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REVIEW OF THE TRANSPORTATION PLANNING PROCESS IN THE MINNEAPOLIS - ST. PAUL METROPOLITAN AREA

November 1993

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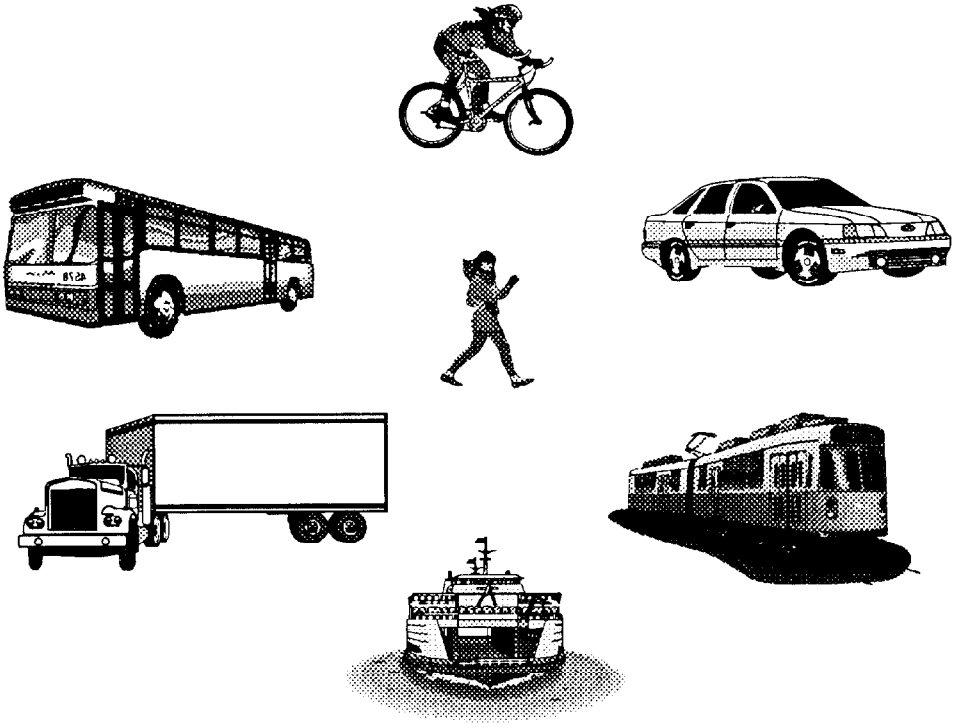

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REVIEW OF THE URBAN TRANSPORTATION PLANNING PROCESS IN THE MINNEAPOLIS-ST. PAUL METROPOLITAN AREA

November 1993

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This report is the sixth in a series produced for the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) by the Volpe National Transportation Systems Center (Volpe Center), Research and Special Programs Administration, U.S. Department of Transportation. Volpe Center staff were William Lyons, Project Manager, and Robert Brodesky (EG&G Dynatrend), Lead Analyst. Other contributors included Charles Goodman of the FHWA, and Frederick Salvucci, under contract with the Center for Transportation Studies, Massachusetts Institute of Technology. Overall guidance for the planning review, including production of this report, was provided by the Program Manager, Deborah Burns of the FTA Office of Planning.

The federal review team, consisting of staff from FTA Headquarters and Region V, FHWA, Minnesota Division, and the Volpe Center, participated in the site visit in the Minneapolis-St. Paul area and reviewed drafts of the report. A draft report was provided for comment to the Metropolitan Council of the Twin Cities. The assistance of staff from the Council, the Minnesota Department of Transportation, the Regional Transit Board, the Metropolitan Transit Commission, the Minnesota Pollution Control Agency, and the city of St. Paul throughout the review is also gratefully acknowledged. Participating state, regional, and local staff are listed in Appendix 1.

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Glossary of Acronyms

ADA	Americans With Disabilities Act
CAAA	Clean Air Act Amendments of 1990
CBD	Central Business District
CO	Carbon Monoxide
the Council	Metropolitan Council of the Twin Cities Area
EIS	Environmental Impact Statement
FAU	Federal Aid Urban
FHWA	Federal Highway Administration, US Department of Transportation
FTA	Federal Transit Administration, US Department of Transportation
HOV	High Occupancy Vehicle
ISP	Indirect Source Permit
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
LRT	Light Rail Transit
Metro Council	Metropolitan Council of the Twin Cities Area
MAC	Metropolitan Airports Commission
MIAC	Minority Issues Advisory Committee
Mn/DOT	Minnesota Department of Transportation
MPCA	Minnesota Pollution Control Agency
MPO	Metropolitan Planning Organization
MTC	Metropolitan Transit Commission
RTB	Regional Transit Board
SIP	State Implementation Plan
STP	Surface Transportation Program (ISTEA)
3-C	Continuing, Cooperative, and Comprehensive (Planning Process)
TAB	Transportation Advisory Board
TAC	Technical Advisory Committee
TBI	Travel Behavior Inventory
TCM	Transportation Control Measures
TDM	Transportation Demand Management
TIP	Transportation Improvement Program
TMA	Transportation Management Area
TMO	Transportation Management Organization
TSM	Transportation Systems Management
UPWP	Unified Planning Work Program
US DOT	United States Department of Transportation
US EPA	United States Environmental Protection Agency
UTPP	Urban Transportation Planning Process
VIM	Vehicle Inspection and Maintenance
VMT	Vehicles Miles Travelled
Volpe Center	John A. Volpe National Transportation Systems Center, Research and Special Projects Administration, US Department of Transportation

I. Summary of Findings and Suggestions

This formal comprehensive review of the planning process in the Minneapolis-St. Paul (Twin Cities) metropolitan area, conducted by Federal Highway (FHWA) and Federal Transit Administration (FTA) headquarters and regional staff, with input from state, regional, and local transportation entities, takes the place of the 1992 planning review of the Twin Cities metropolitan planning organization (MPO) which otherwise would be conducted by FHWA field and FTA regional staff.

The MPO, the Metropolitan Council (Council), conducts a competently managed and organized continuing, cooperative, and comprehensive (3-C) planning process, produces adequate planning products, and uses acceptable planning tools. Efforts are being made to implement a multimodal planning approach, and the transit operator and the state department of transportation are involved in the process.

The federal review team has made a series of observations and suggestions on each segment of the planning process, highlights of which are listed in this summary. These findings are intended to improve an already competent process. Sections of the report where each summary point is discussed in greater detail are noted in parentheses.

The Council activities are being carried out in accordance with the FHWA and FTA regulations, policies, and procedures that were in place prior to the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). The Council is also beginning to address ISTEA requirements. In view of the changing requirements and policies of new law, in particular the Clean Air Act Amendments of 1990 (CAAA) and ISTEA, suggestions are included to strengthen the process in developing the next long-range transportation plan, Transportation Improvement Program (TIP), and State Implementation Plan (SIP). The last section of this report focuses on planning related to the evolving requirements of ISTEA, discusses issues, and provides recommendations.

A. Organization and Management of the Twin Cities Planning Process

1. **The 1986 Prospectus**, a document prepared by the Council to address the region's transportation planning process, **adds clarity and discipline to its complex organizational responsibilities** and should be revised to reflect recent changes, particularly under ISTEA and CAAA. (III.A.)

2. **The Council is commended for its commitment to citizen participation in the 3-C planning process.** (III.A.)

3. In response to the increased emphasis within ISTEA legislation on the development of an intermodal transportation system to reduce air pollution and energy consumption, the region could consider **expanding its transportation policy-making group,** the Transportation Advisory Board (TAB), to include a representative from the Metropolitan Transit Commission (MTC). (III.A.)

4. **The Unified Planning Work Program (UPWP) should be broadened to incorporate all significant transportation planning activities** in the Twin Cities region, regardless of the funding source. The UPWP should present a single, integrated picture of regional transportation planning. (III.B.)

B. Products of the Planning Process

1. The Council could prepare **a single comprehensive, long-range planning document** that incorporates the region's strategic vision, issues, and problems, and considers alternative scenarios. (IV.A.)

2. The long-term planning effort could be improved by **developing multimodal scenarios** as part of the regional transportation plan. This would include quantitatively evaluating the tradeoffs of different transportation investments, including a range of Transportation Control Measures (TCMs) and Transportation Systems Management (TSM) efforts to achieve desired regional goals. (IV.A.)

3. In updating its transportation plan, **the MPO must include a financial plan** to demonstrate that the resources necessary to implement the plan are reasonably available. (IV.A.)

4. The TIP should include the **criteria that were used in developing the three year priority lists of projects**. (IV.B.)

5. The Council is encouraged to include in the TIP **all significant projects** that are funded solely by local units of government. The intent is to improve regional coordination of transportation projects, and create opportunities for assessing the benefits from all programmed traffic and transit improvements. (IV.B.)

C. The 3-C Transportation Planning Process

1. The Council is commended for **its procedures to assess potential capital investments**. These steps are intended to ensure the best use of scarce financial resources. **As a follow-up, evaluations of significant financial investments which estimate actual versus expected impacts could be considered.** (V.A.)

2. In cooperation with other agencies, the Council should **develop an approach to data collection and analysis** that will ensure the optimal application of scarce resources, and improve coordination between planning agencies. (V.B.)

3. **The region's transportation planners, business community, and neighborhoods are commended for actively participating in the resolution of sub-area transportation issues,** considering a range of multimodal alternatives, and adopting trip reduction ordinances that are in the spirit of ISTEA. (V.C.)

4. The Minnesota Department of Transportation (Mn/DOT) and the Regional Transit Board (RTB) should **consider conducting an alternative analysis that examines the two stage construction of light rail transit in the central and I-35W/South corridors.** (V.C.)

5. The region's ambient area quality is closely tied to auto use and land use development patterns. Because of this relationship, the Council could incorporate land use development patterns as factors in scenarios presenting alternative transportation investments in its long-range plan. **Under ISTEA, the effects of transportation decisions on land use, and the consistency of transportation plans and programs with regional and local land use plans must be considered. (V.D.)**

6. Although the level of citizen participation in the I-35W corridor study appears to be exemplary, the Council and the region's other transportation agencies might consider how to **build "grass roots" support for the multimodal transportation philosophy** documented in the Regional Transit Facilities Plan. (V.E.)

7. As required by ISTEA, the Council may need to consider **modifications to its public involvement program to ensure that the public has a reasonable opportunity to comment** on proposed transportation plans and TIPs prior to approval. The ISTEA procedures for the transportation plan must include publication of the plan or other methods to make it readily available to the public. (VI.E.)

D. Tools for Transportation Planning

1. It is strongly advised that the **entire regional travel modeling process**, as executed by the Council and Mn/DOT, be **implemented using a single microcomputer software package.** (VI.A.)

2. The Council and Mn/DOT should consider **improving their documentation of the current modeling process** by producing an overview report, or a special binding of the individual technical memoranda. This step could be particularly important should there ever be litigation under the CAAA or ISTEA. (VI.A.)

3. **Given the need under ISTEA to consider the effects of transportation decisions on land use, consideration should be given to enhancing the travel models** in order to provide the capability for estimating the travel impacts of a wide range of transportation and land use policies. (VI.A.)

E. Ongoing Transit Planning

1. **The Council and the RTB are commended for the strong links established between long-range regional transportation planning and short-range transit planning,** and their strong working relationship. (VII.A.)

2. The Council and the RTB are encouraged to build on the multimodal approach to transit in the Regional Transit Facilities Plan by **incorporating Transportation Systems Management (TSM) and Transportation Demand Management (TDM) strategies as fully developed and integrated components of the future transportation system.** (VII.A.)

3. The Council and RTB are encouraged to **develop a proactive strategy to pursue dedicated state transit funding.** (VII.E.)

4. The RTB and the Metropolitan Transit Commission should work with the FTA to **resolve all issues related to the use of fully allocated costs in competitive bids**, and to assure that the FTA guidelines are satisfied. (VII.G.)

II. Introduction

A. Background

On June 14-17, 1992, a team of representatives from the Federal Highway Administration (FHWA) Headquarters, Regional, and Division offices; the Federal Transit Administration (FTA) Headquarters and Regional offices; and the U.S. Department of Transportation's Volpe National Transportation Systems Center (Volpe Center) met with representatives of the Metropolitan Council (Metro Council), which is the metropolitan planning organization (MPO); the Minnesota Department of Transportation (Mn/DOT); the Regional Transit Board (RTB), the regional body responsible for transit planning; the Metropolitan Transit Commission (MTC), the region's primary transit provider; and other agencies to conduct the review.

Prior to the site visit, the team reviewed extensive documentation on the planning process in the area. The site visit consisted of structured meetings with staff from regional, local, and state agencies responsible for transportation and air quality planning, and the major public transit provider. Participants in the review are listed in Appendix 1. The agenda for the meetings is presented in Appendix 2. The team also conducted follow-up discussions after the meetings.

This report evaluates transportation planning in the Twin Cities urbanized area and summarizes the results of the review in a series of findings and suggestions on planning practices.

Under the regulations in place prior to ISTEA, the State of Minnesota and the MPO must certify that the Urban Transportation Planning Process (UTPP) conforms to regulations set forth in 23 CFR 450, which encompasses transit, highway, and air quality planning. The federal regulations were designed to ensure that urban areas apply a continuing, cooperative, and comprehensive transportation planning process to develop plans and programs which address identified transportation needs in the area, and which are consistent with the overall planned development of the urbanized area.

Self-certification is intended to grant responsibility for transportation planning to states and MPOs. Self-certification is also a prerequisite for receiving federal funds for transportation projects and planning. Certification statements must be provided to FHWA and FTA for review with each new or substantially revised Transportation Improvement Program (TIP).

