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REVIEW OF THE TRANSPORTATION PLANNING PROCESS IN THE PITTSBURGH METROPOLITAN AREA

March 1993

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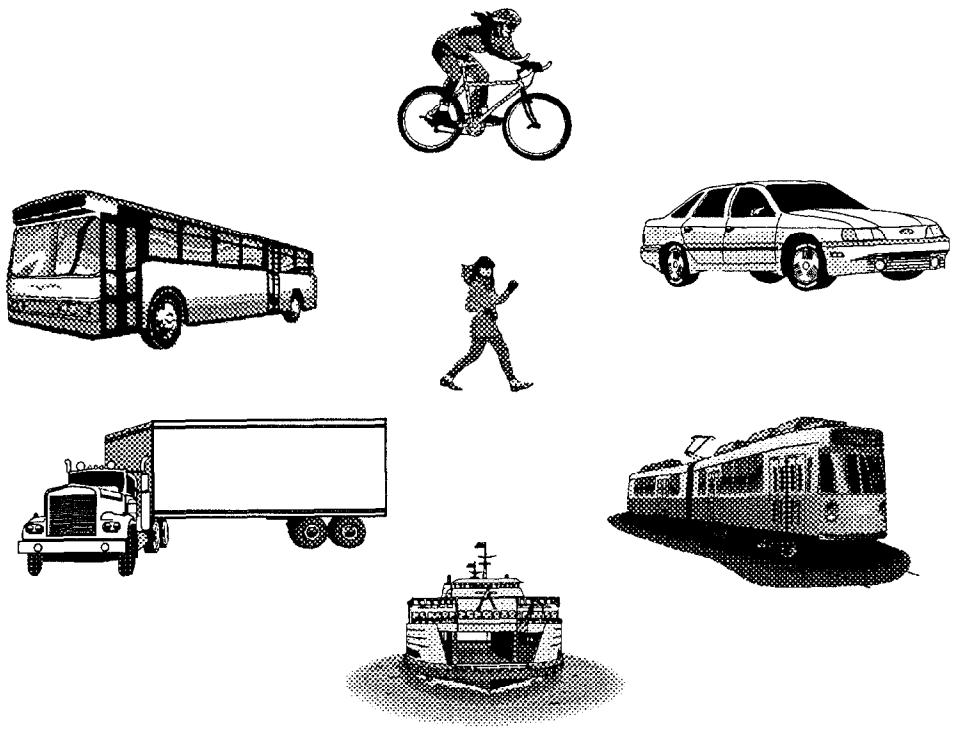

prepared by:
U.S. Department of Transportation
Research and Special Programs Administration
John A. Volpe National Transportation Systems Center
Cambridge, MA 02142

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PROJECT STAFF

William Lyons
Volpe Center Project Manager

Paul Shadle
EG&G Dynatrend

Beth Deysher
Volpe Center

Ronald Jensen-Fisher
FTA

Fred Ducca
FHWA

Frederick Salvucci
Massachusetts Institute of Technology

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The federal review team, consisting of staff from FTA Headquarters and Region III; FHWA Headquarters, Region 3, and the Pennsylvania Division; and the Volpe Center, participated in the site visit in Pittsburgh, and reviewed drafts of the report. Donald Gismondi, Director of the Office of Grants Assistance for FTA Region III participated on the team as a peer reviewer. Dean Smeins, Chief of the FHWA Planning Operations Branch, provided valuable comments on the report. Helpful comments were also provided to a draft report by the Southwestern Pennsylvania Regional Planning Commission (SPRPC) and the Port Authority of Allegheny County (PAT). The assistance of staff from SPRPC, the Pennsylvania Department of Transportation, and PAT throughout the review is also gratefully acknowledged. Participating state, regional, and local staff are listed in Appendix 1.

Federal Review Team

Deborah Burns, FTA, HQ, Office of Planning, and Planning Review Program Manager
Ronald Jensen-Fisher, FTA, HQ, Office of Planning, Senior Analyst
Elaine Burick, FTA, Region III, Senior Transportation Representative
Alfred Lebeau, FTA, Region III, Senior Transportation Program Specialist
Donald Gismondi, FTA, Region V, Director, Office of Grants Assistance
Rick Backlund, FHWA, HQ, Office of Environment and Planning, Community Planner
Frederick Ducca, FHWA, HQ, Office of Environment and Planning, Community Planner
Steve Rapley, FHWA, Region 3, Urban Transportation Planner
Robert Hall, FHWA, Pennsylvania Division, Supervisory Community Planner
Jim Smedley, FHWA, Pennsylvania Division, Transportation Planner
William Lyons, US DOT/Volpe Center, Volpe Center Project Manager
Beth Deysher, US DOT/Volpe Center, Presidential Management Intern
Paul Shadle, US DOT/Volpe Center (EG&G Dynatrend), Senior Technical Analyst
Frederick Salvucci, Massachusetts Institute of Technology (Consultant)

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Glossary of Acronyms

AAA -	American Automobile Association
AA/DEIS -	Alternatives Analysis/Draft Environmental Impact Statement
ADA -	Americans With Disabilities Act
CAAA -	Clean Air Act Amendments of 1990
CBD -	Central Business District
CMP -	Congestion Management Program
FAUS -	Federal Aid Urban System
FHWA -	Federal Highway Administration, US Department of Transportation
FTA -	Federal Transit Administration, US Department of Transportation
HC -	Hydrocarbon
HOV -	High Occupancy Vehicle
HPMS -	Highway Performance Management System
ISTEA -	Intermodal Surface Transportation Efficiency Act of 1991
IVHS -	Intelligent Vehicle Highway System
LRCP -	1991 Long Range Conformity Plan
LRT -	Light Rail Transit
MPO -	Metropolitan Planning Organization
NEPA -	National Environmental Protection Act
NHS -	National Highway System
O & M -	Operating and Maintenance
PAT -	Port Authority of Allegheny County
PennDER -	Pennsylvania Department of Environmental Resources
PennDOT -	Pennsylvania Department of Transportation
PHS -	Priority Highway System
REMI -	Regional Economic Models Incorporated
RTP -	1984 Regional Transportation Plan for Southwestern Pennsylvania
SIP -	State Implementation Plan
SPRPC -	Southwestern Pennsylvania Regional Planning Commission
SRAs -	Strategic Regional Arterials
TCM -	Transportation Control Measure
TIP -	Transportation Improvement Program
TMA -	Transportation Management Area
TSM -	Transportation Systems Management
UPWP -	Unified Planning Work Program
UTPP -	Urban Transportation Planning Process
UZA -	Urbanized Area
VHT -	Vehicle Hours Travelled
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 Observations, Findings, and Suggestions

This formal, comprehensive review of the planning process in the Pittsburgh metropolitan area, conducted by Federal Highway Administration (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 Pittsburgh metropolitan planning organization (MPO) which otherwise would be conducted by FHWA field and FTA regional staff. The Southwestern Pennsylvania Regional Planning Commission (SPRPC) has been found to be in conformance with the regulations in 23 CFR Part 450. The MPO conducts a competently managed and organized continuing, cooperative, and comprehensive (3C) planning process, produces adequate planning products, and uses acceptable planning tools. Efforts are being made to implement a multi-modal planning approach, and the transit operator is 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 below. It is hoped that these findings will help improve an already competent process. Sections of the following analysis where each point is discussed in greater detail are noted in parentheses.

A. Organization and Management of the Pittsburgh Area Planning Process:

1. Significant transportation planning and decision-making are now occurring outside the process managed by the SPRPC. Regional transportation planning should be coordinated through the SPRPC, and all significant regional transportation decisions should be made through the MPO decision-making process. The ISTEA requires agency coordination and gives MPOs power to guide the choice of transportation projects. (III.B., III.C., IV.B., & VII)

2. To improve representation of the population in the regional planning process, the SPRPC could give the city of Pittsburgh and PAT strengthened roles in the planning process. (III.B.)

3. The UPWP should be broadened to incorporate all significant transportation planning activities in the Pittsburgh region, regardless of funding source. The UPWP should present a single, integrated picture of regional transportation planning. (III.C.)

4. Without a clear description of planning priorities, it is difficult to determine if the UPWP addresses the critical planning activities that have been identified by the region's planners. The UPWP lists nine functional planning areas and specific projects for each area. The projects within each functional area could be ranked or otherwise characterized to indicate priority. (III.C.)

B. Products of the Planning Process:

1. The review team commends SPRPC for its efforts to work with a broad range of groups to define a regional planning vision based on consensus. The previous comprehensive plan, which is now eight years old, was recently updated on an interim basis. SPRPC should continue its plan update efforts and complete a comprehensive long range transportation plan as soon as possible. The new plan should reflect recent state and federal developments, including new funding, responsibilities imposed by the Clean Air Act Amendments (CAAA) and the Intermodal Surface Transportation and Efficiency Act (ISTEA), regional planning issues, and realistic financial constraints. The plan should reflect full consideration of multi-modal strategies. In order to fully inform the decision-making process, the plan should present a wide range of alternatives and their respective projected costs and benefits. (IV.A.)

2. The TIP should be clearly derived from and coordinated with a transportation plan. The TIP should also be fiscally constrained and thoroughly justify and prioritize projects. Long-range planning would be improved if projects were carefully monitored during implementation through the TIP process. (IV.B.)

