects should be generated from individual district long range plans as well as the State Transportation Plan. Mn/DOT staff will work with Area Transportation Partnerships and proposers to resolve eligibility questions that remain.

ELIGIBILITY GUIDELINES

The eligibility guidelines in this document have been prepared by the Minnesota Department of Transportation with the concurrence of the Minnesota Division office of the Federal Highway Administration. Area Transportation Partnerships may wish to adopt additional eligibility restrictions but they must identify the additional restrictions in their solicitation materials.

APPENDIX - EXAMPLES OF ELIGIBLE PROJECTS

A list of possible projects under the ten eligible activities identified in ISTEA is attached to this document as an appendix. This list is intended to suggest projects in each category but is not exclusive. All projects must meet eligibility requirements contained in the Project Eligibility Guidelines and any additional requirements adopted by the Area Transportation Partnership.

MINNESOTA ELIGIBILITY GUIDELINES
for TRANSPORTATION ENHANCEMENT PROJECTS

A. ELIGIBLE PROJECT CATEGORIES

ISTEA defines ten exclusive activities which qualify for enhancement funds. The ten listed activities are:

1. Provision of facilities for pedestrians and bicycles

2. Acquisition of scenic easements and scenic or historic sites

3. Scenic or historic highway programs

4. Landscaping and other scenic beautification

5. Historic preservation

6. Rehabilitation and operation of historic buildings, structures or facilities

7. Preservation of abandoned railroad corridors (including the conversion and use thereof for pedestrian and bicycle trails)

8. Control and removal of outdoor advertising

9. Archaeological planning and research

10. Mitigation of water pollution due to highway runoff

Transportation enhancement activities can be implemented in a variety of ways. They can be developed as parts of larger transportation projects, as parts of larger joint development projects, or as stand-alone projects. Projects must be developed in accordance with applicable environmental regulations, design standards or guidelines.

Some projects may include necessary features which may not qualify for enhancement funding by themselves. Activities, such as paving a parking lot, constructing buildings or providing restrooms may also qualify if they serve as an integral part of the larger qualifying project.

B. ELIGIBLE APPLICANTS

Federal and state statutes govern the manner in which Mn/DOT acts as an agent for other units of government or local parties when managing Federal Highway Trust Funds for projects such as enhancement projects. The principal issue is that up-front financing for 100 percent of the project must be provided which will be reimbursed at 80 percent by the Federal Highway Administration as work is

completed. This has a direct bearing on the conditions under which certain applicants are eligible.

Mn/DOT - If a project has a direct relationship to a trunk highway and Mn/DOT is letting the project, then normal Mn/DOT letting procedures are followed and the State Trunk Highway Trust Fund is used to provide up-front financing.

OTHER STATE AGENCIES - If another state agency is responsible for the project, an agreement is written between Mn/DOT and the other state agency and the project is administered by the State Aid For Local Transportation Division (SALT). The state agency is responsible for providing up-front financing thought SALT.

FEDERAL AGENCIES or TRIBAL GOVERNMENTS - Federal Agencies or tribal governments are eligible for enhancement funds under the same conditions as other state agencies.

CITIES OVER 5,000 or COUNTIES - If a city of over 5,000 population or a county is responsible for a project, the project is administered by SALT and the State Aid Account is used to provide up-front financing.

CITIES UNDER 5,000 or PRIVATE GROUPS - Only formal recipients of state aid are permitted to use the State Aid Account for up-front financing of federal aid highway projects. A city under 5,000 or private group must find an eligible sponsor (a state agency, county or city over 5,000) or provide up-front financing for a federal aid project. These types of projects would still be administered by SALT.

C. MINIMUM REQUEST $50,000 total project cost
(Federal Share $40,000)

The processing requirements for federal funds require a significant expenditure of time and money by the agency proposing/developing the project and by the state agency administering the federal funds. Based on past experience some districts have used a higher minimum. A more realistic minimum may be $100,000. Project proposers can "bundle" similar projects together to meet the minimum. For instance, bundled projects could consist of signing and lighting a number of bike trails in several communities. Communities may also consider using joint powers agreements for implementing bundled projects.

D. LOCAL MATCH

A minimum match of 20 percent local funds is required on enhancement projects. This is normally a hard match (requiring cash up front). Recent action by the FHWA under the umbrella of the Innovative Financing Rules have allowed for soft matches on Transportation Enhancement projects where allowed by local authority. Use of the Innovative Financing Rules requires that the project proposer successfully complete an application process. If a project proposer can provide adequate documentation; the cost of labor, furnished materials or right-of-way can be credited as part or all of the local match.

Match money may be from State Trunk Highway funds or the State Aid Agency account. Private funds and qualifying federal funds must be transferred through the state agency account.

E. MAINTENANCE COMMITMENT

The proposer must assure that it will operate and maintain the property and facility for the useful life of the improvement and not change the use of any right-of-way acquired without prior approval from the Minnesota Department of Transportation and the Federal Highway Administration. Facilities and/or services must be provided on a non-profit basis.

The Federal Highway Administration considers most physical constructions and total reconstructions to have a useful design life of 10 years or more, depending on the nature of the project. The useful life of the project will be defined in the inter-agency maintenance agreement that must be prepared and signed prior to the project letting.

F. RELATIONSHIP TO THE TRANSPORTATION SYSTEM

ISTEA requires that Transportation Enhancement projects have a substantial relationship to the intermodal transportation system, but not necessarily to a currently planned highway project. This relationship may be one of proximity/function, or proximity/impact. (Proximity alone does not constitute a substantial relationship to the intermodal transportation system and does not qualify a project for enhancement funding.)

Function, proximity and impact can be defined as follows:

FUNCTION - Projects must facilitate transportation or meet the primary needs of transportation system users.