As stated in the preamble to the FHWA/FTA joint planning regulations published in the June 30, 1983 **Federal Register**, self-certification does not relieve FHWA and FTA of their oversight responsibilities and the obligation to review and evaluate the planning process. These responsibilities are discharged through periodic policy and technical committee meeting attendance and review of related program documentation, including the Unified Planning Work Program (UPWP), technical reports, the TIP, and grant progress reports.

Periodic independent reviews are also appropriate mechanisms for evaluating the planning process. FHWA and FTA are required to judge the credibility of the self-certification designation independently to enable the FTA Regional Administrators/Area Directors and FHWA Division Administrators to make the statutory findings required under Section 8(c) of the Urban

Mass Transit Act and 23 U.S.C. Section 134, on behalf of the Secretary of Transportation. This ensures that the planning process is being carried out by the MPO, in cooperation with the state and transit operators, in a fashion consistent with the joint planning regulations.

This formal, comprehensive review of the Twin Cities urbanized area, conducted by FHWA and FTA Headquarters and Regional staff (Appendix 1), with input from state, regional, and local transportation entities, takes the place of the 1992 planning review of the Twin Cities MPO which otherwise would be conducted by FHWA Division and FTA Regional staff.

B. Scope of the Planning Review

The purpose of this review is to allow FHWA and FTA to determine how successfully the UTPP addresses broadly defined regional transportation needs, and whether the planning process meets the criteria established by the federal planning requirements. Another purpose of the review is to assess the ability of the existing planning process to address the broader responsibilities described under the Clean Air Act Amendments of 1990 (CAAA), and the re-authorization of the surface transportation legislation, the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). ISTEA includes a requirement for federal certification of the planning process in Transportation Management Areas (TMAs). It is expected that this review will assist the Twin Cities metropolitan area to prepare for a future formal certification.

The team reviewed support documentation that included the TIP; the Transportation Development Guide/Policy Plan, the region's plan for transportation through the year 2010; the UPWP; the Regional Transit Facilities Plan; the Air Quality Control Plan for Transportation; and other technical materials related to the UTPP. (Documents are listed in Appendix 3.)

The review focused on the transportation and air quality planning activities of the Council, Mn/DOT, RTB, MTC, and the Minnesota Pollution Control Agency (MPCA).

C. Objectives of the Planning Review

In conducting the planning review, the objectives of FHWA and FTA were to determine if the following conditions existed:

- Planning activities of the MPO and the Council were being conducted in accordance with FHWA and FTA UTPP regulations, policies, and procedures in place prior to ISTEA;

- Regional transportation planning was a 3-C process resulting in the development and support of transportation improvements for the Twin Cities urbanized area;

- The transportation planning process involved representation and input on transportation needs from all levels of government, transit operators, the public, and other interest groups;

- The UPWP adequately reflected all aspects of the UTPP and all transportation planning in the area;

- The transportation planning products, including the TIP and long-range transportation plan, reflected the identified transportation needs, priorities, and funding resources;

- Products of the transportation planning process were multimodal in perspective, complete, based on current information, and interrelated;

- Requirements and objectives of the CAAA, and Americans With Disabilities Act (ADA) were incorporated into the planning process and supported by transportation development activities.

D. Local Transportation Issues

To understand the regional context in which transportation planning is performed in the Twin Cities metropolitan area, the following major transportation issues were identified through discussion with staff from the Council and other regional agencies:

Issue 1 Although the region does not suffer from the severe traffic congestion experienced by other major urbanized areas, **congestion is increasing and will impair economic growth and the region's "quality of life" unless the capacity of the transportation system is expanded.** From 1972 to 1984, severely congested freeway miles tripled from 24 to 72 miles and will triple again by the year 2010 unless the existing transportation system is changed.

Issue 2 **Increased traffic congestion will be caused by a broad range of demographic changes.** Population growth, forecast at 25 percent between 1980 and 2010, will be greatly exceeded by household, employment, and car ownership increases. While employment and population totals will remain steady in the center cities and inner ring, regional growth in jobs and population will be concentrated in the outer ring. As a result, vehicle trips per capita and daily vehicle miles traveled will increase by 50 and 63 percent.

Issue 3 **Metro Council and other regional planning agencies face challenges incorporating "improved quality of life" into effective long-range planning.** According to Metro Council staff, residents consider the quality of life to be superior to that of many other urban areas, and to be threatened by increased traffic congestion. Because this goal is so abstract, it is difficult to reach consensus on how to describe it and measure success.

Issue 4 Many of the metropolitan **highways and bridges are at or beyond their 20-year design life span**, and will require expensive and potentially disruptive reconstruction. Reconstruction combined with expansion of roads into developing areas will strain available public resources, including flexible ISTEA funds, which will be unavailable for other initiatives.

Issue 5 **Two controversies appear to dominate the comprehensive long-range planning process.** First, the proposal to add capacity to the I-35W corridor has generated heated debate and opposition from the affected neighborhoods. Regional highway

expansion, light rail transit (LRT), and high occupancy vehicle strategies; CAAA issues; and urban versus suburban interests, at times seem to be debated through the lens of this single corridor. Second, the decades-old issue of whether and where to institute LRT is unresolved.

Issue 6 **Public transit usage steadily declined in the 1980's, and will require innovative strategies to recover.** Transit lost one-third of total ridership during the past decade. The MTC is struggling to adjust to suburban growth in jobs and population, loss of communities that are "opting-out" of the district, concerns by former riders about safety and service quality, and a shift in planning and programming responsibilities to the RTB. While the MTC has taken actions to retain ridership and control costs, additional fare increases combined with low parking charges may further undermine efforts to regain riders.

Issue 7 While the RTB and MTC have identified resources and strategies to comply with the ADA, **current levels of accessible paratransit service exceed federal requirements** and could be reduced in response to system-wide budgetary strains. The disabled community can be expected to protest the net loss in mobility.

Issue 8 **Support by Twin Cities employers of employee ridesharing programs is eroding.** Many of these companies have been national leaders in this area. The difficult economic climate has led major employers to reduce their committment to employee transportation and related issues. Large vacancy rates in commercial space discourage real estate developers and others from taking actions that might drive economic activity to other locations. Such activities would include discouraging single passenger car trips and encouraging ridesharing and transit.

Issue 9 **The location of a new airport will have a major impact on transportation and land use systems.** The current airport, located close to both central cities, is a major generator of passenger and freight ground transportation and adjacent economic activities. The region is considering new airport locations farther from the two centers out of a concern for the noise. Also, the existing airport would probably have to add runways to meet projected new demand, which would require the taking of thousands of dwelling units, and further increase the noise. Surrounding communities have opposed suggested new sites, as has Bloomington which depends on the current location for its tax base.

Issue 10 **The financial resources required to plan, expand, renew, maintain, and operate the proposed transportation systems substantially exceed identifiable local, state, and federal funding.** The increase in funding from ISTEA may not be as large as expected. Given the competition between urban and rural needs, the Council will need to make a strong case for increased funding.

III. Organization and Management of the Planning Process

A. Metropolitan Planning Organization - Roles and Responsibilities

The Council was established in 1967 to coordinate the comprehensive planning and development of the 3,000 square mile, seven county metropolitan area with its 300 governing units. Council membership consists of seventeen individuals appointed by the governor with the advice and consent of the state senate. Sixteen representatives are appointed from districts of roughly equal population and serve four year terms. The chair represents the region as a whole and is appointed by the governor.

The Council is empowered by state statute to prepare and adopt a comprehensive development guide for the Twin Cities that consists of policy statements, goals, standards, programs, and maps prescribing the orderly and economic development of the metropolitan area. The guide includes direction for land use, parks and open space, airports, highways, transit services, public hospitals, libraries, schools, and other public buildings.

The governor designated the Council as the MPO for the Twin Cities Area in 1973, authorizing the Council to conduct long-range transportation planning. As the MPO, the Council is the lead agency responsible for administering the federally mandated 3-C planning process, and coordinating the activities of other participants charged with carrying out elements of the UPWP. The other major participants in the 3-C planning process are the Metropolitan Airports Commission (MAC), RTB, and Mn/DOT.

To fully carry out the 3-C planning process, the Council has established a very comprehensive structure of committees to ensure the involvement of elected officials, citizens, and technical staff from local and state government, and the region's different transportation agencies. The structure is innovative in the manner that it encourages private citizen involvement in establishing priorities for regional transportation plans and programs.

The Transportation Advisory Board (TAB) manages the 3-C process. It also functions as a forum for cooperative decision-making regarding transportation policy by local elected officials, citizens, and major transportation agencies. The Council has adopted the position that the TAB is responsible for assigning funding priorities and adopting programs. The Council may approve or disapprove a program in part or whole, but will not modify it. If modifications are required, the Council sends the program back to the TAB with its recommendations. The TAB then determines the precise form in which the program will be resubmitted to the Council.

The TAB has 30 members-- seventeen represent local municipalities and counties, four represent state or regional agencies, and nine, including the chair, represent the public. The citizen appointments are made by the Council. Eight of the citizens are chosen to represent the region's metropolitan districts. The four additional members of the TAB are RTB, Mn/DOT, MAC, and MPCA officials.

The TAB has the responsibility for guiding regional planning, reviewing transit plans, and establishing funding priorities for projects eligible under federal programs (e.g., FHWA Federal Aid Urban (FAU), Interstate Substitution, and new programs established by ISTEA). It

participates in the preparation of the transportation and aviation chapters of the Council's Metropolitan Development Guide, and the Transit Policy Plan, and coordinates the preparation of the UPWP, and a three year TIP. The TAB also has extensive reviewing responsibilities which include monitoring the progress of the UPWP; commenting on planning, engineering, and capital grants and projects of regional significance; and assessing RTB's Transit Implementation Plans.

To further ensure the success of the 3-C process, the TAB is supported by a full time transportation coordinator who is responsible for advising and working with the TAB chair and its sub-committees, developing the TAB's agenda, following through on TAB decisions, and representing the TAB on the Technical Advisory Committee (TAC).

The TAC and its sub-committees provide the mechanism for ensuring that the TAB considers the technical merits of proposed transportation issues, plans, and programs. For the most part, the TAC's members are city and county engineers or planners and technical staff from Mn/DOT, MTC, RTB, MPCA, and the Minnesota State Planning Agency. To date, the TAC has five sub-committees which provide guidance on: 1) the Twin Cities Metropolitan Area Transportation System Plan; 2) capital programs; 3) administrative, regulatory, and legislative matters; 4) the Metropolitan Airport System; and 5) air quality matters. Due to the flexible funding provision of ISTEA, the Council is currently considering creating an additional sub-committee to address region-wide bikeway and pedestrian matters.

Observations and Suggestions

1) **The 1986 Prospectus**, a document prepared by the Council on the region's transportation planning process, **adds clarity and discipline to the complex organizational responsibilities and should be updated to reflect recent changes**, particularly under ISTEA and CAAA (e.g., the roles and responsibilities for implementing transportation management strategies). Without this brief but comprehensive description, an outsider to the process would have a difficult time understanding the somewhat complex committee structure that has been established for addressing region-wide transportation issues. The Prospectus effectively clarifies the complex process and provides sufficient information to any citizen on how to participate and influence decision-making.

2) **The Council should consider the benefits of creating an additional sub-committee to address bikeway and pedestrian matters.** Conceivably, a more efficient alternative would be the expansion of the membership of an existing sub-committee to include representatives from the bikeway and pedestrian groups. The structure of the Twin Cities' 3-C planning process has essentially four layers of committees. Even though this ensures the participation of all relevant players, the complexity and large number of committees raises concern regarding how efficiently technical information is being communicated and decision-making is occurring.

3) **The Prospectus' description of the roles and responsibilities of the sub-committees** supporting the 3-C planning process **could include the frequency with which these groups meet during the year.** This information would help clarify the influence that these technical groups have on regional transportation decision-making.

4) **The Council is commended for its commitment to citizen participation in the 3-C process.** The TAB is structured so that citizens and political leaders can establish a dialogue for cooperative decision-making. Nearly one-third of the members of the TAB are citizens, and each one represents the interests of a different metropolitan district. In addition, the appointment of a new citizen to chair the TAB every two years ensures that citizens have a leadership role in the process.

5) **The region should consider expanding the TAB to include an MTC representative.** This addition would further encourage consensus on difficult issues facing the region, and would be consistent with the increased emphasis in ISTEA legislation on development of intermodal transportation systems to reduce air pollution and energy consumption.

B. Unified Planning Work Program

In accordance with joint FHWA/FTA planning regulations, the TAB prepares a UPWP annually. The document describes the multimodal, federally funded transportation planning activities that are to be conducted within the Twin Cities' metropolitan area. The document is intended to provide other agencies and the public with an overview of the major transportation issues facing the region, and the tasks that will be undertaken to support regional planning.

Projects included in the Council's 1992 UPWP have a total budget of $5.7 million. In addition to the Council, RTB, Mn/DOT, MPCA, and the MAC participated in the preparation of the UPWP. This participation ensured that the UPWP projects were reviewed for consistency with the Transportation Policy Plan and the Aviation Systems Plan Guide chapters of the Council's Metropolitan Development Guide.

The UPWP is a very well organized and effective management tool because it outlines the following:

- How is this work program essential to the metropolitan planning process?
- Who are the contributors and the implementing agencies?
- What is the relationship of different work elements to planning activities undertaken in the previous year?
- What are the anticipated results or products of the overall planning effort and individual tasks?
- What is the time frame for completing the work elements?

In addition, the funding sources and the annual carryovers for different work elements and tasks are well documented. Despite this, the UPWP appears to be a stand alone document without any strong links to the region's goals, priorities, and long-range transportation policies.