C. The 3-C Transportation Planning Process:

1. SPRPC and PAT should evaluate the costs and results of major transportation investments in the southwest Pennsylvania region. Such an effort would provide a means of both determining the relative success of major investments and better informing future investment decisions. A formal process for monitoring and reporting program operations would also improve planning efforts. (V.A. & V.B.)

2. The needed transportation plan should reflect a multi-modal approach to planning. For example, the Parkway West Study indicates a consideration of a variety of modes rather than an exclusive focus on roads, transit or innovative route management. Efforts like this could be expanded elsewhere. Fiscal and environmental impact assessments of transportation projects could also be expanded, and planners could thoroughly compare and rank alternatives before including them in the plan. Multi-modal initiatives will be bolstered by the flexible funding and balanced match ratios of the ISTEA. (V.C.)

3. To promote the comprehensiveness of the planning process, the region is encouraged to develop a land use plan for SPRPC's jurisdiction that can be integrated with the long range transportation plan. (V.C.)

4. SPRPC should convene a working group of appropriate agencies (SPRPC, PAT, PennDOT, PennDER, FHWA, FTA, and EPA) to promote the development of a realistic SIP and assign responsibility for tasks related to air quality improvement. (V.D.)

5. The review team commends SPRPC for developing intermodal planning committees, supporting the Allegheny Conference (a group of corporate leaders that advises the planning process), and holding annual policy retreats. These outreach activities should be continued and expanded, and efforts should be made to involve the public more fully in SPRPC's planning process. (V.E.)

D. Tools for Transportation Planning:

1. Validation of forecasting and planning models should be documented. Regional models should be re-calibrated to realistically reflect current circumstances in the Pittsburgh area. The mode split model should be updated using appropriate time-of-day transit impedances in order to allow better predictions of auto occupancy. (VI.A.)

2. SPRPC and the implementing agencies should adopt methods through which transportation costs will be regularly monitored, projected and reported to SPRPC. As the central planning agency, the MPO should maintain current and thorough cost data to facilitate ongoing observation and analysis of transportation performance and needs. (VI.B.)

E. Ongoing Transit Planning:

1. PAT has developed a thorough long-term strategic plan that is well-coordinated with annual business plans. (VII.A.)

2. PAT should work more closely with SPRPC on transit planning and implementation. The planning and implementing agencies should cooperate and reach consensus on regional needs and service programs to promote the provision of coordinated rather than disjointed transportation services to the Pittsburgh area. ISTEA requires consultation and cooperation between agencies in selecting transportation projects. (VII.A.)

3. Regionally significant, non-federally funded transit planning projects should be included in the UPWP to ensure conformance with the joint (FTA and FHWA) planning regulations. (VII.A.)

4. Regionally significant, non-federally funded transit capital projects should be included in the TIP. Inclusion in the TIP is not required, but all projects will be considered in determining the area's conformity with the CAAA, suggesting that a full description of transportation activities may provide a practical advantage.

5. PAT uses a comprehensive set of performance indicators to measure progress toward achieving service goals, set standards, and adjust service. Daily monitoring of ridership is used effectively as a means of gauging the quality of existing transit and need for new service. (VII.B.)

6. PAT prepares thorough capital budgets and needs assessments. (VII.C.)

7. PAT appears to be effectively monitoring ridership and conducting safety planning. (VII.D.)

8. PAT successfully maintains the financial health of its existing services and conducts periodic assessments of its financial capacity. But given the limited operating funds, fiscal pressures are severe, leading to fare increases and service cuts. "Wish lists" should be prioritized. Cooperative efforts between SPRPC, PAT, and PennDOT in planning for the operating priorities created by the CAAA may also allow the development of broader political support for new increases in operating funds. (VII.E.)

9. PAT develops thorough capital and operating plans. Given the capital requirements generated by the ADA and CAAA, however, the fiscal capacity to advance new priorities is limited. This capacity could be improved through cooperative efforts by SPRPC, PAT, and PennDOT to use flexible ISTEA funds. (VII.J.)

II. Introduction

A. Background

On December 3-5, 1991, a team of representatives from Federal Highway Administration (FHWA) Headquarters, Division, and Regional offices; 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 Southwestern Pennsylvania Regional Planning Commission (SPRPC), which is the Metropolitan Planning Organization (MPO) for the Pittsburgh region, the Pennsylvania Department of Transportation (PennDOT), and the Port Authority of Allegheny County (PAT).

Prior to the site visit, the federal 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 planning and implementation. 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 Pittsburgh region and summarizes the results of the review in a series of findings and suggestions on planning practices.

The State of Pennsylvania and the MPO must self-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 are 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 metropolitan area.

Self-certification is intended to grant increased responsibility for transportation planning to States and MPOs, and is 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 an appropriate mechanism for evaluating the planning process. The FHWA and FTA 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 planning process in the Pittsburgh metropolitan 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 Pittsburgh MPO which otherwise would be conducted by FHWA field and FTA regional staff. SPRPC has been found to be in conformance with the regulations in 23 CFR Part 450. In addition, the review team has made a series of suggestions on planning practice, as summarized in section I of this report.

B. Scope of the Planning Review

A purpose of this review was to allow FHWA and FTA to determine how successfully the UTPP addresses broadly defined regional transportation needs, and whether the planning process meets the requirements of the joint planning regulations. Another purpose was to assess the ability of the existing planning process to meet broader responsibilities described under the guidelines implementing the Clean Air Act Amendments of 1990 (CAAA), and proposed in the re-authorization of the surface transportation legislation. The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), which became law after this review was conducted, includes a requirement for federal certification of the planning process in metropolitan areas with population over 200,000. It is expected that this review will assist the Pittsburgh metropolitan area to prepare for future formal certification reviews.

The team reviewed supporting documentation that included the State Implementation Plan (SIP) for air quality planning; the UPWP; the 1984 long-range Regional Transportation Plan (RTP); the TIP; and other technical materials related to the UTPP. (Documents reviewed are listed in Appendix 3.)

The review focused on the transportation and air quality planning activities of SPRPC, PAT, and PennDOT for the Pittsburgh region.

C. Objectives of the Planning Review

In conducting the planning review, the objectives of FHWA and FTA are to determine if:

- planning activities of SPRPC are conducted in accordance with FHWA and FTA UTPP regulations, policies, and procedures;
- the transportation planning process involves representation and input on transportation needs from all levels of government, transit operators, the public, the private sector, and other interest groups;
- the UPWP adequately addresses the elements of the UTPP and all transportation planning activities in the area;

- the transportation planning products, including the TIP and long-range Transportation Plan, reflect the identified transportation needs, priorities and funding resources;

- the transportation planning products are complete, interrelated, and based on the most recent information available;

- the transportation planning products have a multi-modal perspective; and

- requirements and objectives of the CAAA and the Americans with Disabilities Act (ADA) are incorporated into transportation planning and development activities.

D. Local Transportation Issues

SPRPC has grouped its transportation needs into seven components: bridges, capital maintenance, interstates, local roads, the priority highway system, transit, and economic development highways. The current UPWP is designed to address these issues and needs.

To understand the regional context in which transportation planning is performed in the Pittsburgh Region, the review team and SPRPC together identified the following major transportation issues facing the area.

Issue 1 : There has been an overall population decline in the area from about 2.489 million in 1980 to about 2.322 million in 1990. Employment is growing in the central city (Golden Triangle) and Oakland. These trends will shift travel patterns.

Issue 2 : SPRPC membership is drawn largely from suburban and rural areas of the six-county region, which tend to support highways, making it difficult for initiatives attractive to the central city, such as transit, to compete in the planning process.

Issue 3 : No regional land use plan exists, and the nature of local government in Pennsylvania makes it difficult to conduct large scale planning. Municipalities, making up the counties, have control over land use, and according to SPRPC, it lacks the zoning power necessary to enforce a meaningful plan or guide development.

Issue 4 : The region faces a chronic funding shortfall relative to proposed transportation projects, estimated by SPRPC at $6.5 billion by the year 2000. Funding and professional staff shortages make it difficult for SPRPC to accomplish federal and other mandates, and have caused a cutback in technical analysis and modelling.

Issue 5 : All trips have increased substantially over the past twenty years. Average trip lengths have also increased, adding to the demands on transportation capacity and the likelihood of congestion.

Issue 6 : According to PAT, between 1980 and 1990 annual transit ridership dropped from more than 100,000,000 to about 89,000,000.

Issue 7 : Economically depressed Valley Towns need improved access to the few rapidly growing centers, and new freeways have been suggested as a solution to this problem.

Issue 8 : The $1.5 billion Mon Valley expressway demonstration project, which will connect Pittsburgh and West Virginia, is politically controversial. City of Pittsburgh and Allegheny County representatives are working with the Pennsylvania Turnpike to resolve community and environmental issues.

Issue 9 : Unlike many other urban areas, Pittsburgh has a freeway system without circumferential roads. Arterial routes tend to be radial, carry "freeway-like" trips and volumes, and need rebuilding. The freeway system forces traffic through Pittsburgh. However, the lack of circumferential capacity also tends to reinforce the strategic location of Pittsburgh.