PROXIMITY - Except for bicycle transportation and pedestrian walkway facilities, projects must be contiguous to or within sight of roads functionally classified as major collector or above.

IMPACT - Projects must deal with the interrelationship between transportation systems/users and the surrounding environment.

G. MITIGATION

Typically, a transportation project involves mitigation, work in addition to immediate construction activities, that is negotiated with permitting agencies and local governments as a condition of obtaining plan approval.

NOT ELIGIBLE - Work that is required as a condition of obtaining a permit for a project is **not eligible** for enhancement funding. Federal permitting agencies may include the U.S. Forest Service, Bureau of Land management, U.S. Corps of Engineers, and others. State permitting agencies may include the Minnesota Department of Natural Resources, the Minnesota Pollution Control Agency, and the Minnesota Historical Society. Regional agencies may include watershed districts and metropolitan planning organizations. Local agencies may include counties and cities.

NOT ELIGIBLE - Work that is a result of commitments made during project development to compensate for damage or degradation is **not eligible** for enhancement funding. For example, a street widening project might require removal of several shade trees. Landscaping work that is performed to compensate for that loss is not eligible for enhancement funding.

ELIGIBLE - Work that is made possible because a project presents an opportunity to improve and enhance the environment and/or aesthetics in the vicinity of a project may be **eligible** for enhancement funding. For example, a construction project may present an opportunity to improve the condition of an adjacent stream bed to improve water quality, construct a vital link for a community bikeway system and develop a landscaped green area to enhance the downtown environment.

H. FEDERAL REQUIREMENTS

The following list includes federal requirements that are applicable to all transportation enhancement projects:

National Environmental Policy Act (NEPA)
Section 4(f)
National Historic Preservation Act (NHPA)
Matching Funds
Uniform Act and 49 CFR Part 24 (for R/W acquisition)
Brooks Act (for consultant selection)
Competitive Bidding
Disadvantaged Business Enterprise (DBE) goals

Other federal requirements may also apply to specific projects such as:

Project Oversight
Design Standards
Predetermined Minimum Wage (Davis-Bacon)
Section 404
Required Contract Provisions

Questions regarding federal requirements should be referred to the appropriate District State Aid Engineer or to Frank Van De Steeg (612) 296-8482.

Congestion Mitigation and Air Quality Program (CMAQ)

The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA), Title I, Section 1008 establishes a Congestion Mitigation and Air Quality Improvement Program (CMAQ) for projects and programs which are determined likely to contribute to the attainment of air quality standards. Total funding for the program is $6 billion over the six year period, to be distributed to states based on the state's population and on the pollution severity level. Each state is guaranteed a ½ percent minimum.

In Minnesota, the Twin Cities (most of the seven county Twin Cities area and part of Wright County), Duluth and St. Cloud are eligible for CMAQ funds. Approximately $4 million per year of CMAQ funds are available to Minnesota.

Before a project or program can receive CMAQ funding, it must be determined eligible for CMAQ by the US DOT. It must be shown to fit one of the eligible project or program categories, and must quantitatively demonstrate a reduction in CO emissions.

Minnesota Bridge Construction Program

Minnesota has approximately 19,600 bridges on the public road systems statewide. Mn/DOT, county, and municipal highway agencies make a continuous effort to replace or rehabilitate deficient bridges on both the Trunk Highway system and the Local Road Systems. A deficient bridge is one which is generally structurally inadequate or obsolete due to narrow width or inadequate clearance. Deficient bridges often have weight or clearance restrictions placed on them. A bridge generally has a useful life of 60-70 years before deterioration of obsolescence require replacement. Federal funds for bridge replacement and bridge repair projects are available from a variety of federal program categories. Mn/DOT Districts and local agencies submit bridge projects in response to their Area Transportation Partnership's (District/ATP) solicitation for transportation projects. The replacement or repair of bridges on the local road systems is managed by the Mn/DOT Division of State Aid for Local Transportation in conjunction with local agencies.

The Office of Bridges and Structures uses the PONTIS Bridge Management System to develop estimates of the long-term needs for bridge improvements and replacements. These needs are based on the number of bridges, current condition and age, anticipated construction and maintenance costs and anticipated deterioration rates. The Office of Bridges and Structures is able to estimate for each District and the Metro Division, the annual average bridge construction program necessary to maintain their bridges. Each District and Metro Division are asked to consider the Office of Bridges and Structures investment estimates when developing their ATIP.

OFFICE MEMORANDUM
STATE OF MINNESOTA - Department of Transportation
Office of Bridges & Structures
200 Waters Edge Building - 1500 W. County Road B2
Roseville, MN 55113-3109

TO: Kermit McRae, District Engineer
District 6 - Rochester

DATE: November 14, 1995
PHONE: 612/582-1100
FAX: 612/582-1110

FROM: Donald J. Flemming
State Bridge Engineer

SUBJECT: Mn/DOT Bridge Construction Program - Fiscal Year 1999

The purpose of this memorandum is to provide information for your consideration as you develop your candidate projects for the Fiscal 1999 construction program. It is our understanding the various Area Transportation Partnerships (ATP) will be considering projects in late 1995 for development of the FY 1997-1999 State Transportation Improvement Program (STIP). Previously we supplied similar information in early 1994. Since that time we have refined the estimated annual bridge investment needs based on the Pontis Bridge Management System data and analysis. Enclosed are attachments which summarize this information. The attachments are discussed in the following sections.

Mn/DOT Trunk Highway Structures -Annual Replacement and Preservation Investment

The overall needs for bridge replacement and preservation projects are summarized in the attached table "Pontis Bridge Management - Annual Replacement and Preservation Investment". Utilizing Pontis, we queried the system to project replacement and preservation needs over the next 10 years. The system projected these needs based on the number of bridges, current condition and age, anticipated construction and maintenance costs, and anticipated deterioration rates. The results of that analysis provided the following annual investment levels to maintain Mn/DOT's bridges in their present condition.