The UPWP is intended to reflect the needs and priorities of the region. It includes work activities that focus on highway corridor planning, light rail transit (LRT) and other transit planning, demand forecasting, air quality, and aviation planning. However, no information is provided on how annual regional planning priorities are developed, what the priorities are, and how these priorities drive the selection of the UPWP's work elements and tasks. Consequently, the extent to which work elements relate to regional priorities is not clear.

The UPWP includes all of the transportation planning activities of the Council and RTB. It does not include significant transportation planning activities that receive only state and local funds. The Five Cities Corridor Study, which was primarily funded with local funds, was included in the UPWP because federal funds financed the time spent on the study by Council staff. Mn/DOT's work activities included in the UPWP are limited to those which are funded with federal planning and research funds.

The inclusion of all significant transportation planning activities that are state and locally funded will improve the quality of the 3-C planning process by providing a more coordinated and informed mechanism for setting priorities in accordance with regional goals, and programming scarce resources. This would present a single comprehensive description of regional transportation planning to public agencies, the private sector, and citizens.

The UPWP includes airport-related work activities. Since these actions are not required by federal regulation, most large urbanized areas do not consider airport matters when carrying out the 3-C process. This step by the Twin Cities area signifies a strong regional commitment to multimodal planning, the development of an integrated transportation system, and the maintenance of the region's quality of life and economic vitality.

Observations and Suggestions

1) **The Council is commended for developing a UPWP format that serves as an effective management tool.** In addition to describing the 3-C planning process and the roles and responsibilities of the major participants, the UPWP includes work activity descriptions which: 1) state the purpose, approach, and relationship to work conducted in previous years; 2) identify products with completion dates; and 3) specify funds and funding sources.

2) **The narrative of the UPWP could establish the importance of this document as a strategic management tool for accomplishing the objectives described in the transportation and aviation chapters of the Council's <u>Transportation Development Guide/Policy Plan</u>.**

3) **The UPWP should include all regionally significant transportation planning and management activities in the Twin Cities area, regardless of the funding source.** Non-federally funded activities were not included in the UPWP. The joint planning regulations require that all transportation planning activities be included in the UPWP whether or not they are federally funded. By including activities funded solely by state and local sources, the UPWP would provide a more complete picture of planning.

4) **The Council is commended for including the Metropolitan Airport Planning Commission and airport system planning activities in the 3-C planning process.** Since inclusion of airport planning activities is not required by federal regulation, this addition signifies a strong regional commitment to multimodal planning, and the development of an integrated transportation system.

C. Self-Certification

Self-certification of the planning process is done annually with the adoption of the UPWP. At that time, the Council adopts a resolution certifying that the planning process is in accordance with federal procedures. At the time of the review, certification had last been completed in October, 1991.

IV. Products of the Process

A. Transportation Plan

Minnesota statutes require the Council to prepare and adopt a comprehensive development guide that focuses on the economic, social, and physical needs of the metropolitan area. As part of this mandate, the Council is required to assess the impact of future development on highways and transit facilities. In response, the Council has adopted the Metropolitan Development Guide with urban development objectives and growth management policies. The guide includes the Transportation Development Guide/Policy Plan which describes the direction the Council believes transportation investments should take over a 22 year planning period (1988 to 2010). No intermediate term implementation strategy is considered.

The transportation guide is extensive and was published in 1988 by the Council as a stand-alone document. Since then, the Council has produced a number of stand-alone planning documents, and has undertaken planning studies to address specific issues (e.g., Planning Strategically for High Occupancy Vehicle (HOV) Facilities and Programs in the Twin Cities Metropolitan Area). The documents are well prepared; however, it is difficult to discern the relationship of one document to another, and the extent of analysis that has been conducted.

The transportation plan was prepared using 1986 household, population, employment, and traffic estimates. The 1990 Census revealed that the 1986 demographic forecasts for 1990 were slightly below what actually occurred. (Council staff believes that the discrepancy between its estimates and the census count is due to unanticipated migration from the Iron Range into the Twin Cities' suburbs.) In accordance with the state mandate requiring the plan to be updated every five years, the plan will be revised in 1993. This will be done using current census data and regional forecasts which are currently being revised. For the purpose of distributing the forecasts, the Council is preparing urbanized land estimates with the region's communities.

One of the major challenges of long-term regional transportation planning is to provide an effective guide or plan that will be used by the implementing agencies. To accomplish this the Council has developed a policy-driven transportation plan, and provides implementing agencies with strategies and quantifiable performance criteria to apply when considering alternative investments. This approach sets the stage for implementing agencies to take actions that produce regionally desired results. A critical chapter of the transportation plan identifies individual policies, discusses the implications of the different policies, proposes strategies for implementation, and offers performance evaluation criteria. The transportation guide also includes separate metropolitan transit and highway plans, and a section describing principles for evaluating potential funding options.

Even though the plan was adopted in 1988, it included important emphases that are now part of ISTEA. The plan emphasizes the maintenance of the region's existing transportation system, and achievement of transportation system efficiencies by making greater use of existing and under-utilized facilities. This emphasis stems from one of the region's key issues -- preservation of its quality of life, which is frequently noted in many of the Council's planning documents. Even though Council staff members have described the plan as "constrained", it is not anti-growth. The plan attempts to strike a balance between maintaining this somewhat abstract goal

(preservation of the region's quality of life), and supporting development and enhancing the region's economy through transportation investments.

Another priority was the development of a financially reasonable plan. The plan attempts to preserve the existing level of regional mobility through the year 2010, while keeping expenditures to a minimum. In doing this, the Council recognizes current national and local economic and financial pressures, and attempts to balance the interest in maintaining the region's quality of life with limited long-term funding. The Council's Metropolitan Development and Investment Framework emphasizes careful management of regional resources by placing the highest investment priority on servicing existing development within the urban service area.

Despite the call for fiscal restraint, the proposed level of highway and transit improvements exceeds estimated revenues. The Council estimates a shortfall as high as $2.1 billion by the year 2010 for metropolitan highway system improvements. This estimated shortfall incorporates Mn/DOT's projections of a reduction in state transportation expenditures in the region from 41 percent to 34 percent. The plan also calls for additional analysis to estimate the financial implications of maintaining the region's minor arterial system. To support transit operation and construction of three LRT lines, the estimated shortfall for the planning period is approximately $1.3 billion.

The overall transit approach established in the Council's Transit System Plan, 2010 (a chapter of the Transportation Development Guide) strengthens the region's commitment to its regional growth and development vision. The overall approach is to promote all forms of riding together by providing incentives to share rides, and to strengthen the competitiveness of fixed route service with the automobile. The commitment to the transit approach (as well as the regional growth and development vision) is reinforced by a state statute requiring the RTB to prepare an implementation plan to carry out the Council's overall transit policy. The state requirement not only strengthens the 3-C planning process, but authorizes the MPO to take the lead in developing long-term transit implementation strategies and investments. It also gives the Council a stronger hand in influencing the region's long-term land use and development patterns.

In response to the state mandate for the Council to lead transit development, the Council issued the Regional Transit Facilities Plan in February, 1992. By issuing the plan, the Council firmly established its role and created a blueprint with the support of MN/DOT, RTB, and the region's cities and counties for moving forward with HOV and LRT planning and construction.

The plan is not an elaborate policy statement; instead, it definitively outlines alternatives for transit development (such as HOV lane and light rail construction) in accordance with the regional vision established in the long-range plan. It proposes a reorganization of the transit services into a constellation of transit hubs and spokes to better serve suburb-to-suburb, reverse-commute trips, and individuals with disabilities in developing areas. Hubs would be transfer points for passengers who are moving to and from local and express transit services, suburban circulators, carpools, and paratransit. To implement this transit concept, the plan calls for new service improvements, low cost capital investments in park-and-ride lots, signage and shelters, and major capital investments in light rail and high occupancy lanes on freeways and expressways.

Another critical element of regional transportation planning is a consideration of multimodal scenarios. The region appears to be moving in this direction with its commitment to maximizing the capacity of existing facilities, and promoting HOV strategies. The Metropolitan Highway System plan, after examining three alternatives, identified traffic management techniques as the preferred strategy. Since then, the Council has prepared an in-depth study on how to plan for HOV facilities and programs. This document provides technical support for the Regional Transit Facilities Plan. However, in-depth evaluations of alternative scenarios with quantifiable tradeoffs of different categories of transportation investments are not readily evident in the region's long-term planning documents. Without this analysis, justification for selected strategies, such as the construction of HOV lanes and LRT lines versus new highway construction, are not clear. The presentation of alternative scenarios is becoming increasingly important to satisfy the concerns of citizens or advocacy groups with potentially contentious views regarding significant transportation investments. In addition, to fully respond to ISTEA and the CAAA, the Council will need to evaluate and document the extent to which certain actions such as HOV lanes, ridesharing, LRT, and telecommuting influence the attainment of regional goals.

Observations and Suggestions

1) **The Council could prepare a single comprehensive, long-range transportation planning document that incorporates the region's strategic vision, issues, and problems, and consideration of alternative scenarios.**

2) **The long-term planning effort could be improved by conducting and documenting the multimodal system alternative analyses that are used for developing the regional transportation plan.** This process will include quantitatively evaluating the tradeoffs of different transportation investments, including a range of TCM and TSM strategies to achieve desired regional goals. In doing this, the Council could consider optimistic and pessimistic population and economic forecasts, and more completely integrate its regional transportation and land use planning activities.

3) **The Council should establish short and long-range time frames (e.g., 1988-2000 and 2000-2010) for transportation investments in its revision to the long-range plan.** These time frames will provide a better understanding of what needs to be accomplished to enhance mobility and achieve regional goals. This is done to a limited extent in the Regional Transit Facilities Plan which calls for low cost and major transportation investments.

4) In updating its transportation plan, **the MPO needs to include a financial plan that demonstrates that it is reasonable to expect that the resources necessary to implement the plan will be available.**

B. Transportation Improvement Program

The TIP is a product of the 3-C planning process. Each year in June, the Council initiates the process by requesting Mn/DOT and RTB to submit projects. Council staff then prepare a draft document for review by the TAC's Funding and Programming Subcommittee. The TAC

eventually reviews it, and then passes it on to the TAB for adoption, and the Council for approval. The intent of the process is to ensure that the TIP reflects the region's priorities as expressed in: 1) the Council's Transportation Development Guide/Plan; 2) RTB's Five Year Plan; 3) the Council's Transportation Air Quality Control Plan; 4) local comprehensive plans and transportation programs; and 5) Mn/DOT's 20 year plans and Highway Improvement Work Program.

Critical to the 3-C planning process is whether or not the TIP is a strategic document for implementing the long-range transportation plan. The Council successfully documents the regional planning context, the interrelationship of the region's planning documents that influence the TIP's development, and the issues and policies that affect which projects are included in the TIP's three year prioritized lists. The MPO contends that projects are included in the TIP which will maintain the region's economic vitality and quality of life, and will result in:

- Transit services able to compete with single-occupant vehicles;
- Ramp metering and high occupancy vehicle bypass ramps;
- High occupancy vehicle lanes;
- A coordinated approach to land use and transportation planning by local governments and regional agencies;
- The maintenance of the existing metropolitan highway and transit system facilities; and
- The reconstruction of key roadways and bridges.

Despite the Council's thoroughness in presenting its philosophy and policies in preparing the TIP, it is not completely clear how the projects are actually prioritized for inclusion. That is, the Council does not identify the actual criteria that are used to rank TIP projects. By excluding this information the Council is not able to demonstrate that a strong link exists between the plan and the TIP. Also, this omission obscures how multimodal considerations or trade-offs are factored into the TIP development process used by Mn/DOT, RTB, and the Council.

The TIP includes an annual element of projects as well as a three year listing. Projects that are scheduled for construction in 1992 receive special emphasis and they are referred to as the "annual element" of the TIP. Capital projects from the seven county area that are funded by FTA and FHWA programs are included.

The Council does not intentionally over-program the TIP. The reported costs are consistent with the federal funds available. In addition, the MPO staff does not track the development of projects once they are included in the TIP. This is done by Mn/DOT through its State Aid Office. Only the Federal Aid Urban (FAU) element of the previous TIP was regularly reviewed by the MPO staff and the TAB to determine project status. An analysis that was conducted in the fall of 1991 showed that about two-thirds of the projects included were actually implemented over the previous three years.

City and county federal aid projects typically fall in the FAU and Interstate Substitution fund categories. These projects are products of local comprehensive and transportation planning programs. Before their inclusion in the TIP, they are reviewed for consistency with regional plans. The provisions of Minnesota's Metropolitan Land Planning Act enable the Council to

review city and county comprehensive plans, including the transportation elements, to determine consistency with regional goals.

Due to its multimodal perspective, the MPO has adopted a flexible approach to its use of FAU funds to finance highway and transit improvements, pedestrian facilities, and bus purchases. However, the MPO does not adequately document the criteria used to determine which modal investments to make. Nevertheless, this flexible approach demonstrates innovation; it also anticipates the spirit embodied in ISTEA and establishes a model for other MPOs. The Council staff voiced support for ISTEA's flexible funding provision, and they clearly understand the ramifications of the provisions. Council staff predicts that the MPO's job will become more difficult since ISTEA provisions place greater pressure on the region to: 1) ask the right questions; 2) undertake system-wide analyses that examine modal tradeoffs; 3) identify and resolve policy issues; and 4) adopt an investment strategy that maintains the system's integrity.

A component of the 1992 TIP was air quality conformity analysis. In conducting the analysis, EPA's interim guidance was employed by the Council. Two quantitative modeling procedures, Mobile 4 and SPOLLUT, were used to estimate region-wide 1995, 2000, 2005, and 2010 mobile source emissions. From this analysis, the Council concluded that implementation of the 1992 TIP (the build scenario) would contribute to continued reductions in carbon monoxide (CO). The TIP indicates that the annual CO reductions under the build scenario for the years 1995 and 2000 would be about 1,565 and 2,925 tons, respectively.