Issue 10: The uneven terrain in the Pittsburgh area has necessitated the construction of more than 5,000 bridges, many of which are now very old and in need of repairs.

III. Organization and Management of the Planning Process

A. Metropolitan Planning Organization (MPO) Designation

The Southwestern Pennsylvania Regional Planning Commission (SPRPC) is a public body that was created in October, 1962. The enabling legislation provides a general framework within which the powers, responsibilities and membership of the body evolved.

SPRPC was formally designated the Metropolitan Planning Agency for southwestern Pennsylvania in 1974. Subsequent to the 1983 designation of the Monessen Urbanized Area, SPRPC was designated as the MPO for that urbanized area (UZA) as well. The long-range Transportation Plan, TIP, and UPWP for both areas are developed through a single process by the same SPRPC staff.

B. MPO Members - Roles and Responsibilities

According to SPRPC, the membership of the Commission has been structured to ensure responsiveness to the interests and needs of the member governments. The forty-one voting members include representatives from the six county governments (Allegheny, Armstrong, Beaver, Butler, Washington, and Westmoreland - five members each), the city of Pittsburgh (five members), PAT (one member), transit operators in outlying counties (one member), and three State agencies (PennDOT, the Pennsylvania Department of Environmental Regulation (PennDER), and the Governor's Office of Policy Development) that have physical planning and development responsibilities affecting the region. Five other representatives of federal, state and local government agencies participate actively but do not vote.

Transportation planning and programming are among SPRPC's primary responsibilities. The Commission conducts a continuing, cooperative and comprehensive (3C) planning process to ensure the eligibility of the six-county area to receive federal funds for needed highway, bridge, transit and airport improvements. Local, state and federal agencies that have jurisdiction over such transportation functions work with SPRPC to fulfill this regional planning obligation. These agencies include the six counties and city of Pittsburgh, PennDOT, the Federal Highway Administration, the Federal Transit Administration, the Federal Aviation Administration and the Port Authority of Allegheny County (PAT), and the transit authorities of Armstrong, Beaver and Westmoreland Counties and the Mid Mon Valley as well as the City of Washington. Within SPRPC, transportation planning is guided by the Transportation Technical Committee, Transportation Policy Committee, and Transit Operators' Committee. Given existing levels of population and economic activity, the city of Pittsburgh and PAT appear to be under-represented in the SPRPC. Transportation planning entails three interrelated commitments:

1) to prepare a UPWP;
2) to maintain a relevant areawide transportation plan; and
3) to perform a short-range transportation improvement programming function.

According to Article XI of SPRPC's Articles of Agreement, the Commission is authorized "to act as an entity to promote the plans, policies and programs developed by SPRPC in a manner and before legislative bodies as the members of SPRPC deem appropriate." SPRPC does not appear to guide all regional planning activities. The large number of governments involved makes it difficult for the Commission to direct planning. For example, some major projects, such as the $1.5 billion Mon Valley Highway, originate and are committed outside of the SPRPC process.

Observations and Suggestions

Consolidation of planning -- Significant transportation planning and decision-making, such as that for the Mon Valley Highway, are occurring outside the process managed by the SPRPC. Regional transportation planning should be coordinated through the SPRPC, and all significant regional transportation decisions should be made through the MPO decision-making process. As noted above, the city of Pittsburgh has only four of thirty-eight SPRPC votes and PAT does not participate, suggesting that the roles of the city and transit operators could be strengthened to improve the representation of the population in the region.

The ISTEA requires agency coordination and gives MPOs new planning discretion. Newly flexible funding, and equivalent federal match ratios for highways and transit, are added incentives for cooperative transportation planning.

C. Unified Planning Work Program

SPRPC's UPWP addresses basic transportation planning needs and is designed to address emerging issues identified through the various SPRPC standing committees and funding agencies.

The UPWP seeks to respond to both the USDOT's National Transportation Policy of 1990, and southwestern Pennsylvania's regional issues and needs. Regional issues identified in the UPWP include: economic development planning, transportation infrastructure financing, enhancement of public transportation, resolution of highway and bridge deficiencies, improvements to air transportation facilities, and land use/transportation-related air quality planning. SPRPC also notes the general need to improve mobility in the Pittsburgh area through better management of both existing facilities and transportation demands.

To address these issues, the UPWP outlines a work program with nine functional areas, each of which has a number of performance objectives. The functional areas are:

- Administration
- Transportation Surveillance/Data Base
- Economic Development Planning
- Transportation Management Strategies and Programming

- Transportation Long Range Planning
- Transportation Work for PennDOT
- Airport Planning
- Regional Transit Authorities Activities
- Other Funding Requests

For each functional area, the UPWP describes regional, federally-funded planning projects designed to meet the performance objectives. Projects are chosen cooperatively by PennDOT and SPRPC. PennDOT sends a letter to SPRPC identifying broad planning priorities, and the two agencies subsequently meet to establish the categories and issues to be addressed through planning. Specific projects are then prioritized and compiled as the UPWP. The UPWP document could better indicate priorities and identify which projects are particularly significant in carrying out the required planning process. Without clearly indicated priorities, it is difficult to assess whether staff time and other resources are being appropriately allocated.

Descriptions are well-written, organized and include project definitions, purposes and specific objectives. Budgets for fiscal year 1991-1992 include costs and sources of funds for each project and the work program as a whole. Work items in the UPWP are developed by an in-house staff committee, which is guided by SPRPC members and annual guidance provided by PennDOT. Planning funds are allocated to SPRPC and PAT based on negotiations between the two agencies.

Monthly progress reports for each planning activity are prepared and shared with PennDOT, which submits them to the FHWA.

The UPWP attempts to include all major regional transportation planning activities, but omits those that are funded solely by state and local sources.

Observations and Suggestions

The following suggestions are made to improve an already competently developed UPWP:

1) **Non-federally funded UPWP activities** -- Non-federally funded projects 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. Because Pittsburgh's UPWP excludes activities funded solely by state and local sources, it provides an incomplete picture of planning. The UPWP should include all regionally significant transportation planning and management activities in the SPRPC area, regardless of funding source.

2) **Prioritizing planning activities** -- Without a clear description of planning priorities, it is difficult to determine if the UPWP addresses the critical planning activities that have been identified by the region's planners. The projects within each functional area should be ranked or otherwise characterized to indicate priority.

D. Self-Certification

Self-certification takes place annually in conjunction with the update and adoption of the Transportation Improvement Plan (TIP). The most recent self-certification was adopted by SPRPC on September 28, 1992. The Commission reviews its transportation planning process annually to determine if it is being carried out in conformance with all applicable federal requirements. For example, the reviews ensure a continuing, cooperative and comprehensive planning process; conformance with the Clean Air Act; involvement of private carriers; solicitation of private enterprise; and documentation of financial capacity. The criteria used are those established by the appropriate federal agencies.

IV. Products of the Process

A. Transportation Plan

The Regional Transportation Plan (RTP) was last revised in October, 1984. It is reaffirmed annually with the self-certification and adoption of the TIP, but at eight years old it is inadequate to meet the current needs of the Pittsburgh region.

The Long-Range Conformity Plan (LRCP), designed to replace the RTP and briefly described in the Interim Air Quality Conformity Determination section of the TIP, is the region's current transportation plan update. It was formally adopted by SPRPC at the August 26, 1991 Commission meeting, in response to the urgent need to update the eight year-old content of the RTP. During the years since the RTP was developed, a number of projects that were not included in that plan have advanced to various stages of study, design or construction. The LRCP exists more as a collection of proposed projects than a single unified document, and was not provided to the federal review team as a unified document. The following comments are based solely on the RTP, descriptions of the LRCP, discussions during the site review, and draft materials provided by the MPO.

The LRCP is an interim plan update and overlooks some current issues confronting the Pittsburgh region. SPRPC is currently developing an updated comprehensive multi-year plan to address southwestern Pennsylvania's transportation problems. The plan is being designed by a Policy Committee that consists of a broad-based, public and private membership including the major regional public transit operators, PennDOT, the Pennsylvania Turnpike Authority, the Governor's office, the Mayor of Pittsburgh's office, the AAA, the Urban League, the Sierra Club, and the Pittsburgh Pirates, among others. The committee expects to finish its work by October, 1993. The committee is expected to integrate land use and transportation planning, though enormous jurisdictional and political obstacles to such a goal were not discussed by SPRPC. Regional consolidation is difficult to accomplish. Until the multi-year comprehensive plan is completed, the LRCP will serve as the operative plan.

The RTP focused on improving mobility and rehabilitating the existing transportation system. The highway component, known as the Priority Highway System (PHS), recommended reconstructing and upgrading the existing network through a coordinated corridor improvement program. It thoroughly described the existing highway system, the proposed PHS, the relationship of roads to transit, a number of project recommendations, and related land use controls. The brief transit component of the plan was derived from SPRPC's 1982 Initial Phase Alternatives Analysis. This federally-mandated study assessed transit options in nine major travel corridors radiating from the Golden Triangle, and identified corridors in which major transit investments were justifiable. Based on the study, the RTP presented and briefly described six transit-related project recommendations.