Bridge Replacements $41,000,000
Bridge Preservation $27,200,000

For Mn/DOT District 6, we similarly used Pontis to estimate the following annual average bridge construction program to maintain the Mn/DOT bridges in District 6:

Bridge Replacements $6,200,000
Bridge Preservation $3,300,000

These totals are for bridge construction only and do not include any necessary approach work.

Funding for expansion projects would be in addition to these needs. As mentioned earlier, these estimates have been revised since our 1994 projections. Those estimates were made prior to the availability of the Pontis Bridge Management System and considered fewer factors in the analysis. The general effect of the newer methods shows an increase in the replacement and preservation investment for the Metro District and a decrease for most outstate Districts when compared to our 1994 estimates.

District 6 Bridge Program

The table entitled "Program History District 6 - Bridge Construction" provides detailed information regarding the type of work performed each year from 1991-1995, and currently proposed for 1996-1998. These totals are the actual bridge construction costs and generally do not include any grading or approach work. A graph of the total Mn/DOT District 6 Program is also included and is labeled "Mn/DOT District 6 Bridge Construction Let or Programmed". It should be noted the graph includes expansion, replacement, and preservation projects.

From the totals shown on the table and graph, the amount of replacement and preservation projects programmed for 1996-1998 fall short of the estimated annual replacement and preservation needs of $6,200,000 and $3,300,000 respectively. Some letting date changes may have occurred since these reports were printed which would modify the information. We suggest the District review their program for possible projects and consider the level of recommended investment.

We appreciate that funding limitations make it difficult to address all pavement, bridge, traffic, and other needs. This bridge information is provided for your consideration as you make project selections for the upcoming STIP.

Historical Information on the Mn/DOT Bridge Program

The volume of Mn/DOT annual bridge construction rose from the $55,000,000 level of the early 1980's to over $100,000,000 by the late 1980's. Large projects such as I-394 and its associated parking garages, the Mall of America, and construction of I-35 in Duluth and St. Paul contributed to these large programs. By 1991, the annual Mn/DOT bridge program had settled at about $75 million. With the program reductions of 1993, the proposed volume of bridge construction has fallen to as low as $35 million in 1994. The last two attachments provide graphs of the annual total Mn/DOT Bridge Construction Program (includes expansion, replacement and preservation) and the Mn/DOT Bridge Replacement and Preservation Program in dollars of construction.

Mn/DOT has been investing approximately $48,000,000 annually in recent years for bridge replacement and bridge preservation projects which falls short of the $68,000,000 need.

In closing, we would welcome the opportunity to discuss any questions you or your staff has regarding this information. Please contact Dan Dorgan or myself should you have questions. Additionally, our Bridge Construction and Maintenance Section is available to assist District personnel in identifying bridge replacement or preservation projects or generating information from our Pontis Bridge Management System or the Bridge Inventory database.

cc:
J. Sandahl (memo only)
A. Hames/S. Kirsch
J. Allen/B. Iwen
D. Dorgan
P. Kivisto

November 1, 1995

PONTIS BRIDGE MANAGEMENT SYSTEM
ANNUAL REPLACEMENT AND PRESERVATION INVESTMENT
MN/DOT TRUNK HIGHWAY STRUCTURES
10' AND OVER IN LENGTH

District	Total Number of Structures	Annual Replacement Investment	Annual Preservation Investment
M	1,293	19,200,000	12,500,000
1	617	7,100,000	5,100,000
2	346	2,200,000	900,000
3	418	2,600,000	1,600,000
4	332	500,000	1,500,000
6	844	6,200,000	3,300,000
7	468	2,200,000	1,700,000
8	363	1,000,000	600,000
Mn/DOT Total	**4,681**	**41,000,000**	**27,200,000**

Federal Lands Highways Program

The Federal Lands Program includes the following three categories:

- Indian Reservation Roads,
- Parkways and Park Highways, and
- Public Lands Highways.

The Indian Reservation Roads and Parkways and Park Roads categories are allocated by federal administrative formula and the Parkways and Park Highways category is allocated based on a list of projects prepared by the National Park Service. Funding for these three categories is subject to the national obligation limitation. The funding is not included in the initial distribution of obligation limitation to the state. However, all Federal Lands funding has an impact on the amount of the equity adjustments included in ISTEA.

Indian Reservation Roads:
The Federal Lands Indian Reservation Roads program is co-administered by the Federal Highway Administration and the Bureau of Indian Affairs. The Indian tribal government, in cooperation with the BIA, (and, as may be appropriate, with a state, local government, or metropolitan planning organization,) must develop a transportation improvement program that includes all Indian reservation road projects proposed for funding. Projects must be selected by the Indian tribal government from the transportation improvement program and are subject to the approval of the BIA and the FHWA.

Public Lands Highways:
The Public Lands category includes Public Lands Highway and Forest Highways.
Public Lands Highways. Thirty-four percent of the allocated Public Lands Highways funds is used for public lands highways. A public lands highway is defined as 1) a forest road or 2) any highway through unappropriated or unreserved public lands, nontaxable Indian lands, or other federal reservations that are under the jurisdiction of and maintained by a public authority and open to public travel. Public lands highway funds are discretionary in nature. States propose projects which compete for funding on a nationwide basis through solicitation from FHWA. In Minnesota, the annual solicitation is processed by the Division of State Aid for Local Transportation.

Forest Highways. Sixty-six percent of the allocated Public Lands Highways funds is used for forest highways. FHWA is responsible for developing the Forest Highway Transportation Improvement Program (TIP) for each state, with assistance from the National Forest Service, Counties where the National Forests are located and the State Highway Agency (Mn/DOT). In accordance with federal rules, the Mn/DOT is to incorporate the Forest Highway TIP into their STIP. The Forest Highway TIP is provided in time for review and incorporation into ATIPs by the District/ATPs.