In its efforts to improve the region's air quality, the TIP incorporates TCMs from the region's Transportation Air Quality Control Plan. Many of these TCMs are completed or in the final stages of implementation. In 1991, an annual vehicle inspection and maintenance program was implemented to inspect 1976 and newer gasoline-powered cars and light duty vehicles. The region estimates that the program will result in a 13.5 percent reduction in auto-related CO emissions by the year 1995. If it is successful, the region will have met CAAA attainment standards and established a margin of safety. Other TCMs that have been implemented include: 1) staggered work hours for city, county, and state employees; 2) computerized traffic management systems in St. Paul and Minneapolis; 3) an alternative fuel testing program for MTC buses; 4) reduced MTC fares; 5) metered freeway access locations; 6) expansion of area-wide car and vanpool programs; and 7) CBD fringe auto and bicycle parking programs.

Observations and Suggestions

1) **The TIP could include the criteria used to prioritize projects for inclusion in the TIP. This would strengthen the document, demonstrate its objectivity, and establish crucial links to the long-range plan.** Citizen and advocacy groups will increasingly demand this type of specificity to determine if the TIP's projects comply with the requirements of the ISTEA and CAAA. By doing this, the Council would more firmly establish the TIP as a strategic short-term planning document for implementing region-wide projects.

2) **The Council could strengthen the process by which it tracks the completion of projects. Technical and financial milestones prior to construction could be monitored and reported on a regular basis from one TIP to the next.** We recognize

that Mn/DOT is currently tracking federal funds; however, this does not allow for a regional assessment of the efficiency of expenditures for the full range of projects in the metropolitan area.

3) **The Council is encouraged to include in the TIP all significant projects that are funded solely by local units of government.** The intent is to improve regional coordination of transportation projects, and create opportunities for assessing the benefits from all programmed traffic and transit improvements. This will enhance activities that are already underway to link regional and local transportation and land use planning. The Minnesota Metropolitan Land Planning Act allows the Council to review the cities' and counties' comprehensive plans with the region's vision for growth and development.

4) Since only two-thirds of the projects that are included in the TIP are being implemented, **the MPO needs to confirm that the TIP is actually fiscally constrained.** The joint FHWA/FTA Interim Guidance on the ISTEA Metropolitan Planning Requirements provides guidance on this item.

V. Elements of the 3-C Transportation Planning Process and Related Activities

A. Evaluation of the Impact of Recent Major Transportation Investments

The Twin Cities' urbanized area does not have formal guidelines on when and how to evaluate the impact of recent major transportation investments. These evaluations are not formally recognized as the responsibility of specific agencies or unified working groups, and are not routinely undertaken. For accountability reasons, these evaluations should be elements of a sound 3-C planning process, contrasting actual to forecasted impacts on costs; ridership (in the case of transit); automobile usage (vehicle miles travelled); and other relevant factors including land use and air quality impacts. These analyses would allow the testing of assumptions made at the time of project approval related to land use, demographics, and pricing policies. They would also allow a critical assessment of the validity of these analytical methodologies and add an important element of accountability for planners and policy-makers.

The Council has adopted procedures for assessing potential investments during project planning. These procedures are described in the Metropolitan Development and Investment Framework. The Council recognizes the limitations of the region's resources and how important it is to assess the benefits of a range of potential investments. The evaluation procedure is applied to proposed capital improvements that the Council has major responsibility for, such as transit, and those which it can strongly influence, such as highways. To complete an evaluation the Council will do the following:

- determine regional needs based on the policy plans for the metropolitan systems;
- determine the costs and benefits of individual projects and alternative actions;
- develop a financing plan, with an analysis of operating costs and debt service, to rank proposed projects;
- examine the impact of significant projects on the regional economy;
- review all projects to determine equity, efficiency, and the appropriateness of a range of different funding sources and mechanisms (such as general obligation bonds); and
- monitor the sum of its investment decisions versus regional growth goals for maintaining existing facilities, providing for planned regional growth, and servicing unanticipated growth.

Observations and Suggestions

1) **The Council is commended for its procedures to assess potential capital investments.** This is done to ensure that the region makes the best use of scarce financial resources. As a follow-up, **evaluations of significant financial investments which estimate actual versus expected impacts could be considered.** These "before and after studies" should be part of a standard regional data collection and trends monitoring process that contrasts actual to forecasted impacts.

2) As the MPO, with responsibilities for assuring the credibility of the 3-C planning process, **the Council can actively coordinate and encourage all involved agencies to complete these evaluations of major investments.** The Council need not be directly responsible for undertaking all analyses.

B. Monitoring, Surveillance and Reporting

Numerous data collection and preparation activities are conducted by the Council and other transportation agencies. The region has a history of periodically conducting extensive surveys to monitor travel behavior, estimate travel demand models, and reassess long-term transportation plans. The region has the capability to trace the development of travel patterns and behavior over approximately forty years.

The region has no plan that identifies the roles and responsibilities of different transportation agencies for data collection. The different agencies work cooperatively to continuously update travel behavior inventories and traffic counts. Council staff believes that there could be improvements in coordination; however, it does not appear to be a problem.

Attempting to keep the 3-C planning process current, the Council, Mn/DOT, and RTB initiated the Travel Behavior Inventory (TBI) with a comprehensive set of travel surveys in 1990. The survey results were compiled, validated, and documented in 1991. By the end of 1992, the agencies intend to complete their analysis of the data, update inputs for their travel demand models, and re-calibrate their travel demand models.

Similar region-wide surveys were conducted in 1949, 1958, 1970, 1982, and 1990. According to Council staff, the 1990 TBI is far more extensive than comparable regional surveys that have been conducted by MPOs over the last fifteen years. It believes that the demands stemming from ISTEA will result in other MPOs committing to extensive data collection and modeling efforts. The Council contends that similar in-depth research is necessary to accurately understand travel behavior and will result in more credible long-term planning, corridor assessments, and air quality analyses.

For the TBI, the following categories of surveys were conducted: 1) home; 2) establishment; 3) transit on-board; and 4) external origin and destination. The total sample size for the home based surveys was 9,600 households (versus 2,400 in 1982). It consisted of a questionnaire that focused on household characteristics, including auto ownership, and a travel diary for respondents to record information on their trip making. The sample size for the establishment survey was about 250 individuals; its intent was to collect travel data on people arriving at different categories of establishments. Employees at each of the establishments were also included in the survey. The transit on-board survey was structured so that it complemented a 1988 transit survey. The objective was to sample approximately 20 percent of bus trips on routes that have changed or been added since 1988. Additional data were collected on trip generation at locations in the metro area that display special characteristics (e.g., downtown Minneapolis and St. Paul, the University of Minnesota, and the International Airport), and to determine future truck volumes. Traffic counts were conducted at different external stations and screenline locations.

Mn/DOT is responsible for conducting traffic counts on major highways in the region, and intersection counts for corridor studies. It also coordinates and collects the traffic counts that are conducted by the region's counties and cities on roads that fall into lower functional classifications. For the most part, the counties and cities conduct the traffic counts cyclically to ensure funding eligibility. Minneapolis has conducted CBD cordon counts every two years since the 1950s. St. Paul's schedule has been more irregular; however, cordon counts were completed in 1990. As part of ongoing system-wide monitoring, Mn/DOT maintains a computerized Transportation Information System with information on roadway conditions; its Traffic Management Center produces reports on such topics as vehicle occupancy and travel trends; and MTC maintains data on transit performance.

The Council does not regularly collect data for the purpose of monitoring implementation of the long-term transportation plan. When the plan is updated, the Council determines what projects have been implemented over the last five years.

Observations and Suggestions

1) **The Council and the region's transportation agencies are commended for undertaking a comprehensive survey of the region's travel behavior.** The ongoing analysis and recalibration of the region's travel demand model will enable the region to respond to the demands stemming from ISTEA.

2) **Due to the lack of extensive travel behavior inventories** (in areas other than the Twin Cities) **over the last ten to fifteen years, it is suggested that the Council continue to produce reports that thoroughly document its methodology, its development of data bases, and its model calibration activities.** By doing this, the Council will establish a model for other regions to follow for conducting travel behavior inventories and re-calibrating travel demand models.

3) **In cooperation with other agencies, the Council should develop a "plan" for data collection and analysis to ensure the optimal application of scarce resources.** Given the large number of ongoing data collection activities and the demand for additional research to meet requirements of ISTEA, the region needs to consider ways to achieve greater efficiencies.

4) **In conjunction with its TIP updates, the Council is encouraged to monitor the technical and financial milestones that are important to the implementation of the transportation plan.**

C. Ongoing and Corridor Multimodal Planning Approach

The Council is responsible for demographic, economic, and land use planning. It produces population, household, and employment forecasts for the metropolitan area and its 187 cities and townships. Because these forecasts are routinely used to assess development policies and capital investment decisions, they are incorporated into the Metropolitan Development and Investment Framework. They are also essential inputs to the region's travel demand forecasting activities.

As stated earlier, the Council considers its forecasts to be realistic; however, the 1990 census indicated that its 1990 forecasts were somewhat conservative.

The Council uses different methods to produce regional population and employment forecasts. One set of population, household, and labor forecasts is developed using the cohort survival method. The reasonableness of the forecasts is checked by comparing them to a set of regional forecasts produced using regression analysis.

For developing city and township forecasts, the Council has adopted a methodology that it describes as interactive. It first produces household forecasts, then population, and finally employment. This is done by examining recent building permits and land supply trends, monitoring local comprehensive plan and zoning restrictions, and checking changes reported by the federal census. The forecasts are then summed and compared to the regional control total. They are not finalized without meeting with the cities and townships to discuss local growth trends.

The Council routinely undertakes regional system plans or studies to support its long-range planning and the commitments made in the Transportation Development Guide/Policy Plan. The plan includes a work program which calls for the completion of a range of studies. This stipulation has resulted in the inclusion of the following studies in the UPWP: 1) the Major River Crossings Study; 2) the Minor Arterial Study; and 3) the HOV Facilities Study. The Major River Crossings Study focuses on developing a strategy for reconstructing the bridges connecting Minneapolis and St. Paul without major disruptions to inter-city flows. The Arterial Study focuses on how to fund the minor arterial system and what the roles and responsibilities of Mn/DOT, counties, and cities should be for project planning, construction, and funding.

In 1991, the Council published a study on how to plan strategically for HOV facilities in the Twin Cities metropolitan area. The region has already implemented a number of HOV facilities including the Nicollet Mall in downtown Minneapolis, busways on three different arterials feeding Minneapolis, an exclusive freeway lane on I-394, and the construction of downtown parking garages with discounts for HOVs. The study, however, calls for a greater commitment to HOV facilities to maximize the people moving capacity of the existing transportation system and infrastructure. Some of the recommendations included in the final report call for: 1) specific corridor studies; 2) ramp meter bypasses for HOVs for all interchange construction and reconstruction projects; 3) the planning, design, and implementation of HOV support facilities and services; 4) the construction of park-and-ride lots along HOV lanes; 5) the expansion of bus service in corridors with HOV facilities; and 6) the generation of support for the HOV concept among different segments of the population (e.g., citizens, local government, developers, and employers).

Multimodal corridor studies have been conducted with the involvement of Mn/DOT, the Council, local jurisdictions, and citizen and business groups. In recent years the region has focused on how to add capacity in the I-35W and I-494 corridors. I-35W, the main north-south route connecting Minneapolis with the southern portion of the metro area, is very congested. Rapid real estate development during the 1980s has generated increased trip making along I-494 in the vicinity of the St. Paul-Minneapolis International Airport.

An Environmental Impact Statement (EIS) process is currently underway exploring alternatives involving highway expansion, HOV strategies, and LRT construction for the I-35W corridor. Council staff anticipates that Mn/DOT will select an alternative by the end of 1992. Of the different alternatives that have been considered, Mn/DOT and the Council favor an alternative which offers the greatest reserve capacity and implementation flexibility. This alternative calls for the conversion of an existing lane for the northern portion of I-35W to HOV, the construction of an exclusive HOV lane along the southern portion of I-35W, and the possible construction of a LRT line along the median sometime in the future.

Some central city citizen groups intensely oppose any physical expansion of the I-35W right-of-way and construction of additional lanes. The opposition stems from environmental and neighborhood preservation concerns. I-35W, when originally constructed, divided or permanently disturbed the physical integrity of a number of neighborhoods. Some citizens are proposing the construction of a LRT line along the I-35W median as the only acceptable "build" alternative. The state has recently undertaken a review of the projects to determine to what extent right-of-way acquisitions would result in the displacement of minorities. Mn/DOT is committed to building new multi-unit housing to accommodate displaced individuals.

In 1990, RTB adopted a ten year LRT plan which called for the construction of nine lines and two extensions. In late 1991, the Council coordinated an effort to scale back the original plan for an extensive LRT system. The Council and RTB have recently proposed a smaller system with two routes along the corridors which would generate the highest demand: the central corridor connecting the downtowns of St. Paul and Minneapolis, and the I-35W/South corridor. At the same time LRT is being considered in the I-35W EIS process, an alternatives analysis has been initiated by Mn/DOT and RTB to study LRT and possible busway construction along the central corridor.

Another draft EIS has been completed for the I-494 corridor. This study was completed by Mn/DOT with financial support from a joint powers organization consisting of five suburban cities, and a Transportation Management Organization (TMO) supported by local developers. The Council has been involved in the study on an ad hoc, advisory basis. The study's build alternative calls for the reconstruction of I-494 with one HOV lane and the preservation of right-of-way for the construction of one more lane (possibly for HOV). At the same time, the joint power organization is considering adopting a trip reduction ordinance to mitigate the impact of new real estate development on trip generation in the corridor. The goal is to achieve a 20 percent reduction in the number of peak period work trips that are currently forecasted for the year 2010. The ordinance would require employers with 50 or more people to file annual reports on trip reduction activities, and pay filing fees which would be used to support trip reduction outreach programs. It would also make it mandatory for developers to incorporate transit user site improvements in any project proposals.