Projects included in the interim LRCP are derived from three sources: 1) the 1984 RTP, with the Priority Highway System (PHS), which was incorporated in its entirety; 2) projects identified in the 1991-1994 TIP that are not included in the RTP; and, 3) projects that appear in Pennsylvania's 1990-2002 Interim Twelve Year Program. Many of the projects in the third

category are now in various stages of study (planning assessments, needs analyses or feasibility studies currently being conducted or recently completed).

According to SPRPC, no element of the LRCP, TIP, or PHS contradicts the 1982 SIP commitments, and these plans and programs advance a number of goals, recommendations and projects that are consistent with the region's 1982 transportation measures and control policies. Because the federal review team did not have a SIP with which to compare transportation plans and programs, this assertion is difficult to confirm.

The RTP addressed major transportation issues, but did not present them explicitly in the context of land use, urban development and environmental concerns. SPRPC is taking an initial step toward responding to this problem by designing a land use allocation model for its transportation planning and demographic forecasting process. It will allocate the regional Cycle V (that is, the fifth iteration or update) forecast of population and employment for the year 2020 to municipalities and sub-areas (traffic analysis zones) and will account for jobs and residences that shift to growth areas. The forecast will be derived from REMI, the Regional Economic Models Inc. six-county Pittsburgh regional model. When the model is complete, SPRPC hopes to be able to evaluate the land use impacts of transportation alternatives.

SPRPC has also studied the issue of growth management, which may be considered as a strategy to implement the new long-range transportation plan currently under development. See: "Transportation Issues, Needs and Strategies for Southwestern Pennsylvania," pages 14-16; "Growth Management - A Review of Seven State Systems and the Outlook for Pennsylvania," pages 17-25; and "Regional Profile—1991 Conference Background Material."

Currently, staging and priorities for the plan are established outside of SPRPC's metropolitan planning process. Projects are instead added to the plan primarily through negotiation between competing interests. This fragmented process prevents rational analysis of priorities and adoption of implementation programs. The current comprehensive land use and transportation planning effort, which anticipates developing the new plan, is intended to overcome this obstacle by integrating planning efforts. Without an updated comprehensive regional plan, SPRPC is unlikely to be able to serve effectively as the forum for transportation-related decision-making. Documentation of the interim transportation plan (LRCP) can be found in: "Interim Period Air Quality Conformity Determination for Southwestern Pennsylvania"; the TIP summary; and the RTP.

According to SPRPC, the LRCP reflects the most recent population, employment, travel and congestion estimates, as documented in "Interim Period Air Quality Conformity Determination for Southwestern Pennsylvania."

Although its emphasis was on highways and it discussed investments that exceed available resources, the 1984 RTP did recognize the limited availability of funds and seek to target transportation improvements. It identified a network of the most important radial and circumferential roads in the region and gave priority to these routes by recommending a series of generally small-scale improvement projects. Individual projects alone might produce only

modest benefits, but when a series of projects are completed in a corridor, mobility could be significantly improved.

In contrast, the LRCP is unrestrained by resource limitations. As described by SPRPC, it is a collection of projects gathered into a "wish list" designed to meet all of Pittsburgh's transportation needs. According to SPRPC, it incorporates all of the recommendations of ongoing transportation studies. In fact, a Commission report, "Transportation Issues, Needs and Strategies for Southwestern Pennsylvania," documents a funding shortfall through the year 2000 of $6.5 billion based on the plan's goals.

Observations and Suggestions

SPRPC is pursuing a competent approach to developing a long-range transportation plan for the region. The following suggestions are aimed at improving the plan:

1) **Completion of Transportation Plan** -- SPRPC should assign a top priority to completion of an updated, comprehensive regional transportation plan. The Commission currently expects to complete its next long-range plan by the Fall of 1993. The updated plan should be designed as a single, integrated document. In its present form as a compilation of studies and projects, the LRCP does not and will not provide comprehensive guidance for Pittsburgh's transportation planning process. Significant transportation initiatives, such as the Mon Valley Expressway and the South Beltway, now originate outside the SPRPC process. An integrated, comprehensive plan that identifies critical regional issues and needs is required by ISTEA, and is crucial if SPRPC is to provide a forum for the decision-making process.

2) **Regional issues** -- The Commission's description of the LRCP incorporates regional transportation issues raised in the 1984 RTP, and cites research on the relationships between transportation and land use, urban development, and environmental requirements. These issues were not addressed in the 1984 RTP. The updated plan should add and carefully describe these regional components.

3) **Multi-modal needs** -- The updated plan should reflect full consideration of multi-modal strategies.

4) **Financial constraints** -- The updated plan should recognize funding limits. Project proposals should be realistically evaluated and prioritized on the basis of expected costs and availability of financing. As noted above, it appears that the region currently proposes projects for meeting its transportation needs without adequate accounting for fiscal constraints. The formation of a broadly-representative Transportation Plan Finance Committee assigned to develop fiscal projections is a positive step.

5) **Alternatives** -- In order to fully inform the decision-making process, the plan should present a wide range of alternatives and their projected costs and benefits.

6) **Time-frame** -- It is not clear from existing documents that the LRCP is designed to guide transportation policies in the short- and long-term. SPRPC should include both short- and long-term management strategies in the updated plan.

7) **Planning sequence** -- SPRPC used items in the current TIP, which was formulated in response to the 1984 RTP, as components of the proposed LRCP. Items included in the TIP, which has a short-range planning focus, should instead be determined by the priorities set in the long-range transportation plan.

B. Transportation Improvement Program

The TIP, including the Annual Element, is prepared by SPRPC's Transportation Technical Committee and Transit Operators Committee. The Transportation Technical Committee includes representatives from the local PennDOT District Offices, PennDOT Central Office, member planning departments (including the city of Pittsburgh), and Port Authority of Allegheny County (PAT). The Transit Operators Committee includes staff from recipients of federal transit assistance: PAT, Westmoreland County, Beaver County, the Mid Mon Valley Transit Authorities, and the City of Washington-sponsored operator, GG&C Bus Company, Inc. Participants recommend transit and highway improvements, which are summarized in the current TIP. The city of Pittsburgh's Planning Department is particularly active in this process, especially during discussions of uses of FAUS (Federal Aid Urban System) funds. According to SPRPC, policy questions that arise during staff development of the TIP are resolved by the Transportation Policy Committee, which is composed entirely of voting members of SPRPC who are elected officials. Final approval of the TIP is conducted by the full SPRPC.

The timing of the annual revision of the TIP, including the Annual Element, is coordinated with the biennial update of the State's Twelve Year Transportation Program. An effort is made to formulate compatible programs to achieve an orderly progression of transportation improvements. In addition, input is received from SPRPC's Annual Public Meeting on the Transit TIP. Project justifications are included in the detailed descriptions of projects, which are provided when projects are included in the Annual Element.

The TIP includes both transportation demand and system management strategies. Demand management strategies, including carpools, flextime, and staggered work hours, are discussed in the TIP but are not included for funding. System management strategies actually included for funding are, among others: the massive Billion Dollar Bridge program, designed to improve traffic flow in the region, busway extensions, park n' ride expansion, bus procurement, and rail modernization. Anticipated costs of the 1991-1994 TIP projects are approximately $774 million for highways and $112 million for transit (including a $34 million grant for transit garage rehabilitation).

A regional SPRPC planning process is not currently guiding the choice of projects included in the TIP. Projects are included based on negotiations between elected officials and implementing modes. For example, PennDOT and the Pennsylvania Turnpike Commission make highway fund decisions and transit operators make transit fund decisions, based on their own criteria and objectives, and SPRPC's committees incorporate them into the TIP. Because no updated plan

exists, long-term regional criteria and objectives identified by SPRPC do not necessarily determine the contents of the TIP.

Annually since 1982, SPRPC has compared the TIP to the SIP to determine the degree of conformity. The TIP describes the process as it relates to the five regional transportation control strategies: Bridge Maintenance and Repair Strategy; Maintenance of Current Levels of Transit Service; Implementation of Select Control System Improvements; TOPICS/TSM Projects; and Maintenance of a Ridesharing Promotion Program. Conformity with the 1990 Clean Air Act Amendments, according to EPA/USDOT interim guidelines, is documented in a companion document to the TIP, "Interim Period Air Quality Conformity Determination for Southwestern Pennsylvania."

The process of project development is tracked in TIP Annual Elements. Based on a review of documents submitted, physical progress from project beginning to completion does not appear to be carefully monitored for highways or transit. The Commission tracks highway projects only for their use of FAUS-earmarked funds, regularly monitoring dollars expended as well as the unobligated balance. A formula for sharing limited FAUS resources, which SPRPC's Transportation Policy Committee developed in 1983, is utilized to control allocations within the region between State and local projects. Unobligated balances are not reported in the TIP. For transit monitoring, SPRPC maintains Section 9/9B formula funds tracking tables, which estimate the current status of the formula funds allotted to each Pittsburgh and Monessen Urbanized Area recipient since the inception of the Section 9 program. Tables reflect TIP amendments, grant application submissions and funding obligations. Estimates of funding availability are derived from data contained in the TIP.