Parkways and Park Highways:
Park Highways are owned by the National Park Service. Parkways are authorized by Congress. The FHWA's Federal Lands Highway Office administers the program in cooperation with the National Park Service.

APPENDIX C

MN/DOT HIGHWAY IMPROVEMENT PROGRAM (HIP) (STATE TH FUNDS)

Mn/DOT Highway Improvement Program (HIP) (State TH Funds)

In developing the STIP, all federal aid highway funds except special demonstration funds are subject to the ATP prioritization process. State funded trunk highway (TH) projects are included in the formal STIP for informational purposes and were shared and discussed with the ATPs. Mn/DOT anticipates a high degree of flexibility in the use of federal and state funding sources for individual trunk highway projects. State funded projects should also be included in the MPO TIP for informational purposes.

This state fund target is available to each Mn/DOT District to cover the following items in priority order:

1. Match federal dollars received through the ATP process and the special demonstration projects.
2. Estimate necessary District set asides to cover supplemental agreements and significant costs overruns.
3. Estimate of right of way needs to cover all trunk highway (TH) projects, with appropriate lead time for expenditures. A single account will still be managed under one charge identifier by the Mn/DOT Office of Right-of-Way. The Mn/DOT Districts and Metro Division must identify the expenditures for the correct state fiscal year (SFY).
4. Prioritize a list of all other state funded highway and bridge projects. In the process of developing this list of projects, **Preservation** should receive the highest priority. These should be followed in order by **management and operations**, **replacement** and **expansion** projects. The list of projects may include reserves for grouped projects in the 2nd and 3rd year of the STIP. While discouraged, grouping in the 1st year may be necessary within some project categories. The prioritized list should consider (but not be limited to) projects or funding reserved for grouped projects in the following categories: municipal agreement projects, road repair projects, wildflower projects, landscape partnership projects and rest area projects. A number of these categories could be covered under a single reserve, e.g. wildflower and landscape partnership projects could be covered by the municipal agreements reserve.

Project Work Plans and Project Studies Plans

The three year Project Work Plan should be based on sound estimates of total costs. Projects should have the appropriate scope and reasonable time schedules. The Project Work Plan will be constrained to the funding estimates provided by OIM. A financial summary form should be used for each year of the Project Work Plan (see memo following this information). The following data elements should be

included: SP number, TH number, description/termini; length; category; cost; date and status (new, modified, existing).

The four year Project Studies Plan may include studies that are in the very early stages of development. Accurate estimates of costs may not be available for some of these studies. A reasonable estimate of corridor, area or study cost should be used to keep the list of project studies within a reasonable estimate of future funding. The Project Studies Plan will also be constrained to the funding estimates provided by OIM. The financial summary form should also be used for each year of the Project Studies Plan.

A District multi-modal long-range plan may identify corridor studies and environmental analyses that are beyond the ten year time-frame. Area wide analyses, major investment studies, systems plans, modal plans, etc., are activities that are also being considered for District long range plans.

Minnesota Department of Transportation

Memo

Office of Investment Management
Mail Stop 440, Room 211
395 John Ireland Blvd.
St. Paul, MN 55155

Office Tel: 612-296-8478
Fax: 612-296-3019

January 3, 1997

To: Transportation District Engineers
Metro Division Engineer

From: Al Schenkelberg
Director, Office of Investment Management

Subject: Beyond the STIP (Mn/DOT Highway Investment Plan)
- Project Work Plan (2001-2003)
- Project Studies Plan (2004-2007)
Due Date: February 14, 1997

The statewide **Project Work Plan** and **Project Studies Plan** need to be updated. These plans allow functional groups, involved in the early project development activities, to be able to plan their workload more effectively. The plans also encourage an assessment of the financial feasibility of the projects. The projects included in these plans should be regularly reviewed for consistency with the long range system plan for your district. The Area Transportation Partnership should also be made aware of these project planning and development activities.

The development of the project planning list necessitates estimates of future funding. The preliminary forecast of funding for Mn/DOT project planning for 2001-2007 has been reviewed by the Transportation Program Investment Committee (TPIC). The estimated annual funding is shown in Table 1. Table 1 assumes that state fund availability will be affected by inflation and that additional revenues will be provided to maintain this level.

Table 1: Mn/DOT's Annual Funding Estimates for 2001-2007

Source of funding	$ Estimate (Millions)
Federal aid highway funding (all sources)	$ 180
State Highway funding	$ 220
Subtotal	$400
allowable overprogramming ≈ 6%	$ 25
Project planning total	$ 425

The ATP Funding Guidance for FY 1998-2000 was issued in an October 31, 1996 memo to you. The estimates included in this memo are to be applied to the years 2001 thru 2007. This should eliminate any confusion over the differences between ATP funding and Mn/DOT funding estimates. The annual funding estimate is distributed to the districts in Table 2, by the new target formula.

Table 2: Annual Projected Funding Estimates (Trunk Highway only) FY 2001-2007

District	Percent	$ Millions
1	9.5%	40
2	5.6%	24
3	10.9%	46
4	6.6%	28
6	9.9%	42
7	7.4%	32
8	6.1%	26
M	44.0%	187
TOTAL	100%	425

The three-year Project Work Plan should be based on sound estimates of total costs. Projects should have the appropriate scope and reasonable time schedules. Projects that are currently in the Artemis system should be reviewed, not just staged out to a future date. New projects, not currently in Artemis, should be added and a tentative schedule built.

The four-year Project Studies Plan may include studies that are in the very early stages of development. Accurate estimates of costs may not be available for some of these studies. A reasonable estimate of corridor, area or study cost should be used to keep the list of project studies within a reasonable estimate of future funding. If project costs are not available, a typical cost per mile should be estimated for the study area. The district is asked to provide an estimate of dollars needed for each year of a Project Study. We understand and expect these estimates to change as project development continues and realistic staging is determined.