The Council has been granted the power by the state to declare a proposed real estate development of "metropolitan significance." If the Council invokes this power, the development cannot proceed until the Council reviews the project, assesses impacts (including transportation), and negotiates any necessary changes that would minimize adverse impacts (such as the inclusion of transit friendly facilities). One of these reviews could take as long as a year. At the request

of Minneapolis, the Council invoked this power to review the Mall of America proposal. The proposal was scaled back, excluding some of the proposed commercial and office space.

Observations and Suggestions

1) **The region's transportation planners, business community, and neighborhoods are commended for actively working together** to resolve sub-area transportation issues, to consider a range of multimodal alternatives, and to adopt trip reduction ordinances that are in the spirit of ISTEA and the CAAA.

2) **The Mn/DOT and RTB should consider conducting an alternative analysis that examines the two stage construction of LRT in the central and I-35W/South corridors.**

D. Consideration of Air Quality

The Twin Cities urbanized area is now very close to attainment for carbon monoxide (CO). In 1982, the region anticipated that it would come into compliance; however, random testing in the mid-1980s uncovered a number of intersections where CO standards were exceeded. Since then, the EPA has required the region to adopt a strategy for vehicle inspection and maintenance (VIM) for automobiles and light duty vehicles in the seven county urbanized area. The VIM program, which has been in place for a year now, should effectively reduce CO levels and bring the region into attainment. The region may be eligible to apply to the Environmental Protection Agency (EPA) for a CO reattainment designation several years from now, providing no new violations occur.

The EPA approved the seven county area's Air Quality Control Plan for transportation in 1980. At that time, the Minneapolis central business district (CBD) was the only location where control measures were deemed necessary to attain CO standards by 1982. Subsequent monitoring necessitated plan amendments and the adoption of different traffic management improvements. These have included: 1) the completion of one-way streets on 1st Avenue North and Hennepin Avenue and Lake Street in Minneapolis; 2) the construction of a fringe parking system for the Minneapolis and St. Paul CBDs; 3) the expansion of Minneapolis and St. Paul downtown skyways; 4) the computerization of St. Paul's downtown traffic signal system; and 5) the computerization of the traffic control system for the intersection at Snelling and University.

As described previously, the CAAA interim conformity guidelines required a comparison of "build" and "no build" scenarios as part of the 1992-94 TIP conformity determination. The analysis was based on the 2010 highway system as the "build scenario." Emission estimates were produced using the most current population, employment, and travel estimates. The analysis indicated that the "build scenario" would result in annual reductions in the tons of CO. For the year 2010, the mobile source estimates for the build and no-build scenarios are 253,928 and 260,138 tons/year, respectively.

In developing air quality plans and implementation actions, the Council works closely with the Minnesota Pollution Control Agency (MPCA). The agency has the power to promulgate and enforce air quality standards throughout the state, and is responsible for the development of the

State Implementation Plan (SIP). At the regional level, MPCA is an active member of the TAB and the TAC, where it advises the region on the Twin Cities' Air Quality Transportation Control Plan and TCMs.

The MPCA also has statutory power to regulate the construction of large developments which could generate high volumes of traffic. Construction cannot begin unless the MPCA issues an Indirect Source Permit (ISP). Issuance is dependent on whether or not the proposal meets the ISP's parking criteria, and a determination that no state ambient air quality standards will be violated. The permit may specify unique or special conditions for the construction and operation of the development, such as: 1) completion of roadway improvements; 2) provision of traffic and law enforcement personnel; 3) monitoring of traffic and air quality; and 4) implementation of transportation management measures (e.g. adoption of flex-time by employers locating in the development).

The urbanized area devotes great care to analyzing and monitoring air quality. Given the substantial margin of safety developed by the VIM program, the only substantive danger appears to be the possibility that the region, which is currently in attainment for ozone, might fall out of attainment if VMT grows dramatically. The region is well positioned to control VMT growth due to its multimodal planning philosophy and the different statutory powers that the Council and MPCA have to review or regulate land use and development.

Transportation system management strategies which affect ambient air quality have been implemented or are currently under consideration by local jurisdictions. For example, Golden Valley and St. Louis Park have entered a joint powers agreement to prepare an ordinance to reduce auto trips along a part of I-394 through the regulation of densities. Minnetonka has separately adopted an ordinance to manage growth adjacent to the I-394 corridor. Currently, five cities (Bloomington, Edina, Eden Prairie, Richfield, and Minnetonka) in the I-494 corridor, with the support of a private TMO consisting of developers, are considering the adoption of a similar ordinance.

Concerned about the possibility of litigation, the Council staff indicated that it is working with Mn/DOT to enhance the credibility of its air quality models and procedures, and to improve its documentation. Experience in other regions has indicated that individuals or groups seeking to halt a project have questioned the validity of modeling procedures and mitigation actions. At the same time, the Council has formed an ad hoc committee of local consultants to write air quality guidelines to be used when local transportation studies are undertaken.

Observations and Suggestions

1) **The region is commended for its proactive stance on air quality.** Even though the region anticipates that the implementation of the VIM program will result in a CO safety margin, the MPCA utilizes its statutory power to regulate the construction of real estate developments which could generate high volumes of traffic. Local municipalities have entered joint-power agreements to adopt trip reduction ordinances to be applied to employers with 50 or more employees, and the Council has declared proposed real estate projects of "regional significance."

2) Since the region's ambient air quality is so closely tied to auto usage and developing land use patterns, **the Council could include scenarios in its long-range plan that examine the interaction of land use development and the investment in transportation infrastructure.** This would be useful in demonstrating that the effects of transportation decisions on land use and development have been considered, as required under ISTEA.

3) **The MPCA is encouraged to continue working with regional agencies, particularly the Council, to identify opportunities to apply a broad range of TCMs.** These measures would include support for transit and demand management in granting indirect source permits to major developments.

4) **The Council is encouraged to update its air quality control plan and provide comprehensive documentation on its air quality modeling procedures.**

E. Outreach Efforts

For the most part, the Council, RTB, and Mn/DOT have independent outreach efforts. Each organization relies on citizen input at public meetings and hearings. One recent public meeting on alternatives for increasing capacity in the I-35W corridor, jointly sponsored by the Council and Mn/DOT, attracted more than one thousand people. The Council and RTB have direct citizen input through the MPO committee structure and specialized advisory committees that serve the different organizations.

Citizen Participation

The Twin Cities have a strong tradition of citizen participation which has been fueled by politicized controversies over highway construction, the transfer of interstate highway funds, airport noise, large scale real estate developments, and the possibility of LRT construction. This tradition has been enhanced by the Council, RTB, and Mn/DOT's commitment to actively recruiting citizens for their advisory committees.

In an effort to involve the general public in the planning, development and implementation of regional plans and policies, the Council and RTB have an "open appointment" policy and program to actively recruit citizens to sit on advisory committees. The open positions are advertised in local newspapers including three minority-owned publications. RTB recruits citizens for its Transportation Accessible Advisory, Rideshare Advisory, and Providers' Advisory committees.

In addition, the Council has a community services group that includes publications, a data center, and a community outreach staff. It maintains a mailing list of over 25,000 individuals and groups to which it sends various public relations publications and notifications of public meetings. The staff also circulate reports and policy documents to interested groups and individuals, as well as public libraries throughout the seven county area.

In June, Mn/DOT and the Council held a public meeting on the alternatives identified in the draft EIS for the I-35W corridor. The meeting, which was contentious, was attended by more than one thousand citizens. The contentiousness of the public response at the I-35W meeting

can be interpreted in a number of ways. Either the process is exemplary or many of the citizens are frustrated by the direction of regional transportation planning, the types of alternatives that are considered, or by the way the alternatives are presented to them for consideration. This is difficult to assess as part of this review; however, the Council and the region's other transportation agencies might consider how to build "grass root" support for the multimodal transportation philosophy documented in the Regional Transit Facilities Plan, through public involvement in the earliest stages of long-range planning.

As discussed previously, the Council's 30 member TAB includes nine citizen representatives. The TAB's membership is an indication of the Council's commitment to citizen participation, as it ensures that transportation policy making reflects the needs and desires of the community. Citizens are also represented on the Council's Aging Advisory and Minority Issues Advisory committees, both of which are consulted on transportation plans and issues.

The RTB has established an ongoing community participation program. Meetings and forums are regularly held with local elected officials, legislators, general public, local planning staffs, and providers. Public meetings to discuss such topics as fares, service, and accessibility are often held in different neighborhoods to ensure access by affected groups and provide a good geographic mix.

Minority Participation

Minorities make up only approximately 3.5 percent of the metro area population, and they have not participated extensively in public hearings and other forums for public comment.

The Council relies on its 25 member Minority Issues Advisory Committee (MIAC), which meets monthly, to advise it on issues of concern to minority communities in the region. The committee's role is to identify and study major issues and trends affecting minority communities. It reviews Council policies and plans to determine their impact on minority communities and develops recommendations as to how the Council can be more responsive. In addition, within minority communities the committee attempts to identify barriers to involvement in regional programs, services, and decision-making.

The Council appoints MIAC members for three year staggered terms. The sixteen Council districts are grouped into eight precincts, and one member is appointed from each precinct. Twelve members are appointed at large, and four members represent each of the four state councils for minority communities, which are the Asian Pacific Council, the Council on Black Minnesotans, the Indian Affairs Council, and the Spanish Speaking Affairs Council. The MIAC chair is appointed by the Council chair.

Private Sector

The RTB provides the opportunity for private provider participation in the planning process in a number of ways. Private provider representatives serve on its Transportation Accessible Advisory, Rideshare Advisory, and Providers' Advisory committees. Quarterly meetings are held with providers under contract to the RTB. Private providers have been consulted and

involved in the development of the RTB's capital planning process and the Five Year Transit Plan.

In addition, a TMO was formed by real estate developers in the I-494 corridor to pursue traffic management strategies. The TMO has conducted surveys of local employers to determine employees' travel patterns. Local municipalities, which have entered a joint-power agreement to adopt a trip reduction ordinance, have found the data to be very valuable. The TMO is not currently active; however, the Council anticipates that this will change once the trip reduction ordinance is adopted.

Observations and Suggestions

1) **The Council and RTB are commended for their efforts to provide an effective means, through membership on the TAB and an array of sub-committees, for citizens and private operators to participate in the planning process.** The region has also effectively notified and provided opportunity through public meetings for citizens to comment on the findings of different studies. This was demonstrated by the turnout for the I-35W corridor study.

2) Although the level of citizen participation in the I-35W corridor study appears to be exemplary, **the Council and the region's other transportation agencies might consider how to build "grass root" support for the multimodal transportation philosophy documented in the <u>Regional Transit Facilities Plan</u>.**

3) **The Council and Mn/DOT are commended for addressing minority concerns in their regional and corridor transportation planning.** The Council actively recruits minorities to participate in its transportation sub-committees and uses its Minority Issues Advisory Committee as an additional forum to raise transportation issues. Mn/DOT's commitment to provide housing to individuals displaced by I-35W capacity improvements is an innovative approach to balancing social costs with regional benefits.

4) **In recognition of today's broader range of interest groups for transportation planning, consideration should be paid to including representatives of the environmental community, as well as the citizenry at large, in the technical information dissemination process.** The Council currently prepares a TBI "Fact Sheet" for broad distribution throughout the community. Perhaps the scope of this effort could be expanded to include information and opportunity for comment on the overall technical process.

5) In addition its current public involvement procedures, the Council **may need to consider modifications to ensure that the public has a reasonable opportunity to comment** on the transportation plan and TIP prior to approval, as required by ISTEA. The procedures for the transportation plan require publishing the document or using some other means to make it readily available to the public.

VI. Tools, Skills and Data Base for Transportation Planning

A. Travel Demand Forecasting

Regional application of the travel models is a cooperative effort undertaken jointly by the Council and Mn/DOT. The Council staff is primarily responsible for preparing demographic inputs, and calibrating and applying the trip generation, distribution, and mode choice elements of the model chain. It also is responsible for the transit network development component. Mn/DOT maintains the highway networks and prepares regional traffic assignments.

The Council and Mn/DOT are currently using different hardware/software environments to conduct regional transportation modeling and analysis. The Council performs its steps in a microcomputer environment using the TRANPLAN software package, and Mn/DOT carries out its responsibilities in a mainframe computer environment using Planpac. These differences create operational inefficiencies and data incompatibilities (e.g., during the highway network and trip assignment step), and limit the number of functions that can be performed.

Planpac has a number of shortcomings. It does not support many of the iterative, recursive, and equilibrium-seeking processing functions that are desirable in today's planning environment, and are available with TRANPLAN. In addition, technical support is no longer available to its users. As a result, the complete conversion of the four step modeling process to a micro-computer based software process would increase efficiency and enable the region to undertake additional analyses. TRANPLAN on a 386 microcomputer with a math co-processor would accommodate the 1200 transportation analysis zones that the Twin Cities region intends to use for its modeling.

As discussed earlier, the Council, Mn/DOT, and RTB conducted the TBI in 1990. The travel behavior and trip making data are currently being used to update the Council's travel demand models. Since a comparable data base was constructed in 1982, the region has extensive data on travel behavior and household trip making rates for an eight year period. This would enable it to assess how travel habits have changed, and to analyze the possible impacts of these changes on short and long-term transportation planning. By selecting a small sample of the households who cooperated in the 1990 TBI, the region could continue to track travel behavior and document changes.