Transit and highway projects are adopted and added to the TIP at the same time. However, the draft of the Transit Component is typically completed one month ahead of the Highway Component because of its review at SPRPC's Annual Public Meeting for the Transit TIP and as part of the privatization policy. Other than urban programs eligible for FAUS funds, proposals are neither judged according to a set of regional criteria nor prioritized. The implementors decide what programs they want and add them to the TIP under the auspices of SPRPC's Transit Operators Committee. Tables in the TIP indicate that the 1991-1992 Annual Element programs PAT transit capital projects costing $18.9 million while anticipating distributions of funds for these projects of only $14 million. Programmed funds exceed endorsed fund distributions. The TIP does not indicate which projects must therefore be cut, suggesting that SPRPC overprograms instead of prioritizing and funding the most pressing needs (See p. 110 of TIP). It is not clear how SPRPC and implementing agencies monitor the progress of program implementation.

The private sector is included in the TIP process. SPRPC maintains a Transit Operators Registry and consults with private transit operators through its annual meeting on the transit component of the TIP. The Commission privatization policy directs the public transit operators to: consider the private sector's capabilities when planning new and restructured services; assess opportunities for the private sector to provide existing services; and assure opportunities for the private sector in the planning and development of capital projects. Activities directed at

promoting this policy are described in the Appendix to the TIP titled "1990-1991 Transit Privatization Report."

Observations and Suggestions

SPRPC has had an acceptable process in place for developing the TIP, but it should be modified to reflect ISTEA requirements. The Commission made a strong effort to analyze and apply USDOT/EPA interim guidelines for compliance with the CAAA and direct the transportation planning process toward meeting compliance requirements by promoting TCMs. The TIP also demonstrates SPRPC and the region's commitment to provide accessible transit for disabled and elderly persons, through the ACCESS paratransit program, and to the participation of private transit operators in the transportation planning process (see section VII). SPRPC also notes in the TIP, as in planning documents, that the Pittsburgh area faces a substantial shortage of funds for implementing its transportation improvement programs. The following suggestions are offered to improve the TIP process:

1) **Linking the TIP to a plan** -- The TIP should be a strategic means to implement a comprehensive transportation plan, which cannot happen until SPRPC has updated its current interim plan. An updated plan is essential to provide a sound basis for the adoption of projects listed in the TIP.

2) **Project justification** -- The basis for including projects in the TIP should be described. Descriptions of PAT projects in the Appendix include a "Project Justification" section, but overall summaries of the highway and transit components in the body of the TIP do not. Program needs may be obvious to planners in some cases, but should nonetheless be described to establish regional significance for a broad readership.

3) **Project prioritization** -- In order to conform with ISTEA requirements, TIP projects should be prioritized and within funding limits. Combined with complete project justifications, priorities would increase the ability of decision-makers to reach sound programming decisions.

4) **Overprogramming** -- SPRPC acknowledges its funding shortfall, but overprograms the transit portion of the TIP without ranking its components. To conform with ISTEA, future TIPs must include financial plans and be fiscally constrained.

5) **Transportation Control Measures (TCMs)** -- SPRPC is commended for describing TCMs such as carpools, flextime, high-occupancy vehicle (HOV) lanes, park and ride lots, and growth management in the TIP. However, these initiatives should be categorized, identified by scale and general impacts expected, and prioritized for implementation.

6) **Project monitoring** -- Project monitoring should be improved. The TIP reports sources of funds and actual expenditures, but does not track the degree to which programmed projects have been implemented, the progress of construction, or unobligated funding balances.

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

A. Evaluation of the Impact of Major Transportation Investments of the Past Twenty Years

SPRPC does not appear to have formal guidelines on when and how to evaluate major highway and transit investments. Investments of the past twenty years have not been analyzed. A limited description of major transportation investments and demographic trends, without explanations of the links between the two, was compiled as part of SPRPC's Annual Conference. (See "Regional Profile-1991 Conference Background.")

Popular support for past highway and transit projects has reduced the incentive to assign resources to basic assessments of their benefits and costs after completion. According to PAT and SPRPC, popular support for transit arose in response to the improved service and higher ridership resulting from recent projects.

Observations and Suggestions

Routine evaluations of major investments -- SPRPC and PAT could evaluate the results of major transportation investments in the Southwest Pennsylvania region. Such an effort would be a means of both determining the relative success of major investments and better informing future investment decisions, particularly considering the increased authority for flexible multi-modal investment granted by ISTEA.

Evaluations of major investments could contrast actual and forecasted impacts of projects on: costs; transit ridership; automobile use and miles travelled; and other relevant impacts, including land use and air quality. These analyses would inject a degree of accountability into the planning process by allowing testing of both the assumptions made at the time of project approval related to land use, demographics, and pricing, and the analytical methods that bred these assumptions.

B. Monitoring, Surveillance and Reporting

SPRPC maintains a variety of data for plan reappraisal. Surveillance activities include an ongoing traffic count program that provides trend and calibration data, and the monitoring of travel parameters necessary to verify and run the transportation modeling process. Products are intended to provide a regional database for SPRPC, its member governments and the funding agencies. The Commission revises and updates the regional database on an ongoing basis, and maintains the maps, forecasting models, and needs assessments that are necessary to planning programs described in the UPWP.

SPRPC monitors the quality and physical characteristics of a sample of roadways in the region; obtains manual or machine classification counts on one-third of the sample universe each year; and maintains a Highway Performance Management System (HPMS) master file reflecting changes made by the PennDOT Central Office. Staff also accesses PennDOT's Roadway Management System as needed.

SPRPC has completed four sets of forecasts for the counties and municipalities of southwestern Pennsylvania, using updated forecasting techniques with each cycle. During the 1990-91 work program, the demographic database was updated to reflect the initial 1990 Census reports and research was conducted on the relationship between land use and transportation. Findings provided a conceptual basis for the impending Cycle V forecasts.

A limited home interview survey was conducted in 1990. SPRPC designed a stratified sampling procedure based on household size and auto ownership for the six counties and the city of Pittsburgh. During the Spring and Fall of 1990 a total of 750 survey packets were mailed to selected households, and 433 completed surveys were returned (57% return rate).

Sub-area data is collected to monitor travel change. Central business district (CBD) cordon counts were taken in 1989, screenline counts were taken at river crossings in 1983-84, and an external survey was conducted at SPRPC's regional boundaries in 1988-89. Screenline and cordon counts are used to monitor travel trends, to calibrate and validate travel simulation models for the region, and to update count-based estimates of regional miles of travel.

The Commission monitors travel trends in the region to collect the traffic count information needed to estimate vehicle miles traveled (VMT) and calibrate the region's travel forecasting model. The most recent traffic counts were obtained from 93 of the 104 roadway crossings at the region's cordon line. Over the past three years, 180 truck classification counts were also collected annually at sites designated by PennDOT within the region. Since 1982, SPRPC has assisted PennDOT in the Federal Highway Performance Monitoring Program (HPMS). Annual field observations of the 450 HPMS sample sections were made and vehicle classification counts were obtained for these designated sections on a three-year cycle.

SPRPC also maintains the "Development Monitoring 1990+" database, which tracks projects in the region that affect forecasts of population, households, employment and land use in 1990 and later. The database includes such items as: project name, location, description, cost, status, census tract, traffic zone, etc.

Beyond assessing impacts on post-1990 demographic forecasts, there is no formal process for reporting the status of plan implementation. The "Annual Bridge Report" tracks the status of individual bridges. A special study in 1986 assessed the impact of a recent freeway opening. The "Allegheny Valley Expressway Corridor Reconnaissance Study" examined the potential development pressures that might result from the completion of that highway.

Observations and Suggestions

SPRPC competently monitors and surveys transportation systems in the Pittsburgh region. The Commission might improve planning by developing formal processes for reporting progress in implementing transportation programs and assessing the full impacts of projects. Political authorities, and the issues that they raise, play a critical and appropriate role in the planning process, but both they and the transportation implementing authorities should operate with benefits of full information provided by careful analysis of program operations.

C. Ongoing and Corridor Multi-Modal Planning Approach

SPRPC's Transportation Strategy Policy Committee has identified the following seven broad transportation planning components for the Pittsburgh region: bridges, capital maintenance, interstates, local roads, the priority highway system, transit, and economic development highways. (See: "Regional Profile - 1991 Conference Background", and "Transportation Issues, Needs and Strategies for Southwestern Pennsylvania.") According to SPRPC, substantial increases in trips, congestion, and travel times suggest needs in all surface transportation modes requiring a $10.2 billion investment over twelve years. Based on funds currently committed, the region faces a $6.5 billion shortfall in meeting recognized needs. The Commission believes, perhaps unrealistically, that it will close the funding gap through a strategy of obtaining "more transportation funds from a wider range of sources."

SPRPC has demographic projections of total population, households, group quarter population, average household size and work-place employment for five industrial categories for the City of Pittsburgh by ward, and municipalities in the six-county region to the year 2000. The heart of the planning process is the Mature Economic Region Land Use Allocation Model (MERLAM), an accounting system that predicts demographic trends in regional communities based in part on land availability and accessibility to different transportation modes. Outputs from MERLAM are used to assess the impacts of planning alternatives. SPRPC is also in the process of developing a simple land use allocation model for its transportation planning and demographic forecasting processes.