The project work plan and project studies plan will be constrained to the funding estimate in Table 2. Any review of project planning and project development should consider the funding set-asides necessary for project support activities. Specifically we believe that a minimum of 15% of funds available should be reserved for Cooperative Agreements, Right of Way, and Supplemental Agreements. A financial summary form is attached for your use in identifying funding reserves (set-asides) and funding committed to identified projects or studies in the various categories of work. The financial summary form should be provided for each year of the Highway Investment Plan. A list of the projects included in the plan should be provided to this office. The following data elements should be included as a minimum: SP #; TH #; description/termini; length; program category; total estimate; proposed letting date; and status (new, modified, existing).

When setting letting dates, remember that November is typically the earliest a federal project can be let in the federal fiscal year. As these projects are programmed into the STIP even earlier lettings can be accomplished thru innovative finance procedures like advanced construction.

Both the **Project Work Plan** and the **Project Studies Plan** should be submitted to this office by **February 14, 1997.** If you have any questions or concerns please call Bob Hofstad (612-296-8519 or Profs ID RDH100).

.cc TPIC
ISTEA Working Group
D. J. Flemming
L. G. Eilts
M. H. Linzie
K. F. Rasmussen
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District PMSS Coordinators

MN/DOT HIGHWAY INVESTMENT PLAN FY_____ Financial Summary of Project Work Plan and Project Studies Plan			
Program Priority/Category	Funding Reserves $ Millions	Identified Projects $ Millions	Total Estimate $ Millions
Priority One: Preservation			
Bridge Repair (BI)			
Road Repair (RX)			
Resurfacing (RS)			
Reconditioning (RD)			
Subtotal			
Priority Two: System Management			
Cooperative Agreements (AM)			
Right of Way (RW)			
Supplements/Overruns (SA)			
Enhancement Activities (EN)			
Landscaping - Rest Area - Wetland Mitigation (RB)			
Planning (PL)			
Safety, Traffic and Capacity (SC)			
Safety, Hazard Elimination (SH)			
Safety, Rail/Highway (SR)			
Traffic Management (TM)			
Other			
Subtotal			
Priority Three: Replacement			
Bridge Replacement (BR)			
Reconstruction (RC)			
Subtotal			
Priority Four: Expansion			
Major Construction (MC)			
Subtotal			
Grand Total			
Annual Project Planning Funding Estimates			

APPENDIX D

ATIP Process Documentation Form

ATIP Process Documentation Form

1. District/ATP Name:_____

2. Membership: Numbers of members by Representation, by Type (Professional, Elected Officials, Interested Citizens, and Voting vs. Non-Voting).

3. Process Description: As a minimum, address who and how projects are solicited, the use of planning priorities/sub-targets/etc., how lists are integrated, roles of major partners?

4. Public Participation: List opportunities employed to involve public.

5. STIP Management: Define criteria for District/ATP review of scope or funding changes (significant changes) and typical procedures for addressing these situations.

(Attach additional pages as necessary)

APPENDIX E

TARGET FORMULA FOR YEAR 2000

Target Formula for Year 2000 (1998-2000 STIP)

Background

"Target" is defined as a flexible short range estimate of federal funding. The target is used as a planning tool to assist the District/Area Transportation Partnerships (ATPs) in developing their Area Transportation Improvement Programs.

Targets were used by the ATPs for the first time to develop the 1994-1996 State Transportation Improvement Program. During 1995, officials within Mn/DOT requested that targets be re-evaluated. In late 1995, a work team within Mn/DOT was formed to examine the existing methodology that had been used to develop the target formula and to review other options.

The Target Work Team developed five alternative target formula scenarios which were reviewed by the Districts, Metro Division and their partners in May and June, 1996. In July, the Transportation Program Investment Committee, the Transportation District Engineers, the Metro Division Engineer and the Target Work Team met to share information received from the transportation partners. The scenario that most closely reflected the group's desire to include both system size and system usage factors was selected and further modified.

As a result of nearly a year of analysis and review, Mn/DOT recommends this new target formula for the Area Transportation Improvement Program. The new target formula is consistent with the investment guidance for developing an Area Transportation Improvement Program, includes factors that address the needs of the system and results in relatively minor changes from the results of the previous formula.

Target Formula Explanation

The recommended target formula is based on a 40/60 split between system size and system usage. Factors measuring system size and system usage are used as proxies for existing deficiencies and reflect future usage rather than a backlog of existing deficiencies.

System size factors are included in the formula to reflect Mn/DOT's commitment to preserve and maintain the roadway system throughout the entire state. The usage factors capture the impact of vehicle use on the system and the contribution made by users to the highway trust fund from the different regions of the state.

The Guidance for Development of the State Transportation Improvement Program (STIP) indicates that 30 to 40 percent of Minnesota's investment in

the transportation system should be in preservation activities. The most direct measure of need is the size of the system to be preserved. The size of the system is weighted at 40 percent of the formula. The size factors include total statewide bridge area, federal aid lane miles and public transportation/buses. The weights given to each of these factors roughly approximate the balance among the dollars spent on bridges, roadways and transit projects included in the STIP.

The usage measure, representing 60 percent of the formula, is split equally between present usage and future usage. The present usage factors are total vehicle-miles of travel (VMT) and heavy commercial vehicle-miles of travel (HCVMT). HCVMT is also included in the number for total VMT. To give additional weight to heavy commercial traffic since these vehicles impose greater damage to roads, HCVMT is included in the formula as a separate factor. The two factors of VMT and HCVMT are routinely collected by Mn/DOT.