The land use forecasting process relies heavily upon professional judgement and consensus building among member local governments. Access-sensitive land use allocation models are not used in the demographic forecasting process. Instead, planners consider currently established development patterns and general levels of access in preparing the forecasts.

Written record of the current modeling process is not provided in a single document, nor even a compendium of reports. Instead, the Council has prepared a chronological sequence of technical papers describing model tests and enhancements. All planned transportation improvements are justified by technical analyses performed under the process in place -- even as the modeling process is updated and undergoes major review. Any legal challenges to these projects would require documentation to be reconstructed. Since litigation has been initiated

in other regions in response to the CAAA and ISTEA requirements, current and comprehensive documentation of the modeling process would be in the Twin Cities' best interest.

The trip production model is based upon cross-classification lookup tables of trip rates, stratified by area type. Area type is used as a proxy for development density, which has been found to affect the level of "motorized" trip-making in some areas. Another possible measure that could be substituted for area type is development density. Not only is development density quantifiable, it is a more direct indicator of trip generation. Additionally, the trip generation stage includes no consideration of transportation system access, cost, or general supply. The TBI should provide greater insight on the influence of accessibility at this stage of the modeling process. The TBI will also enable the region to learn more about the context and pattern of non home-based travel occurring in the Twin Cities region. Studies performed elsewhere in the U.S. have identified rapid growth in this component of trip-making, relative to other trip purposes.

The trip attraction model involves use of regression equations applied on a zone basis. One possible enhancement could be the removal of the constant value in the regression equations. This would enable the models to be applied using different transportation zone configurations.

The Council utilizes a traditional gravity model form of distribution. The large sample size of the TBI was planned, in part, to support calibration of the income sensitive distribution models. The extensiveness of the TBI provides an opportunity to consider incorporating new variables into the model re-calibration process. Possibilities include "equilibrated" speeds as the accessibility measure, and transit/HOV impedances for certain corridors. In addition, a high incidence of external trip making and intra-zonal travel call for the region to reconsider the size of the modeling area and the size of the transportation analysis zones.

The Council employs a nested logit approach to estimating the modal shares of home-based work trips, with sub-zonal stratification of walk access. The model requires highway and transit zone-to-zone travel times. Because the highway and transit networks are developed by different agencies, in different software environments, consistency between the resulting sets of impedances is questionable. Furthermore, the use of "equilibrated" speeds is particularly important in mode choice. As inferred earlier, the Planpac package is not capable of iterating capacity restrained speeds in a feedback loop through the four step process.

The assignment method employed by Mn/DOT is "all-or-nothing", an approach that is not sensitive to capacity constraints, and is only marginally useful for sketch planning purposes. In corridor studies, the Council performs traffic assignments using the "equilibrium" method available in TRANPLAN.

Finally, processing highway and transit networks in different software environments limits opportunities for establishing a coordinated technical process for establishing operating speeds for alternative forecast-year surface transit test scenarios. It is important that transit operating speeds reflect anticipated levels-of-service on the region's roadways on which the transit vehicles will be operating.

Observations and Suggestions

1) **It is strongly advised that the entire regional travel modeling process**, as executed by the Council and Mn/DOT, **be implemented using a single microcomputer software package**. By doing this, multiple iterations of feedback loops could be executed more efficiently, inefficiencies inherent in Planpac could be eliminated, and greater consistency between region-wide and corridor-level modeling processes could be achieved.

   Mn/DOT currently holds a statewide license to operate TRANPLAN, the software package which is being used by the Council and other smaller regional agencies across the State. TRANPLAN appears to be the logical selection for both Mn/DOT and the Council to use.

2) **The Council and Mn/DOT should consider improving their documentation of the current modeling process** by producing an overview report, or a special binding of the individual technical memoranda. This could be particularly important should there ever be litigation under the CAAA or ISTEA.

3) **Because ISTEA requires the effects of transportation decisions on land use to be considered, the Council might consider enhancing the travel models** to provide the capability to estimate the travel impacts of a wide range of transportation and land use policies. Although there are no major capacity expansion projects currently being planned for the Twin Cities area, introducing access-sensitivity in the land use allocation process should be considered. Valuable information on land use and location patterns is available from the TBI and the 1990 Census. The Council and Mn/DOT should consider utilizing these data opportunities. The Council could prepare and evaluate **alternative land use/transportation improvement scenarios** for their areawide mobility impacts prior to adoption of the next round of small area growth forecasts. This would be of great value in developing the regional scenarios suggested in Section IV.A.

4) **The Council and Mn/DOT should consider expanding the modeled area** to include not only the entire CO non-attainment area, but also the area that potentially could be included in an ozone non-attainment area, if such a designation were to occur. Currently, the modeled area of the Twin Cities region excludes portions of the designated CO non-attainment area. Additional consideration should be given to modeling the functional commutershed, as identified by data to become available from the 1990 Census.

B. Costing Methodologies

The Council relies upon the implementing agencies for capital and operating cost estimates. Mn/DOT is responsible for cost estimation for highway programs, while the RTB is responsible for transit. The RTB regularly updates its data base of actual operating costs and uses this as the basis for forecasting. Transit costs are developed using a four factor cost model and fully allocated costs.

Observations and Suggestions

1) As part of the project development and implementation process, the actual costs of constructing or maintaining transportation facilities should be tracked and compared with forecasts. If this became a part of the routine data collection effort, this would introduce accountability by identifying cost overruns or over-estimates.

VII. Ongoing Transit Planning

A. Organizational Issues

Metro Council and the RTB

The Regional Transit Board (RTB) is responsible for transit planning in the Twin Cities metropolitan area. The RTB was created by the Legislature in 1984 to perform transit planning and policy-making, and to administer transit services in the metropolitan area. The RTB links the long and short-range regional plans of the Council to transit programming by the RTB, and to operations provided by the Metropolitan Transit Commission (MTC) and other providers.

To understand how transit planning is conducted in the area, it is crucial to understand the RTB's relationships with the Council and the MTC. The strong relationship between the RTB and the Council results in close coordination between long-range regional transportation planning and short-range transit planning. The RTB produces strategic plans that reflect the goals and policies established in the Council's long-range plans. The success of regional planning in the Twin Cities area may result in large part from state mandates that define clear roles and responsibilities for the Council and the RTB, as well as the positive working relationships they have established.

State legislation links the agencies politically and financially. By mandate, the RTB prepares a plan to implement the Council's long-term transportation policy. The Council issues the bonds to finance the capital cost elements of the RTB Plan. Of the RTB Board's ten members, the Council appoints one from each of the eight RTB districts. In addition, the governor appoints the chair, as well as one member who is age 65 or over, and one member with a disability. At least six members must be elected officials of cities, towns, or counties.

The regional transit philosophy expressed in the Council's Regional Transit Facilities Plan (1992) successfully provides a bridge between the twenty year horizon of the Transportation Policy Plan and the RTB's five year range for transit planning. The Facilities Plan, developed by the Council with the RTB, Mn/DOT, and MTC, extends the definition of "transit" beyond fixed route service to a multimodal concept of mobility, including ridesharing, TSM, transportation demand management (TDM), and land use strategies to support transit.

In practical terms, the RTB develops strong short-term plans for regional transit. Its products include the Vision for Transit, describing capital and service improvements through 1996, and the Five Year Transit Plan 1991-1995. These documents identify a cohesive and integrated picture of a future regional transit system characterized by LRT, HOV, and transit hubs.

The broad view of transit reflected in the Facilities Plan anticipates the multimodal thrust of ISTEA. Although this plan recognizes the role of TSM and TDM strategies, when it comes to defining specific long-term projects it focuses on capital intense LRT and HOV projects. TSM and TDM appear to be left to "local groups responsible for these activities," with Council assistance. At issue is not the absence of TSM and TDM -- a full range of activities are underway throughout the region, including:

- an innovative trip reduction program initiated by Golden Valley and St. Louis Park;
- work by the Council with local governments and TMOs to ensure that TDM objectives are included in local plans;
- incorporation of TDM on highways by Mn/DOT (e.g., ramp metering and preferential access); and
- initiation of ridesharing by some major employers.

The issue is whether TSM and TDM are integrated as specific and fully developed components of short and long-range plans. By incorporating TSM and TDM in future long-range plans, the Council and the RTB could fully develop and quantify how these strategies will contribute to the performance of the regional transportation system. The expected results of these strategies could be measured in terms of VMT reductions, improvements to air quality, reduced congestion, or mobility. TSM and TDM strategies could take their place alongside the proposed HOV, LRT, and transit hub proposals in long-range alternative scenarios.

County Railroad Authorities

The seven county railroad authorities develop and implement light rail transit in their own jurisdictions. The RTB was directed by the Legislature in 1989 to assume responsibility for LRT planning. It was instructed to incorporate the seven county plans into a regional plan with financial projections. During the review, the Council and RTB staff expressed concern over the difficulty of coordinating a regional LRT plan, with prioritized corridors, with county authorities that understandably focus on local concerns. At one time, the county commissions had identified nine LRT lines. At the time of the review, the region had yet to establish a regional consensus on priority LRT corridors. The Regional Transit Facilities Plan, however, focused LRT discussion on two lines in two corridors.

The MTC

The five MTC commission members (one each representing Minneapolis, St. Paul, the region at-large, and two for the suburban areas) are selected by the RTB Board. The MTC is the primary provider of the 46 providers or communities the RTB contracts with for transit services. The MTC operates 903 peak buses to provide 96 percent of the region's 145 routes, providing 65 million rides in 1991. The MTC also operates the regional ridesharing organization, Minnesota Rideshare.

Relations between the MTC and both the Council and the RTB appear somewhat strained. When the RTB was created, it assumed the MTC's transit planning functions. The MTC was reorganized to become an entrepreneurial, market oriented organization. The RTB must award service to the MTC for operations within the designated area (including Minneapolis and St. Paul). Five suburban communities were allowed to "opt out" of the MTC service district, receive funds directly from the RTB, and put local services out to bid. The MTC is expected to be entrepreneurial and independent in competing with private providers for contracts.

However, it is in an unusual position relative to other providers -- it is managed and regulated by the RTB, its major customer.

There are several issues related to competition between the MTC and private providers discussed in Section VII.G.

The ISTEA emphasis on representation of central cities and public transit operators in regional transportation planning is reflected to a limited degree in the metropolitan area. The RTB has no formal structural link to Minneapolis and St. Paul, despite the heavy involvement of the cities in regional transit issues. Both cities, however, are represented on various advisory boards, and by RTB appointees to the MTC Board. Formal representation on RTB could increase support for long-range initiatives including transit hubs, HOV lanes, and LRT routes. Transit interests are represented by RTB membership on the TAB, and the RTB and MTC staff who serve on the TAB's Technical Advisory Committee.

Transit planning in the region successfully reflects the multimodal emphasis of ISTEA in many ways. At the conceptual level, the Council and the RTB consistently use a multimodal definition of transit in their planning. And more specifically, MTC works with Mn/DOT in the "Team Transit" program to improve transit efficiency through small highway and road projects. An example of where multimodal planning could be strengthened is the inability of the planning agencies or MTC to work with St. Paul or the University of Minnesota to increase parking costs. The MTC has a difficult time competing with daily parking at $0.80 at the University and $1.25 in St. Paul.

Observations and Suggestions

1) **The Council and the RTB are commended for the strong links established between long-range regional transportation planning and short-range transit planning**, and their strong working relationship.

2) The Council and the RTB are encouraged to build on the multimodal approach to transit in the Regional Transit Facilities Plan by **incorporating TSM and TDM strategies as fully developed and integrated components of the future transportation system.** The plans should identify projected impacts of these strategies, which should be combined with proposed HOV, LRT, and hubs in alternative scenarios.

3) **The Council and the RTB are encouraged to continue to work with the county railroad authorities to produce a single prioritized LRT plan reflecting regional objectives and financial constraints.**

B. Performance of Existing Service and Development of New Service

Related discussion is included in section VII.D.

The RTB monitors and evaluates all public transit service in the Twin Cities area. This includes: the regular route system; community-based transit service -- RTB-funded programs

administered by cities and counties; special transportation for elderly and disabled persons, provided by Metro Mobility; TDM services; and ridesharing.

The RTB employs a broad range of measures to evaluate the performance of transit service and to identify opportunities to expand or reduce service. Measures include cost per hour, cost per passenger, passengers per hour, and subsidy per passenger. Primary indicators for designing new services are dwelling units per acre, employment statistics, and household income per census tract.

The key performance standard for regular route service is subsidy per passenger. For MTC service, the RTB applies the four-factor cost model to determine operating costs per passenger, and specifies the maximum subsidies per passenger: $3.25 for local radial; $4.00 for local cross-town; and $3.85 for peak-hour express. The standards are reviewed annually, and revised every two years with updates to the Five Year Plan. The cost model is validated annually.

Although the key indicator is subsidy per passenger, problem service is also evaluated for farebox recovery, cost per hour, cost per passenger, passengers per hour and mile, and load factor. If routes fail to meet standards, RTB has formal procedures for public hearings, and restructuring, contracting out, or terminating the route.

Use of passengers as the single indicator of ridership may limit estimates of benefits produced by transit and the value of performance comparisons between services and modes with different average trip lengths. The RTB could add passenger miles, which reflects distance travelled, to supplement the passenger measure, which is boardings and not completed trips. Subsidy or cost per passenger mile would improve consistency in comparisons of transit service with different average trip lengths (crosstown and express routes), and different modes (light rail, fixed route bus, and demand response). Passenger miles might also be one useful measure of transportation benefits in competitions between highway and transit projects for ISTEA flexible funds. Although passenger miles are costly to collect because it typically requires sampling, it is required as part of the FTA Section 15 report.