According to SPRPC, no comprehensive, long-term land use plan has been developed for Pittsburgh, and government structure in Pennsylvania hinders regional planning by granting zoning power to individual municipalities. SPRPC has neither direct zoning power nor indirect influence over local zoning authorities, and growth is generally uncontrolled.

The 1984 Regional Transportation Plan (RTP) has been evaluated at the systems level as part of various corridor and sub-area projects, but a current, comprehensive transportation plan does not exist for the purposes of assessment. The RTP lists projected benefits and costs of projects included in the plan, but does not compare them to rejected alternatives. According to SPRPC, projections of transportation demand used for current planning are based upon the economic, demographic and land use projections as presented in the 1990 "Regional Profile."

Descriptions of specific program proposals under each of the seven components listed above suggest a multi-modal planning approach. The program objectives described include maintenance and prioritization of roads for different uses; improvement of bus and light rail transit service; demand and system management strategies such as flextime, carpools, signalling, HOV and intermodal coordination; and growth control measures such as regional coordination and mixed-use zoning. In the 1990 "Transportation Issues, Needs, and Strategies for Southwestern Pennsylvania," the Transportation Strategy Policy Committee's suggests that long-term goals will be prioritized, but it does not compare their potential impacts and give them ranks. Without a current transportation plan, however, it is difficult to determine if stated objectives have been translated into actual projects that provide a coordinated multi-modal approach to planning in all important corridors.

SPRPC states that alternative transportation investments were analyzed during the development of the 1984 RTP, but not for the 1991 LRCP.

Transportation System Management/Congestion Management Strategies have been given emphasis in corridor level studies performed by SPRPC with the participation of consultants, including:

- Expanded Park-N-Ride Strategies Study, 1991
- Parkway East Implementation Plan, 1991
- Parkway West Multi-Modal Corridor Study, 1989
- Potential Impact of South Hills Light Rail Transit on Washington County Transit Service, 1985
- Initial Phase Transit Analysis, 1982
- Allegheny Valley Pilot Corridor TSM Study, 1980

The Parkway East Implementation Study, for example, examines such strategies as: Incident Management; Park-n-Ride; Ramp Metering; Transit Options; and minor physical roadway improvements.

If the Parkway West Multi-Modal Corridor Study (which was performed with the assistance of a consultant, the Maguire Group, and provided to the reviewers) is a representative example, corridor program alternatives are thoroughly analyzed based on cost effectiveness. In general, operating, maintenance and capital costs are developed by implementing agencies, not the MPO staff. Studies compare alternatives based on capital costs and travel performance measures. Operating and maintenance costs are not emphasized. The Parkway West Study also assessed the environmental and social impacts of proposed projects, but SPRPC acknowledges that the thoroughness of such analysis is inconsistent and varies by study.

Cursory fiscal analysis is carried out to compare the financial feasibility of program alternatives, but corridor multi-modal planning is generally not constrained by fiscal conditions. SPRPC indicates that the new long range transportation plan will attempt to reconcile funds and projects while seeking new sources of financing. In early 1991, SPRPC's Transportation Strategy Policy Committee made a commendable effort to generate funds by recommending that the Pennsylvania Legislature authorize the formation of a new Regional Transportation Finance Authority in southwestern Pennsylvania to levy a gasoline tax (up to 5 cents), a dedicated sales tax (up to 1 percent), and a personal property tax on vehicles (up to 4 mils). All levies would be dedicated to transportation and would finance a ten year, $2 billion transportation improvement program. The legislation failed to pass successfully through the legislative budgetary process and such an authority is unlikely to be created soon. The Commission is also examining the feasibility of new toll roads. Without any new sources of revenue, the regional transportation system will have to reassess options and service expectations.

Observations and Suggestions

SPRPC is, in general, engaging in professional, multi-modal regional and corridor planning. Goals are determined based on observed demographic trends, and multi-modal travel

management strategies are emphasized in a number of corridor and subarea studies. The following suggestions might improve the process and its products:

1) **Multi-modal approach** -- The anticipated transportation plan should reflect a multi-modal approach to planning. For example, the Parkway West Study indicates a consideration of a variety of modes rather than an exclusive focus on roads, transit or innovative route management. Efforts like this could be expanded elsewhere. Fiscal and environmental impact assessments of transportation projects could also be expanded, and planners could thoroughly compare and rank alternatives before including them in the plan. Multi-modal initiatives will be bolstered by the flexible funding and balanced match ratios of the ISTEA.

2) **Ranking investment alternatives** -- Planners should more thoroughly compare and rank transportation investment alternatives. Analyses should compare operating and maintenance costs as well as capital costs and travel performance. Existing facilities also deserve attention. For example, very low fares and high-intensity transit service might provide benefits with value equal to that of new investments.

3) **Land use planning** -- SPRPC should urge its constituent governments in Southwestern Pennsylvania to support the development of a comprehensive land use plan that is integrated with the expected transportation plan. Coordinated land use and transportation plans would serve as common reference points, facilitating identification of transportation needs and evaluation of project designs.

4) **Financial plan** -- The updated long-range plan should include a financial component that demonstrates that it can be implemented in accordance with the requirements of ISTEA.

D. Consideration of Air Quality

Attainment Status

Southwestern Pennsylvania has been designated a moderate non-attainment area for ozone under the CAAA, and is in attainment for carbon monoxide. PM-10, or particulate matter, standards are not met in the City of Clairton and the Boroughs of Glassport, Liberty, Lincoln and Port Vue, but this is due primarily to stationary coke oven emissions. In contrast to cities with intense compliance problems such as Los Angeles, Houston and Chicago, air quality is not driving the transportation planning process in Pittsburgh.

Compliance Monitoring/Transportation Control Measures (TCMs)

As required by the CAAA, SPRPC prepares an annual conformity statement in conjunction with its TIP development. The statement identifies each transportation control measure and evaluates overall progress toward achieving commitments in the SIP. The most recent population, employment, travel and congestion figures are used to estimate emissions. Findings of the conformity analysis are reported to the Transportation Technical Committee, which provides an annual opportunity for FTA, FHWA, and EPA (which are non-voting members of the

committee) to review SPRPC's compliance with the mandate. The findings of the most recent conformity analysis are contained in the 1991-94 TIP and were confirmed through the Commission's action of August 26, 1991.

According to SPRPC, it is unclear who is responsible for estimating emissions levels for the Pittsburgh region. SPRPC conducted the last emissions inventory and expects that PennDER will request that it conduct the inventory required by the CAAA, but transportation agencies perceive the CAAA as a minor issue and give it little attention. PennDER works more closely with MPOs in areas with significant non-attainment problems than with SPRPC. Land use and transportation planning efforts have not been coordinated, and SPRPC and the State of Pennsylvania do not appear to be moving together on the development of a new SIP.

SPRPC staff expresses concern that conventional TCMs may have only a limited impact on emissions, and pursuit of these strategies might diminish the availability of resources for other projects. Current planning places emphasis on the implementation of the four transportation control measures outlined in the 1982 SIP: keeping bridges open, keeping transit operational, promoting ridesharing, and improving TOPICS. (See: Appendix 4 "1991-1994 Transportation Improvement Plan for SPRPC Region (including Monessen Urbanized Area)".) According to SPRPC, existing TCMs have not been fully implemented and it is not clear that the new SIP will include new measures. The UPWP, which was written before any CAAA or ISTEA guidance was available, did not comprehensively address the air quality issues and costs confronting the region. Additional attention should be given to such measures as incident management on roadways, procurement of clean buses, refueling vapor recovery, transit fare adjustments, intelligent vehicle highway systems (IVHS), bicycle and pedestrian access, parking taxes or regulation, and vehicle inspection and maintenance requirements. PennDOT's Safety and Mobility Initiative (SAMI) has been aggressively pursued; however, SAMI strategies to improve travel options for pedestrians have not been advanced.

Observations and Suggestions

While the EPA has not finalized guidance, the CAAA requires that air quality planning be improved in order to bring the region into compliance for ozone emissions. The various agencies involved in transportation planning must develop means of working cooperatively to maintain and improve air quality, and set a firm schedule to attain air quality standards. The ISTEA also includes planning requirements designed to encourage air quality improvements, although regulations are not yet final.

The CAAA established an eleven state Northeast Ozone Transport Region, of which Pennsylvania is a part. Regardless of local attainment classifications, requirements within the region include enhanced vehicle inspection and maintenance programs (in areas with populations greater than 100,000) and measures to control vehicle refueling emissions. The CAAA also requires that moderate ozone non-attainment areas demonstrate reductions of volatile organic compound emissions of at least 15% by 1996, and provide for contingency measures such as TCMs in their 1993 SIP submittals. The magnitude of this challenge should not be underestimated. The following suggestions may serve as a starting point for making the necessary improvements:

1) **Interagency efforts** -- SPRPC should convene a working group of appropriate agencies (such as SPRPC, PAT, PennDOT, PennDER, FHWA, FTA, and EPA) to promote the development of a realistic SIP and assign responsibility for tasks related to air quality improvement. The CAAA requires that SIP preparation be coordinated with the 3C transportation planning process.