The target formula includes the state demographer's forecast of population for the year 2020 to represent future system usage. A better measure might be projected VMT, but a forecast of VMT is not available by county (only current VMT is available by county). Analysis of the state demographer's 1995 projected population and 1995 VMT as reported by Mn/DOT showed a 99 percent correlation between population and VMT. Therefore, Mn/DOT concluded that population is a reasonable proxy for future usage of the system.

TARGET FORMULA

MEASURE		FACTOR	WEIGHT
SYSTEM SIZE 40%		Bridge Area	10%
		Federal Aid Lane Miles	25%
		Buses	5%
USAGE 60%	Present	VMT	25%
		HCVMT	5%
	Future	2020 Population	30%

TARGET DISTRIBUTION BY DISTRICT/ATP

DISTRICT	TARGET	
	OLD	NEW (2000)
1	9.4%	9.5%
2	4.6%	5.6%
3	11.8%	10.9%
4	6.9%	6.6%
6	10.0%	9.9%
7	8.0%	7.4%
8	6.1%	6.1%
M	43.2%	44.0%

The recommended formula will be used in the last year of the next STIP, i.e., the year 2000 for the 1998-2000 STIP.

APPENDIX F

STIP FUNDING GUIDANCE

Minnesota Department of Transportation

Memo

Office of Investment Management
Mail Stop 440, Room 211
395 John Ireland Blvd.
St. Paul, MN 55155

Office Tel: 612-296-8478
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October 31, 1996

To: Transportation District Engineers
Metro Division Engineer

From: Al Schenkelberg, Director
Office of Investment Management

Subject: STIP Funding Guidance (SFY 98, 99 and 2000)

After review and discussion of the previous STIP guidance with the ISTEA Work Group it has been decided to separate the funding targets from the guidance document. This memo will serve as the funding guidance by providing the federal and state target funding estimates for 1998 - 2000. The STIP Guidance document will include the framework from which the ATIPs and STIP are developed. The STIP Guidance document is being updated and will be available soon.

Federal Funding Forecast for the 1998-2000 STIP

The target funding level is based on an estimate of the federal aid highway funds available for transportation projects for the next three state fiscal years (1998-2000). The estimate of federal aid highway funds includes **all sources of federal funds except existing special demonstration project funding.**

The Transportation Program Investment Committee decision is to continue to use the same level of federal funding forecast for the 1998-2000 STIP as was used for the 1997-1999 STIP. The District/ATP target funding is shown in TABLE 1. The targets for 1998-1999 are the same as those used in previous years, with $10 million held for statewide reserves each year. The targets for FY 2000 have been adjusted to reflect the work done by the Target Work Team and approved by TPIC and the Commissioner.

TABLE 1

Annual Target Federal Funding Estimates for 1998, 1999 & 2000

District/ATP	1998 & 1999 Share Percent	1998 & 1999 Target $ Millions	2000 Share Percent	2000 Target $ Millions
1	9.4%	$22	9.5%	$22
2	4.6%	$11	5.6%	$13
3	11.8%	$27	10.9%	$25
4	6.9%	$16	6.6%	$15
6	10.0%	$23	9.9%	$23
7	8.0%	$18	7.4%	$17
8	6.1%	$14	6.1%	$14
M	43.2%	$99	44.0%	$101
TOTAL	100%	$230	100%	$230

New Target Numbers

The new target formula for year 2000 is based on a 40/60 split between system size and system usage. Factors measuring system size and system usage are used as proxies for existing deficiencies and reflect future usage rather than a backlog of existing deficiencies.

System size factors are included in the formula to reflect Mn/DOT's commitment to preserve and maintain the roadway system throughout the entire State. The usage factors capture the impact of vehicle use on the system and the contribution made by users to the highway trust fund from the different regions of the State.

The Guidance for Development of the State Transportation Improvement Program (STIP) indicates that 30 to 40 percent of Minnesota's investment in the transportation system should be in preservation activities. The most direct measure of need is the size of the system to be preserved. The size of the system is weighted at 40 percent of the formula. The size factors include total statewide bridge area, federal aid lane miles and public transportation/buses. The weights given to each of these factors roughly approximate the balance among the dollars spent on bridges, roadways and transit projects included in the STIP.

The usage measure, representing 60 percent of the formula, is split equally between present usage and future usage. The present usage factors are total vehicle-miles of travel (VMT) and heavy commercial vehicle-miles of travel (HCVMT). HCVMT is included in total VMT. However, to give additional weight to heavy commercial traffic due to road damage, HCVMT is also included in the formula as a separate factor. The two factors of VMT and HCVMT are routinely collected by Mn/DOT.

The target formula includes the state demographer's forecast of population for the year 2020 to represent future system usage. A better measure might be projected VMT, but a forecast of VMT is not available by county (only current VMT is available by county). Analysis of the state demographer's 1995 projected population and 1995 VMT as reported by Mn/DOT showed a 0.99 correlation between population and VMT. Therefore, Mn/DOT concluded that population is a reasonable proxy for future usage of the system.

TABLE 2

TARGET FORMULA

MEASURE		FACTOR	WEIGHT
SYSTEM SIZE 40%		Bridge Area	10%
		Federal Aid Lane Miles	25%
		Buses	5%
USAGE 60%	Present	VMT	25%
		HCVMT	5%
	Future	2020 Population	30%

State Funding Forecast for the Mn/DOT HIP

The revised state target funding level is based on new revenue forecasts less $20 million per year for statewide reserves. These funding forecasts have yet to be approved by TPIC but are the best estimates available for your use in developing the Trunk Highway Improvement Program (HIP). The revised forecast envisions $200 million in state target funds available for fiscal year 1998 and 1999. The forecast for FY 2000 is $210 for state target funds. The target funding levels are included in TABLE 3.