Monitoring of performance measures for transit conducted by the Council and the RTB are included as items in the UPWP.

In general, the UPWP contains very little information about the significant transit planning efforts underway in the region. Activities undertaken by MTC, many of which may be federally funded, are excluded. Many of the RTB's planning activities considered in the following sections, including financial, ADA, equipment, and safety planning are summarized under the single broad category of "transit planning" in the UPWP.

Observations and Suggestions

1) The RTB could **add passenger miles as an indicator of ridership** in its performance measures to improve comparisons between services and modes with different average trips lengths. This may be useful for comparisons of costs and benefits of transit and highway projects in competitions for ISTEA flexible funds.

2) The RTB could **expand the summary descriptions of transit planning activities in the UPWP to provide a more complete picture of significant efforts** underway throughout the region. The value of a comprehensive description of regional transportation was provided in Section III.D.

C. Transit Structure, Vehicle and Equipment Planning

Fleet replacement plans are prepared to coincide with biennial preparation of the Five Year Transit Plan, and updated annually by the MTC for its fleet by the RTB for the other providers. The RTB and MTC evaluate existing facilities, rolling stock, and equipment for consistency with service, efficiency, and effectiveness objectives. The RTB inventories major capital equipment and facilities every two years with the update of the Five Year Plan. Replacement programs reflect equipment and vehicle life-cycles.

Vehicle and equipment plans include regular annual renewal of 80 to 100 buses, and twelve year replacement of the entire fleet. The financial implications of compliance with ADA and the CAAA are programmed into the five year fleet replacement budget. Lifts are on 25 percent of MTC buses and will be on all new vehicles. The Five Year Plan recognizes the uncertainty in costs to meet the emissions standards, and estimates that $20,000 to $40,000 may be added to the cost of each bus. Also, between $4 to $5 million may be required to retrofit fueling facilities at bus garages. These costs are on budget totals of $81.3 million for fleet replacement and $8.5 million for facilities during the period of 1991-1995. Staff estimated that Section 9 will only fund 50 percent of the projected fleet costs.

Observations and Suggestions

1) The RTB could continue to refine **capital and operating plans, as improved estimates of costs to meet ADA fleet and CAAA requirements become available.** Accurate estimation of costs and air quality benefits of clean buses might help build a competitive case for flexible ISTEA funds.

D. Transit Management Analysis

Discussion of related topics is included in Section VII.B.

The MTC evaluates route performance for scheduling and other operations planning. In response to the loss of one-third of transit riders in the last decade, the RTB is financing an independent management audit of MTC, and is working with MTC on a comprehensive operations analysis. The MTC and the other providers collect performance data, which are then analyzed by the RTB. Demographic data for transit planning are collected by the Council.

The RTB and MTC took an innovative approach to evaluation of service quality by considering the perceptions of current and former riders in the 1991 Marketing Study. The report concluded that riders rate system performance positively -- 56 percent as excellent or very good, and 31 percent as improved, compared to 8 percent as fair, and 6 percent as poor. Reasons offered for the ridership decline were safety and security concerns; shifts of demand away from the two

downtowns; a recent fare restructuring perceived as an increase; diminished support from the business community; lack of innovation; and ineffective marketing.

Neither the RTB nor the MTC conducts formal safety planning. The Five Year Plan recognizes the need for new efforts in this area, and schedules a survey of safety and service quality. Accidents are recorded on the number of accidents per 100,000 miles, as is the cost per individual accident.

Observations and Suggestions

1) **The RTB and MTC are commended for their innovative evaluation of service quality in the 1991 Marketing Study and are encouraged to reflect insights from this analysis in service development and management plans.**

2) **The RTB could undertake formal safety and security planning.** These plans could focus on the safety and security concerns of former riders as identified in the marketing study.

E. Financial Planning

The RTB conducts financial planning as part of the Five Year Transit Plan. The plan demonstrates thorough consideration of alternatives, and efforts to create a stable long-range financing structure. Stable funding is particularly important for the MTC after an unsettling decade of ridership losses and cost increases, and it is necessary to fund the ambitious transit infrastructure developed in the long-range plans. The RTB and MTC conduct an annual assessment of the operator's financial capacity, and the RTB assesses the capacity of the other transit providers.

Staff expressed serious concerns about the region's inability to identify stable long-term resources for transit over the next five years. Past assessments indicate that transit operations and capital costs will be funded in the near term. Factors driving up costs include fuel prices, and compliance with federal vehicle emissions standards. Property taxes, which in recent years have increased to replace declining federal funds, are not considered available for further increases. The RTB has developed an innovative system of "feathering" to adjust property tax rates to the service provided to communities; thus, increasing political support because of perceived equity.

Although the RTB regards fare and state assistance increases as the most likely sources to fund expected shortfalls, both are problematic. The MTC fares ($0.85 base and $1.10 peak in Minneapolis and St. Paul) are already high relative to the inexpensive parking charges described above. Fare increases that will yield greater revenues and move the MTC from the current 30 percent fare recovery to the adopted standard of 35 percent, are likely to conflict with regional plans to increase or at least regain transit riders. Also, it could be difficult to increase revenues through proposed fare restructuring, considering the negative public perception of the last restructuring, described in Section VII.D.

Unlike highway programs, which receive stable revenues from state highway trust funds financed by gas taxes, transit relies on biennial state appropriations. State transit assistance is provided from the General Fund and the Motor Vehicle Excise Tax for operating costs, planning, and RTB administration. During the review, staff expressed some optimism that the Legislature might increase the level and stability of state funding either by "unlocking" the highway trust fund or creating a new dedicated transit source. The limitation of the trust fund to "highway purposes" may allow some flexibility in interpretation.

Although increases in federal funds dedicated to transit are unlikely because of national budget deficits, ISTEA flexibility will allow regions to transfer federal funds between highway and transit programs. At the time of the review, the Council and other agencies were developing criteria for comparisons of transit and highway projects in competitions for the flexible funds.

Observations and Suggestions

1) The Council and RTB are encouraged to **develop a proactive strategy to pursue dedicated state transit funding**. This strategy could be furthered by: a) development of long-term scenarios demonstrating expected outcomes of capital and non-capital transit projects (Sections IV.A and VII.A); and b) political consensus on a long-term vision of transit, supported by the counties and their railroad commissions, the two central cities and other localities, private organizations, citizens, and activist groups.

2) The RTB is encouraged to **compete aggressively for flexible ISTEA funds** as one means of overcoming revenue shortages for transit. This effort might benefit if transit projects, including TSM and TDM, are described in terms of their ability to accomplish outcomes that further regional objectives, including VMT reductions, air quality improvement, and congestion mitigation, as discussed in Section VII.A.

F. Planning for the Americans with Disabilities Act (ADA)

The RTB submitted a plan for meeting the ADA requirements to FTA in January 1992. The Metro Mobility program has provided the seven county area with comprehensive and innovative accessible transit service since 1979. Demand has grown steadily, from 182,000 rides in 1979 to 1.4 million in 1989. Because of rapid growth in the population requiring accessible transit, and funding limitations, the RTB expects to reduce dial-a-ride service, while still satisfying the ADA requirements. The RTB plan will provide a 100 percent accessible regional transit system by the year 2002, through combined regular route, light rail, and dial-a-ride service, with extensive use of transit hubs. Controversy over the reduction in dial-a-ride service from previous levels is likely.

G. Outreach Activities and Related Considerations

Outreach activities related to transit planning are discussed in Section V.E.

Involvement of the Private Sector

The RTB functions as a "buyer" or "broker" of transit services to encourage competitive contracting for services and produce cost savings. The RTB is able to contract with the MTC or other public or private providers for a full range of services ranging from route planning and scheduling, to operations of fixed route, demand response, or ridesharing service. The RTB also contracts for community dial-a-ride or circulators, and regular route service that is either new, provided to organizations in cost-sharing agreements with the RTB, or to "opt-out" areas. Five areas were allowed to opt-out of the MTC service district and receive RTB funds to contract directly for transit service. At the time of the review, communities were no longer allowed to opt-out. Although contracts let by the opt-out areas are also subject to RTB performance guidelines, RTB staff was concerned that these services were not subject to the same regional over-sight applied to service directly contracted by the RTB.

The actual extent of competition has been limited -- by statute the RTB must contract with the MTC for all operations within the designated service area, which includes the two center cities, and 96 percent of regional fixed route service. Although the RTB can contract out MTC routes that fail to meet performance standards, this apparently occurs infrequently. The MTC won contracts for all of the opt-out service, facing limited private competition.

There was an outstanding issue over whether the RTB and MTC should use fully allocated costs, as required by the FTA, in competitive bidding. Several complaints were filed as a result of MTC bids on service to the University of Minnesota and to the five opt-out areas. Private operators felt that the MTC was bidding marginal costs, which are less than fully allocated costs. The MTC's position was that regional private participation policy permits it to bid less than fully allocated costs if it discloses these costs. The FTA has not accepted that position.

The RTB has established thorough controls over contract service. Providers receiving financial assistance from the RTB must submit annual service management plans as part of their contracts. These agreements specify service characteristics (vehicles, routes, schedules, and fares); objectives; projected ridership; expenditures; and funding sources. Contracts are linked to financial projections in the Five Year Plan.

The RTB apparently does not have a plan or formalized policy to develop public/private partnerships in the development, operation, or maintenance of transit capital projects.

Observations and Suggestions

1) The RTB and MTC should work with the FTA to **resolve all issues related to the use of fully allocated costs in competitive bids**, and to assure that the FTA guidelines are satisfied.

2) The RTB could **develop a plan to encourage public/private partnerships in the development, operation, or maintenance of transit capital projects**. A formal plan might improve coordination of transportation activities with private entities undertaken by the Council, Minnesota Pollution Control Board (see Section V.D), the RTB, MTC, or local governments. Private funds or efforts to develop transit friendly facilities could

be particularly important considering the expected financial shortfalls and ambitious plans for new transit infrastructure.

H. Planning Activities for a Drug-Free Work Place

The MTC has an ongoing drug testing and education program for employees in safety sensitive positions. The RTB has adopted a drug-free workplace plan which includes periodic employee education sessions.

I. Capital and Operating Plans and Programs

Related topics were discussed in Sections VII.A, B, C, and E.

There are well-established links between the MTC's operating plans and annual budget, and between the short-range plans of the RTB and long-range plans of the Council. The MTC's annual budget is reviewed by the RTB for consistency with the Five Year Transit Plan, which in turn is reviewed by the Council on a biennial basis, as described in Section VII.A.

VIII. ISTEA Planning

ISTEA provides for a number of new initiatives related to metropolitan transportation planning. ISTEA also requires the U.S. Department of Transportation to certify the metropolitan planning process. Although guidance on certification and implementation of ISTEA planning requirements was not finalized at the time of the Twin Cities area review, FHWA and FTA have distributed interim guidance.

One objective of the federal planning review was to assist the Council, Mn/DOT, and other planning agencies to anticipate ISTEA changes, and to prepare for future formal certification. The FHWA and FTA were also interested in problems encountered anticipating ISTEA provisions, and how these problems are resolved.

This section focuses on planning related to ISTEA, as observed at the time of the review, and summarizes relevant observations made in earlier sections of this report (indicated in parentheses).

A. General Observations

The Twin Cities area planning agencies are in a strong position to meet ISTEA planning requirements, as they evolve. The staff indicated that ISTEA endorses an approach to regional planning that the Twin Cities has followed for thirty years. At the time of the review, the Council, Mn/DOT, and other agencies were taking a proactive approach to meeting new ISTEA requirements. An ISTEA Work Group, chaired by a Council staff member, has been formed to identify ISTEA responsibilities and priorities; reach agreement on organizational roles; and determine procedures for distributing the flexible funds in the ISTEA programs. The ISTEA Group proposed roles and responsibilities for Mn/DOT to play in the allocation of flexible funds. The Group also set a two year timetable for making decisions, completing planning tasks, and satisfying mandates related to ISTEA.

The Council and other planning agencies are commended for the formation of the Work Group and the proactive approach to ISTEA that it represents. The ISTEA Group initially focused on allocation of flexible funds -- development of criteria, roles, and deadlines. The Council is encouraged to build on these initial efforts to assure that flexibility and all other provisions of ISTEA are reflected in the transportation planning process, including development of future TIPs and long-range plans. For example, explicit links should be established between criteria used to prioritize projects for inclusion in the next TIP and availability of flexible funds. It is also recommended that TIP criteria be more formally stated to strengthen the TIP, demonstrate its objectivity, and establish crucial links to the long-range plan. (IV.B)

Development and application of explicit criteria not only will strengthen the planning process, but can establish that all projects satisfy ISTEA and CAAA requirements; thus preventing the litigation now faced by many other regions.

B. Flexible Transfers of Funds

A major feature of ISTEA is the flexibility to transfer funds between highway, transit, and other program categories. There is a tradition in the Twin Cities area of using flexibility in the federal Interstate Transfer and FAUS programs that will help the area to anticipate the broader flexibility in funds allocation under ISTEA. This flexibility is likely to be a major challenge to other areas. The Twin Cities is one of the few urbanized areas in which FAUS funds were used for transit.

At the time of the review, the Council and the ISTEA Group were discussing development of formal criteria to use in evaluating projects competing for flexible funds. The Work Group supported use of population as the basis for allocation of Surface Transportation Program (STP) funds by the state to regions, but was open to use of other variables, including vehicle miles, lane mileage, or gas tax revenue generation. The ISTEA Group took a strong position against sub-allocating flexible funds within the region to jurisdictions or to modes, which is consistent with ISTEA guidance discouraging suballocations within areas of STP or Section 9 funds based on predetermined percentages or formulas.