2) **Resources** -- Expanded SPRPC transportation planning required to address air quality problems in non-attainment areas in and adjacent to the Pittsburgh region will require that the MPO develop additional resources. Given the added levels of funding and increased flexibility provided by ISTEA, the MPO and state have the resources for an adequate expanded planning effort to meet the requirements of federal law.

3) **Transportation Control Measures (TCMs)** -- To conform with the requirements of the CAAA, the region's transportation plan must "provide for the expeditious implementation of TCMs." According to the EPA, this requires TIPs to provide for the implementation of TCMs that may have been committed but not yet carried out. Under the expected ISTEA regulations, transportation planning will be required to consider long-range measures that regulate land use and promote bicycle and pedestrian travel as means of reducing pollution-producing auto use.

4) **Transportation Plan** -- Because Pittsburgh is an ozone non-attainment area, its new long-range transportation plan must demonstrate reductions in annual emissions to bring the area into compliance. The TIP and UPWP should be viewed as strategic means to attain the long-range plan, and should reflect this priority.

E. Outreach Efforts

SPRPC provides access to the transportation planning process for elected officials and the general public by producing and disseminating information about transportation issues and planning efforts. Outreach strategies have included: preparation and distribution of an Annual Report on the status of transportation planning, press conferences and press releases, public meetings on transportation issues held in each of the six counties in the Fall of 1989, SPRPC appearances before interested groups to present background on planning activities, rotation of SPRPC meetings to all constituent counties, and convening a public Annual Meeting on the Draft Annual Transit Element of the TIP. Direct and early citizen involvement in the process of developing long-range plans and the TIP is generally not encouraged, and disadvantaged and minority communities are not specifically encouraged to participate.

The Commission supports the Allegheny Conference, a group of corporate leaders that advises the planning process, and convenes the Transportation Strategy Policy Committee, designed to gather "transportation statesmen" from the ranks of the Allegheny Conference who can interact with political leaders. Another outreach mechanism is the annual policy retreat, convened away from Pittsburgh, which brings together SPRPC board members and other community leaders to identify important regional issues and seek consensus on future courses of action.

Observations and Suggestions

SPRPC is commended for supporting the Allegheny Conference and holding annual policy retreats. The Commission should move beyond providing information to interested citizens and develop formal procedures for gathering and considering public input throughout the planning process. ISTEA regulations are expected to require that all interested parties be given a reasonable opportunity to comment on plans and TIPs. PAT has a citizens advisory committee; such a body might contribute positively to SPRPC's efforts.

Outreach would be improved further if the public, including minority, disadvantaged and other interested communities, were included early in the planning process at the level of agenda-setting and decision-making.

VI. Tools, Skills, and Data Base For Transportation Planning

A. Travel Demand Forecasting

The traditional four-step process including trip generation, trip distribution, modal split, and traffic assignment is used to determine future travel demand. Highway and transit modes are included and assignments are made for each. High occupancy vehicles are not currently included in the regional modeling process.

SPRPC performs the development, refining, and application of the travel demand forecasting models. The methodologies and results of the models are provided to other agencies in the region. Generally, forecasts developed by other agencies use the SPRPC regional model output as a base. Microcomputers and software packages such as MINUTP, MERLAM, Lotus 1-2-3, and MAPINFO with Windows are used mostly for SPRPC's travel demand forecasting process. Some specialized programs are written in- house. The forecasting models were last validated in 1990.

SPRPC is currently in the process of constructing a land use model. The decision was made to construct a model in part because existing models were considered too cumbersome and could not be used for the type of application desired in Pittsburgh. One objective of the model building process is to develop consensus among local governments as to the most desirable land use patterns, which might lend support to a land use plan. The variables to be used in the model will be identified by an expert panel. SPRPC hopes to have an operating land use model in place by the Fall of 1992.

Household survey data was collected from 1978 to 1980 and in 1990. Data from the earlier years was used to calibrate the travel demand models. The 1990 data sample (450 households) was too small to sharpen major models, but aided in the refinement of the production models, which appear to replicate current conditions. Attraction models are based on 1967 survey results.

The mode split model is based upon the 1978-1980 data. It stratifies trips based on three trip purposes (home-based work, home-based other, and non-home based) and car ownership (carless and one plus households). The calibration assumed peak period transit impedances for all trip purposes, which is different from traditional treatments that assume work trips in the peak and non-work in the off-peak. Some of the model coefficients are counter-intuitive. Analysis of the transit impedances indicates the value of time for carless households and those with cars is about the same for home-based work trips. Also for home-based work trips, carless households have a higher coefficient of in-vehicle transit time than households with cars, meaning that carless households show greater elasticity to in-vehicle time. In-vehicle transit time of home-based other trips for carless households is included in the impedance calculation. Although values are low, in-vehicle time is also in the impedance calculation for determining non-home based transit trips.

Although modal split is performed for only two modes, transit and auto, the model does include factors for estimating auto occupancy. The split between park-and-ride and walk to transit is

determined by two separate modelling runs for each access mode and a prorating of the maximum ridership of the two runs between these access modes. No treatment of auto access is performed.

On-board transit surveys were conducted in 1982 and 1988, and transit ridership estimation has been validated against this data. While documentation of the validation results shows aggregate comparisons, SPRPC stated that more comparisons have been performed which have not been documented.

Current parking cost data are maintained by the city. The connection between this data and that used in the demand models is unclear. Parking costs are forecasted based on employment density, which is a traditional approach. This forecasting method was developed by COMSIS as part of an alternatives analysis study. Recently, the forecasting of parking costs based on employment density has been added to SPRPC's demand models. Whether this procedure has been incorporated into the regional models is unclear. City policy is to discourage long term parking in the downtown. Because the city owns a number of parking facilities in the downtown, it is in a position to bring about this policy.

Observations and Suggestions

The following recommendations are designed to improve the quality of travel demand forecasting:

1) **Documentation of the land use model** -- Since the land use model is being developed locally, and is likely to become complex, SPRPC should thoroughly document the model, its assumptions and parameters. This will be particularly important for future users.

2) **Validation of all models** -- Validation of all models should be carefully documented. This documentation is important as evidence that the models adequately duplicate existing conditions.

3) **Re-calibration of regional models** -- SPRPC should collect new household data for re-calibration of the regional models, which are based on data as old as 13 years, do not have capabilities that may be needed by the region, and contain mode split coefficients that are counter-intuitive. The region plans to acquire the 1990 Census journey-to-work data, which should support this effort.

4) **Update of mode split model** -- The mode split model should be updated using appropriate time-of-day transit impedances for trip purposes. SPRPC needs a model that predicts auto occupancy and more accurately assesses park-and-ride access. This is particularly important because the region is considering projects that are oriented to these modes. Work on the prediction of auto occupancy has been done recently in Houston, San Francisco, and for the Shirley Highway in Washington. Work done by COMSIS for park-and-ride access for the alternatives analysis studies may also be valuable.

B. Costing Methodologies

SPRPC has no specific costing methodologies, but instead relies on implementing agencies to develop and provide this information. PAT reports operating and maintenance (O&M) and capital costs in its Strategic Plan and provides this information to SPRPC on request. According to PAT, it monitors the costs of all of its service and projects and conducts cost estimates using cost allocation and build-up models that are run on mainframe and personal computers.

Planning for a fixed guideway extension along the existing East Busway, and reconstruction of the Arlington Avenue rail system, are underway. The assessment of the East Busway is using operating cost data from PAT, and capital cost data from PAT and PennDOT. The nearly-completed Arlington Avenue rail project uses actual bid projects to assess costs.

Observations and Suggestions

SPRPC and the implementing agencies should adopt methods through which costs will be regularly monitored, projected and reported to SPRPC. As the regional planning agency, the MPO should maintain current and thorough cost data in order to enable ongoing observation and analysis of transportation performance and needs.

VII. Ongoing Transit Planning

A. Organizational Issues

The Port Authority of Allegheny County (PAT) develops and adopts a comprehensive Strategic Plan that describes agency goals every 3-5 years. The current plan was drafted with the assistance of a strategic planner from the private sector and adopted in 1987, and an updated version is now being developed directly by PAT staff. A Business Plan of programs designed to carry out the objectives of the Strategic Plan is prepared annually. The Business Plan also contains performance indicators that enable PAT to track its progress in achieving goals.

PAT plans for services in a number of modes. The authority operates standard bus, light rail, and inclined plane modes, and contracts out the operation of its ACCESS paratransit system and the experimental implementation of a sub-mode called LINK, a suburban feeder bus service. Services also include the South and East busways, HOV lanes in the medians of I-579 and I-279 North, and exclusive contra-flow bus lanes in downtown Pittsburgh. In addition, PAT monitors and authorizes private carriers that operate their own services, including a CBD-fringe shuttle, a neighborhood shuttle serving Pittsburgh's Oakland district, charter service, and scheduled service to the airport.

PAT participates in PennDOT's Safety and Mobility Initiative, which is developing transportation system management and congestion management strategies, and is a member of the Pittsburgh Modal Integration Committee, which brings federal, state and local planning and implementing agencies together to explore multi-modal management. The authority also contributes to regional study committees, such as SPRPC's park-n-ride committee and Parkway East study initiative, Allegheny County's rail corridor study, and the city of Pittsburgh's Baum/Centre corridor study. According to PAT officials, the authority will support any measures that induce people to try alternatives to automobile travel, and it actively promotes transportation management associations in the Pittsburgh region. Two associations, one at the airport, are currently trying to develop transportation strategies, and PAT has pledged to support any "transit niche" that results from this planning.