TABLE 3

Annual Target State Funding Estimates for 1998, 1999 & 2000 (HIP)

District/ATP	1998 & 1999 Share Percent	1998 & 1999 Target $ Millions	2000 Share Percent	2000 Target $ Millions*
1	9.4%	$19	9.5%	$20
2	4.6%	$9	5.6%	$12
3	11.8%	$24	10.9%	$23
4	6.9%	$14	6.6%	$14
6	10.0%	$20	9.9%	$21
7	8.0%	$16	7.4%	$16
8	6.1%	$12	6.1%	$13
M	43.2%	$86	44.0%	$92
TOTAL	100%	$200	100%	$210

* May not total correctly due to rounding.

cc: TPIC
R. McFarlin
D. Borson
D. Flemming
M. Robinson
R. Hofstad/F. Van De Steeg
D. Gerdes
A. McKenzie/J. Bloom
D. Allan
A. Vogel

APPENDIX G

GLOSSARY OF FEDERAL FINANCE TERMS

Glossary of Federal Finance Terms

Allocation. An administrative distribution of funds among the states for funds that do not have statutory distribution formulas.

Apportionment. A term that refers to a statutorily prescribed division or assignment of funds. An apportionment is based on prescribed formulas in the law and consists of dividing authorized appropriations for a specific program among the states.

Appropriations Act. Action of a legislative body that makes funds available for expenditure with specific limitations as to amount, purpose, and duration. In most cases, it permits money previously authorized to be obligated and payments made, but for the highway program operating under contract authority, appropriations specify amounts of funds that Congress will make available to liquidate prior obligations.

Authorization Act. Basic substantive legislation or that which empowers an agency to implement a particular program and also establishes an upper limit on the amount of funds that can be appropriated for that program.

Budget Authority. Empowerment by the Congress that allows federal agencies to incur obligations to spend or lend money. This empowerment is generally in the form of appropriations. However, for the major highway program categories, it is in the form of "contract authority." Budget authority permits agencies to obligate all or part of the funds that were previously "authorized." Without budget authority, federal agencies cannot commit the Government to make expenditures or loans.

Contract Authority. A form of budget authority that permits obligations to be made in advance of appropriations. The Federal-Aid highway Program operates mostly under contract authority rules.

Expenditures (Outlays). A term signifying disbursement of funds for repayment of obligations incurred. An electronic transfer of funds, or a check sent to a state highway and transportation agency for voucher payment, is an expenditure or outlay.

Federal Fiscal Year (FFY). Since FFY 1977, the yearly accounting period beginning October 1 and ending September 30 of the subsequent calendar year. Prior to FFY 1977, the federal fiscal year started on July 1 and ended the following June 30. Fiscal years are denoted by the calendar year in which they end; e.g., FFY 1991 began October 1, 1990, and ended September 30, 1991.

Limitation on Obligations. Any action or inaction by an officer or employee of the United States that limits the amount of federal assistance that may be obligated during a specified time period. A limitation on obligations does not affect the scheduled apportionment or allocation of funds, it just controls the rate at which these funds may be used.

Obligational Authority. Another term for limitation on obligations. See that definition.

Obligations. Commitments made by federal agencies to pay out money as distinct from the actual payments, which are "outlays." Generally, obligations are incurred after the enactment of budget authority. However, since budget authority in many highway programs is in the form of contract authority, obligations in these cases are permitted to be incurred immediately after apportionment or allocation. The obligations are for the federal share of the estimated full cost of each project at the time it is approved regardless of when the actual payments are made or the expected time of project completion.

Penalty. An action that does not allow a state to use the full amount of its apportioned funds. The action may be a withholding of project approvals or withholding of a percentage of the state's apportionment. The action may be taken when the state does not comply with a required provision of law.

President's Budget. A document submitted annually (due by the first Monday in February) by the President to Congress. It sets forth the *Executive* recommendations for the federal budget for the upcoming fiscal year. The President's budget submitted in January 1996 contained recommendations for FY 1997, beginning on October 1, 1996.

Rescission. A legislative action to cancel the obligation of unused budget authority previously provided by Congress before the time when the authority would have otherwise lapsed. Rescission may be proposed by the executive branch but require legislative action to become effective.

States. As defined in Chapter 1 of Title 23, the 50 states comprising the United States plus the District of Columbia and the Commonwealth of Puerto Rico. However, for the purposes of some programs (e.g., Highway Safety programs under 23 USC 402), the term may also include the Territories (Virgin Islands, Guam, American Samoa, and the Northern Mariana Islands) and the Secretary of the Interior (for Indian Reservations).

Trust Funds. Accounts established by law to hold receipts that are collected by the federal Government and earmarked for specific purposes and programs. These receipts are not available for the general purposes of the federal Government. The Highway Trust Fund is comprised of receipts from certain highway user taxes (e.g., excise taxes on motor fuel, rubber, and heavy vehicles) and reserved for use for highway construction, mass transportation, and related purposes.

APPENDIX H

GLOSSARY OF PROGRAM CATEGORIES

Glossary of Program Categories

Municipal Agreements (AM). The Municipal Agreements category is Mn/DOT's share of work done on its right-of-way by another jurisdictions.

Bridge Improvement and Repair (BI). The Bridge Improvement and Repair category is directed at the maintenance, protection and improvement of safety on existing bridges. The work may consist of deck and substructure repair, deck overlay, slope protection repair, bridge approach panel repair, bridge painting, minor widening, etc.

Bridge Replacement (BR). The Bridge Replacement category is directed at the elimination or correction of bridges that have been identified as inadequate and/or hazardous because of horizontal and vertical clearances, load restrictions or deterioration. The work may consists of replacing deficient bridges with bridges or culverts, constructing approaches or major bridge rehabilitation.

Enhancement (EN). The Enhancement category is used for those projects which qualify for Enhancement funding but is not tied to another program category. Projects that may use Enhancement funds are listed in appendix B.