The Council staff indicated their intention to use $4.7 million in STP and Congestion Mitigation and Air Quality Improvement Program funds for seven transit projects. These decisions are consistent with ISTEA emphases on flexibility and multimodal planning. The Council, however, is encouraged to expeditiously develop formal criteria to prioritize projects for inclusion in TIPs.

In its initial thoughts on criteria, the ISTEA Group assigned the highest priority to maintaining existing facilities, with secondary consideration to improvements. Consistent with the 3-C planning process that is the foundation of ISTEA, the Group recognized that criteria must include consistency with regional plans. In developing criteria, the Council is encouraged to continue to involve all agencies involved in transportation planning, including Mn/DOT, the RTB, MTC, and cities of St. Paul and Minneapolis.

C. Multimodal Integration

ISTEA identifies multimodal integration as an important feature in the transportation system. Transportation planning in the region successfully reflects the multimodal emphasis of ISTEA in many ways.

At the conceptual level, the Council and the RTB use a multimodal definition of transit in their planning, including recognition of the importance of TSM and TDM strategies. However, TSM and TDM are under-emphasized when it comes to defining specific long-term projects in the plans, even though there is an extensive range of TSM and TDM activities underway in the region. The Council and the RTB are encouraged to incorporate TSM and TDM strategies as fully developed and integrated components of the future transportation system developed in short and long-range plans. (VII.A)

At an institutional level, agencies representing all modes are involved in regional planning, although participation could be further improved. The ISTEA emphasis on representation of

central cities and public transit operators in regional transportation planning is reflected to a limited degree. The RTB has no formal structural link to Minneapolis and St. Paul, despite the heavy involvement of the cities in regional transit issues. Both cities, however, are represented on various advisory boards, and by RTB appointees to the MTC Board. Formal representation on the RTB could increase support for transit initiatives, including potentially controversial allocation of ISTEA flexible funds. (III.A and VII.A)

The Council is commended for including the Metropolitan Airport Planning Commission in the 3-C planning process. Since federal regulations do not require airport planning activities to be included in regional planning, this signifies strong commitments to multimodal planning, and the development of an integrated transportation system. (III.B.)

The Council is encouraged to increase representation by advocates of bikeways and pedestrian facilities in its transportation advisory sub-committees. This would increase the attention given to these important components of multimodal regional transportation.

D. Emphasis Areas

ISTEA identifies fifteen factors that must be considered as part of the planning process for all metropolitan areas. MPOs are expected to review their planning processes to assure that these factors are explicitly reflected in the planning process and its products. Several of these areas were discussed during the review. MPOs should begin reviewing planning processes and making adjustments to include these factors.

Preservation and efficient use of existing facilities. A major emphasis of ISTEA is preservation and, where possible, more efficient use of existing transportation facilities to meet regional needs.

This emphasis is reflected explicitly in the area's long-range plans. (IV) The long-range highway program identifies a minimal amount of capacity expansion, and focuses on construction of HOV lanes and restoration of existing facilities. Other than HOV lanes, capital projects are focused on transit, including LRT.

In its early thinking on criteria for the use of flexible funds, the Work Group continued the regional emphasis on the importance of maintenance and more efficient use of existing infrastructure.

Enhancements. ISTEA earmarks 10 percent of STP funds for a broad range of transportation enhancements broadly defined as related to the environment. Discussions during the review indicated that the Council would form a committee to develop a priority list of projects for enhancement funds, and that the process would be open and result in lively debate and competition for the funds. The Council is encouraged to develop criteria that link distribution to regional transportation objectives, and to continue to involve a broad range of representatives of public agencies, the private sector, citizens, and advocacy groups.

Rights-of-Way. Areas are required to consider preservation of existing rights of way, both used and unused, for future transportation projects.

The Council staff mentioned the possibility of using Enhancement funds to acquire development rights near rural highways to both preserve views and avoid over-development. The Council has funds available to purchase a limited amount of right-of-way.

Land Use. ISTEA requires areas to consider the effects of transportation policies on land use and development, and the consistency of transportation and land use plans and programs.

The Twin Cities area pays more attention to the linkages between regional and local land use and transportation than is usually the case in other regions. The Council has an important role in influencing the region's long-term land use and development patterns. State legislation gives the Council the power to review the cities' and counties' comprehensive plans, including the transportation elements, for consistency with the region's vision for growth and development. The Council also prepares and adopts a comprehensive development guide prescribing economic development, including directions for land use, parks and open space, airports, highways, transit services, public hospitals, libraries, schools, and other public buildings. (IV and V)

Expansion of Transit. The efforts of the RTB, in conjunction with the Council and MTC, demonstrate aggressive efforts to expand and enhance regional transit services. These agencies are encouraged to pursue their efforts to include TSM and TDM strategies as specific components of long and short-range plans. The major constraint to accomplishing long-range transit plans is the absence of a stable funding source, which is being pursued by area agencies. (VIII.A and I)

Transit Security. ISTEA requires consideration of increased capital investment to improve the security of transit services.

The RTB and MTC are encouraged to conduct formal safety and security planning to identify cost-effective investments to improve safety. The Five Year Plan recognizes the need for new efforts in this area, and schedules a survey of safety and service quality. Safety and security concerns have been identified by former riders as an important reason for abandoning transit. (VII.D)

E. Outreach Efforts

ISTEA directs MPOs to "provide citizens, affected public agencies, representatives of transportation agency employees, private providers of transportation, and other interested parties with a reasonable opportunity to comment" prior to the approval of transportation plans and transportation improvement programs. Additionally, participants should be adequately informed and given access to official information, and allowed opportunities to influence plans and TIPs in the early stages of their development.

Comments on the adequacy of involvement by a broad range of public agencies in area planning are provided in Section VIII.C.

The Council and RTB are commended for their efforts to provide an effective means, through membership on the TAB and an array of sub-committees, for citizens and private operators to participate in the planning process. The region has also effectively notified and provided opportunity through public meetings for citizens to comment on the findings of different studies. This was demonstrated by the turnout for the I-35W corridor study. As encouraged in ISTEA, the Council and the other planning agencies might consider ways to increase "grass roots" support for the multimodal transportation philosophy in the short and long-range plans, and the projects selected through the planning process.

APPENDIX 1

Participants in the Twin Cities Planning Review

Federal Transit Administration (FTA)

Headquarters:
Deborah Burns, Project Manager
Jennifer Libby, Community Planner

Region V:
Donald Gismondi, Director, Office of Grants Management
Paul Fish, Senior Transportation Representative

Federal Highway Administration (FHWA)

Headquarters:
Dean Smeins, Chief, Planning Operations Branch
Charles Goodman, Community Planner

Minnesota Division:
Ronald Shriver, Planning and Research Engineer

U.S. Department of Transportation/Volpe National Transportation Systems Center

William Lyons, Volpe Center Project Manager
Robert Brodesky, Senior Technical Analyst
Frederick Salvucci, Massachusetts Institute of Technology (Consultant)

Metropolitan Council of the Twin Cities

Sharon Klumpp, Executive Director
Steve Alderson, System Planning Supervisor
Jim Barton, Senior Planner
Emil Brandt, Transportation Coordinator
Nacho Diaz, Transportation Division Manager
Connie Kozlak, Transportation Supervisor
Carl Ohrn, Principal Planner
Steve Wilson, Forecast Analyst/Planner

Regional Transit Board

Howard Blin, Director of Planning
Judy Hollander, Director of Planning and Programs

APPENDIX 1 (continued)

Metropolitan Transit Commission

Michael Christenson, Executive Director
Beverly Auld, Assistant Chief Administrator for Administration
Robert Thompson, Director of Finance

Minnesota Department of Transportation

Fred Tanzer, Metropolitan Regional Planning Coordinator

Minnesota Pollution Control Agency

Suzanne Spitzer, Transportation Planning Team Leader

City of St. Paul

Leon Pearson, Civil Engineer

APPENDIX 2

Agenda for Urban Transportation Planning Review Meeting

June 14-17, 1992

Metropolitan Council
230 East Fifth Street
St. Paul, Minnesota 55101

Monday, June 15	*at Metro Council*	
9:30 - 10:15 a.m.	Donald Gismondi FTA, Region V	Welcome and introductory remarks
	Ronald Shriver FHWA, Mn Division	
	Deborah Burns FTA, Headquarters	Objectives for planning review
	Introduction of participants.	
	Nacho Diaz Metro Council	Introductory remarks
	Fred Tanzer Minnesota DOT	
	Judy Hollander Regional Transit Board	
10:15 - 10:30	William Lyons USDOT/Volpe Center	Overview of meeting and schedule
		Format for all sessions - Discussion of urban transportation planning process
		Each session begins with a topic overview from regional agencies, building on written responses, with discussion led by review team members. (Roman numerals following topics below refer to questionnaire, which provides discussion questions).

APPENDIX 2 (continued)

Monday, June 15 (continued)

		How the planning process works in the Twin Cities Region
		Local Transportation Issues (I.B)
10:30 - 11:00	Nacho Diaz Metro Council	Presentation
11:00 - 12:00	Paul Fish, FTA, V Fred Salvucci, Volpe Center/MIT	Discussion
12:00 - 1:00 p.m.	Lunch	
		Organization and management of the process -- Agencies' roles and responsibilities (II)
1:00 - 1:30	Emil Brandt, Metro Council Regional Transit Board	Presentations
1:30 - 2:15	Ronald Shriver FHWA, Mn Division Robert Brodesky, Volpe Center	Discussion
		Products of the process (III)
2:15 - 3:45	Nacho Diaz, Metro Council	Presentation
3:45 - 4:45	Paul Fish, FTA, V William Lyons, Volpe Center	Discussion

Tuesday, June 16 *at Metro Council*

		How the planning process works in the Twin Cities Region (continued)
		Elements of 3-C process (multimodal dimension) (IV)
9:00 - 9:30 a.m.	Emil Brandt, Metro Council	Presentation
9:30 - 11:00	Ronald Shriver FHWA, 5/Division William Lyons, Volpe Center	Discussion

APPENDIX 2 (continued)

Tuesday, June 16 (continued)		Approach to air quality (Clean Air Act) (IV.D)
11:00 - 11:30	Metro Council Susanne Spitzer, Minnesota Pollution Control Agency	Presentations
11:30 - 12:30 p.m.	Ronald Shriver, FHWA, Mn Div. Fred Salvucci, Volpe Center/MIT	Discussion
12:30 - 1:30	Lunch	
1:30 - 4:30		Format - overview on each topic from RTB and the Metropolitan Transit Commission (MTC), followed by discussion led by review team members
		On-going transit planning (VI).
	RTB and MTC	Introductory remarks
	Paul Fish, FTA, V William Lyons, Volpe Center	Discussion
		Organizational issues - strategic planning (VI.A)
		Service performance and development (VI.B)
		Structure, vehicle, and equipment planning (VI.C)
		Transit management analysis (VI.D)
		Financial planning (VI.E)
		Americans with Disabilities Act (VI.F)
		Outreach activities (citizen and minority participation, DBE, private sector involvement) (VI.G)
		Planning for a Drug-Free Work Place (VI.H)
		Transit Capital and Operating Plans and Programs (VI.I)

APPENDIX 2 (continued)

Wednesday, June 17	*at Metro Council*	
8:00 - 9:30 a.m.		Federal Review Team meeting -- Prepare draft findings
9:30 - 11:00	Donald Gismondi, FTA, V Ronald Shriver, FHWA, 5/Division	Meeting summary -- Findings and follow-up actions (VII) Regional concerns Next steps
		Parallel Breakout Sessions
11:00 - 2:00 p.m.		**Session 1 --** Transportation Planning Techniques (V.) Travel demand forecasting Costing methodologies
	Metro Council	Presentation
	Charles Goodman FHWA, Headquarters	Discussion
		Session 2 -- (if necessary)
11:00 - 2:00 p.m.		Complete outstanding items

APPENDIX 3

Documentation Provided by Minneapolis/St. Paul Regional Agencies

Metropolitan Council

"Transportation: Development Guide / Policy Plan, February 1989"

Transportation Improvement Plan - "Transportation Improvement Program for the Twin Cities Metropolitan Area, 1992-1994"

Unified Planning Work Program - "1992 Transportation Unified Planning Work Program for the Twin Cities Metropolitan Area"

"Amendment to the Transportation Development Guide / Policy Plan, Light Rail Transit Element, Metropolitan Development Guide, December 1989"

Air Quality Control Plan - "Air Quality Control Plan for Transportation, Supplement Number 2 to Transportation Guide / Policy Plan, January 1980"

"Amendment to Air Quality Control Plan for Transportation, Supplement Number 2 to Transportation Guide / Policy Plan, February 1981"

"From here...: Regional Transit Facilities Plan, February 1992"

"A Report on the 2010-F Travel Forecast, January 1990"

"1990 Travel Behavior Inventory Work Plan, May 1990"

"Metropolitan Development and Investment Framework, September 1986"

"Planning Strategically for HOB Facilities and Programs in the Twin Cities Metropolitan Area, December 1991"

"Minor Arterial Study Report, December 1990"

"Metropolitan Agencies 1990 Consolidated Financial Report. Report to the Minnesota Legislature, December 1990"

Pamphlet:

"Keeping the Twin Cities Moving"

ISTEA Work Group Memo: "Roles of MPO and State Relative to ISTEA Program," May 18, 1992

APPENDIX 3 (continued)

Regional Transportation Board

"1991 Annual Report"

"Vision for Transit, Capital and Service Improvements, 1992-1996"

"1991 Marketing Study, Significant Findings and Recommendations"

"1992 Summary Budget"

Regional Transit Board and Metropolitan Transit Commission

"Americans with Disabilities Act, Paratransit Plan for the Twin Cities Metropolitan Area, January 1992"

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