Major Construction (MC). The Major Construction category is directed toward improvements that increase the operational characteristics of a highway facility by decreasing congestion, increasing the operating speed and/or reducing accidents by adding lanes, or by building a new roadway. The projects consist of grading, surfacing, and may include all or combinations of the following: interchanges, bridges, signals, lighting, signing, fencing and landscaping. The focus is on major improvements to existing facilities.

Planning (PL). The Planning category is intended for long range studies of options along or within transportation corridors.

Rest Area/Beautification (RB). The Rest Area/Beautification category is intended for the installation and/or upgrade of Roadside Rest Areas. The Beautification portion of the category is intended for those activities to improve the appearance of the roadside and state entrances, such as Landscape Partnerships.

Reconstruction (RC). The Reconstruction category is intended to bring sections of the highway system which are of higher functional class and are inadequate with respect to grades (deficient horizontal and/or vertical sight distances) and cross section (steep slopes and narrow shoulders) to an

acceptable standard. These projects may also provide for the upgrading of sections with load capacity restrictions. The reconstruction category is not meant to include the addition of thru traffic lanes. The projects consist predominantly of grading or heavy regrading, base, surfacing, and bridges where necessary.

Reconditioning (RD). The Reconditioning category is intended to correct conditions which have been identified as critically deficient without involving major changes to the cross section. The projects usually consist of a combination of two or more of the following: widening, resurfacing, recycling, drainage correction or shouldering. The work may also involve major ditch restoration, isolated geometric corrections, as well as projects with road strengthening as an objective. Geometric improvements include corrections to the horizontal (width, curvature) and vertical (grade) design elements of the highway.

Resurfacing (RS). The Resurfacing category is intended to restore the roadway surface and/or shoulders. The projects may consist of removing and replacing the top layer of the roadway, placing an additional layer on the existing roadway or shoulder, maintenance emergencies or minor improvements (joints, culverts, slopes).

Right-of-Way (RW). These projects are intended to provide for the purchase of property needed for highway construction and to relocate utilities and railroad facilities.

Road Repair (RX). The road repair category is used for minor preservation work. Work must be more than ordinary maintenance and be necessary to obtain the normal life expectancy of the roadway.

Safety Improvements (SH) and (SC). The purpose of the Safety Improvement categories is to eliminate hazardous conditions and/or to increase intersection capacity. The projects consist of mainly intersection improvements (channelization, signals), widening turn lanes, guardrail, improving curves and skid resistant surface treatments. This category has two subcategories determined by funding eligibility.

1. Hazard Elimination (SH) -federally funded and projects must have a Benefit/Cost Ratio of 1.0 or more (This category is often called the Hazard Elimination Safety (HES) Program and more information can be found in Appendix B.)

2. Safety Capacity (SC) - the project's potential to reduce accidents is reviewed but does not have a specific requirement for the Benefit/Cost Ratio.

Safety Rail (SR). The purpose of the Safety Rail category is to promote and enhance safety at all public railroad-highway grade crossings in the state. More information can be found in Appendix B.

Traffic Management (TM). The purpose of the Traffic Management category is to provide for the installation and development of systems to control and alleviate the congestion on urban freeways.

APPENDIX I

STRUCTURE OF PARADOX DATABASE FOR ATIP SUBMITTAL

STIP Guidance

Structure of Paradox Database for ATIP Submittals

STIP data should be transmitted via a Paradox database with the following makeup. Fields that are shaded are for Central Office use only and should be left blank when submitting the ATIP.

Data Element Name	Definition	Type/Width
Sequence Number	**a unique number for each line in the data base**	**Integer**
ATP	**ATP number**	**alpha 3**
District	**Mn/DOT construction district number**	**alpha 3**
Route System	**route system (I, TH, CSAH, MSAH, local, transit, other) and number (ex. TH 6 or CSAH 6)**	**alpha 27**
Route Number	**route number (used only for sorting)**	**numeric**
Project Number	**state project identification number**	**alpha 34**
Requested Year	**the year the District/ATP is requesting the project in**	**alpha 6**
Rank	**ATP priority or rank (this should be a unique value).**	**alpha 11**
Draft Year	**the year the project is placed in during the development of the Draft STIP**	**alpha 6**
Final Year	**the year the project is placed in during the development of the Final STIP**	**alpha 6**
Who	**is this a Mn/DOT project (S) or other (L)**	**alpha 3**
Agency	**name of the agency that will be opening the bids**	**alpha 32**
City	**state aid code number for the city the project is in**	**alpha 3**
County	**number representing county project is in**	**alpha 2**
MPO	**is the project in a Metropolitan Planning Organization's area and the MPO TIP**	**alpha 1**
Description	**verbal description of location**	**alpha 205**

Data Element Name	Definition	Type/Width
Length (Miles)	**length of roadway project in miles**	**numeric**
Length (Kilometers)	**length of roadway project in kilometers**	**numeric**
PRG	**Mn/DOT program category that best fits the project work type**	**alpha 2**
Goals & Objective	**number representing which goal/objective the project meets**	**alpha 2**
Mode	**what mode does this project best fit (highway, transit, bike, etc)**	**alpha 14**
Type of Work	**Artemis Work Type Code for project**	**alpha 5**
Possible Funds	**anticipated source/type of funding**	**alpha 9**
Current Estimate	**total construction estimate**	**currency**
DEMO $	**total federal demonstration dollars anticipated to be used**	**currency**
Other FHWA $	**total FHWA non-demo, non-formula dollars anticipated to be used**	**currency**
FWHA $	**total federal formula highway dollars anticipated to be used**	**currency**
FTA $	**total dollars from the Federal Transit Administration anticipated to be used**	**currency**
STATE TH $	**total state highway dollars anticipated to be used (either state match or state funds; does not include any state-aid funds)**	**currency**
OTHER $	**total of all other dollars anticipated to be used (may be city, county, state-aid, or other sources)**	**currency**