In general, PAT policy emphasis areas, such as service quality improvement, financial stability, and facilities maintenance conform well to SPRPC's transit plans and programs. The agencies cooperated on the development of the East Busway and the promotion of ridesharing, and anticipate that they will work closely under the flexible funding guidelines described in ISTEA. PAT also uses UPWP funds to support its strategic planning efforts. However, the MPO's emphasis on highways and PAT's interest in implementing transit changes can weaken formal links between the two agencies. For example, SPRPC's desire to allow HOV use of busways has been resisted by PAT, which controlled their development. The lack of formal links requiring and guiding interaction may discourage the coordinated development of transportation services. Cooperation may be stronger in principle than in practice.

PAT's nine priority corridors are part of the 1984 Regional Transportation Plan (RTP). However, only federally-funded transit projects appear in the UPWP and the TIP. A number of projects listed in the current Business Plan (1992) are omitted. For example, the Steel Plaza

Station development, Monongahela Incline rehabilitation, and light rail station improvements, all of which might have impact on regional transportation, do not appear in the UPWP.

Observations and Suggestions

PAT is commended for developing a comprehensive, long-term strategic plan and implementing it through specific annual business plans. Broad strategies are successfully linked to annual tasks. The following suggestions are intended to improve the organization of the transit planning process:

1) **Coordination of planning with SPRPC** -- PAT could seek better coordination and consensus with SPRPC. Effective cooperation might resolve differences on the design and use of projects, such as the busways, before they are developed. It might also encourage service that is better oriented to regional needs. As noted in Section III.B., the ISTEA requires that all projects in TMAs, except those on the NHS or funded under the Bridge and Interstate Maintenance programs, be selected by the MPO from the TIP "in consultation" with the state and transit operator. The state and transit operator choose projects in the excepted categories "in cooperation" with the MPO. MPOs and operators are urged to develop an "agreed to list of projects" and formal project selection procedures. A transit operator must receive formal concurrence from an MPO for <u>all</u> project selections until formal joint project selection procedures following the above guidelines are developed.

2) **Reporting of transit projects** -- Non-federally funded transit projects should be included in the UPWP and the TIP. The joint (FTA and FHWA) planning regulations require that all transportation planning activities be included in the UPWP, regardless of funding source. Furthermore, the current CAAA guidelines indicate that the collective impact of non-federally funded projects will be considered in determining the compliance of transportation plans and TIPs with respect to emissions milestones. Non-federal projects are likely to have impact on overall air quality attainment, suggesting that they should be reported in the TIP as a practical measure.

B. Performance of Existing Service and Development of New Service

PAT relies on fifty-five quarterly and twelve monthly numeric indicators to monitor the performance of transit services. Indicators are developed by PAT's Planning Department with input from all of the authority's functional areas, and they are reviewed with management staff and the Board of Directors. Indicators, which are defined and reported in the annual Business Plan, monitor service, safety and maintenance effectiveness, financial and ridership performance, and employee utilization.

Service standards are reviewed and revised annually, and they serve as the basis for service adjustments that occur four times each year. The indicators serve as "flags" that suggest what revisions should be made to service on bus and light rail lines. If services to a particular area must be substantially restructured, PAT convenes an internal committee to develop changes. New plans are then discussed with community leaders, riders, and the Board of Directors.

PAT's Planning Department gathers demographic data from secondary sources such as SPRPC, city and county planning departments, the Pennsylvania state data center, and the University of Pittsburgh School of Social Research. Data on operations, service and ridership, used to calculate performance indicators, are collected and compiled by the authority's Transit Operations Division and the Schedules and Service Development Department. Ridership is monitored seven days a week. The Marketing Department conducts surveys of rider and non-rider attitudes countywide approximately every three years, and on specific routes when changes in service are anticipated.

To determine route operating costs, PAT uses models based on a cost allocation plan. These models were last validated in fiscal year 1990. Ridership for corridor studies is estimated by the regional ridership models, and for route-level studies by comparison to like services; costs are allocated to vehicle miles and hours, number of vehicles deployed, and other service parameters. Ten expense details are also proportionately added to routes, including capital, technical, planning, and general administration. The required fare recovery ratio is set by state legislation, and is currently 46%. Fares are raised at PAT's discretion, and no estimate is made of fare effects on VMT. PAT reports that it has continued to achieve the 46% fare recovery ratio through combinations of service reductions and fare increases.

Observations and Suggestions

PAT is commended for using a comprehensive set of performance indicators to measure progress toward achieving service goals, set standards, and adjust service. The clear linkages between the strategic and business plans and the performance measures is particularly innovative. Daily monitoring of ridership is also a good means of gauging the quality of existing transit and need for new service.

C. Capital Planning

PAT prepares a combined capital and operating budget in conjunction with development of the annual Business Plan portion of the Strategic Plan. Capital budgeting is guided by a Capital Technical Committee and a Capital Steering Committee. According to PAT, a capital needs study was completed in 1987 and is being updated. Replacement and rehabilitation program requests for vehicles, equipment and facilities are assessed as part of PAT's Capital Needs Assessment, which is performed biennially. Performance of these programs is reviewed quarterly by the Capital committees. Capital planning is noted in the UPWP and programs are listed in the TIP.

Existing facilities, rolling stock and equipment are evaluated for their consistency with PAT's service, efficiency and effectiveness objectives during the annual capital and operating budget planning process. The Business Plan assesses facility, rolling stock, and equipment improvement programs with regard to the authority's goals and objectives. Condition surveys are performed every year during budget preparation. The biennial Capital Needs Assessment considers life-cycles of assets when developing capital programs.

Observations and Suggestions

PAT prepares thorough annual capital budgets and biennial capital needs assessments, which provide a sound basis for planning.

D. Transit Management Analysis

Service productivity and efficiency planning is based on daily passenger counts, which are monitored to evaluate route- and trip-specific ridership, usually per vehicle hour. According to PAT, 100% of ridership is counted. This information is used to determine service standards, which form the guidelines for routing and scheduling. Service standards are continuously assessed and adjusted. The UPWP notes PAT's plans to improve its service data base content and management, develop a transit improvement program for the next TIP, and analyze transit options in critical corridors.

Safety planning goes beyond simply recording accidents. Employee accidents are recorded on PAT forms for recordkeeping and on state of Pennsylvania forms for worker compensation. Vehicle and passenger accidents are tracked using ANSI D-15. Monitoring information is used to develop annual objectives and long-range plans to reduce accidents. PAT also has an accident investigation review committee, conducts regular operator safety reviews, runs a safe driving training programs, and holds public meetings to discuss safety issues.

Observations and Suggestions

PAT appears to be effectively monitoring ridership, and using the results to adjust transit routes and schedules. The agency also conducts thorough safety planning.

E. Financial Planning

A preliminary financial capability analysis of fixed guideways was performed in 1988. Financial capability analysis was performed in 1990 as part of the Airport Busway Transitional Analysis, and will be conducted as part of the Airport Busway Alternatives Analysis/Draft Environmental Impact Statement (AA/DEIS).

PAT successfully built and operates the South Busway, Martin Luther King, Jr. East Busway, and the Stage 1 South Hills LRT line. The 1988 preliminary financial capacity analysis determined that projected financial requirements of the authority's fixed guideway improvement programs are consistent with projects that have already been funded, and within the financing ability of PAT and its funding partners. The Transitional Analysis verified the financial ability to build and operate the Phase I Airport Busway. This conclusion will be reviewed as part of the Airport Busway AA/DEIS. Financial capacity is also included in the Authority's other corridor planning efforts, on the Stage II South Hills LRT, the Martin Luther King, Jr. East Busway Extension, and the Spine Line.

PAT has a ten-year capital "wish list" that would cost $10 billion, far more than available through either state dedicated or federal funds. As noted earlier, the transit portion of the TIP

has been substantially overprogrammed without the benefit of priorities that might enable decision-makers to choose between projects. The CAAA may require that financial priorities be altered to meet air quality mandates.

Observations and Suggestions

PAT successfully maintains the financial health of its existing services, and correctly conducts periodic assessments of its financial capacity. But given the limited operating funds, fiscal pressures are severe, leading to fare increases and service cuts. "Wish lists" should be prioritized according to levels of anticipated funds. Cooperative efforts between SPRPC, PAT, and PennDOT in planning for the operating priorities created by the CAAA may also allow the development of broader political support for new increases in operating funds.

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

PAT is developing paratransit and key LRT station accessibility plans that will comply with the ADA. The authority currently provides paratransit service, called ACCESS, throughout Allegheny County for those unable to board standard vehicles. This service already meets or exceeds many ADA requirements. Eligibility criteria for this service will be expanded to include persons with visual and cognitive disabilities.

One-hundred and fifty of nine hundred buses on one-hundred and seventy routes are lift-equipped. Eleven bus routes, chosen by the disabled community in the course of four public meetings, are entirely accessible. All new equipment will be accessible.

Observations and Suggestions

PAT is commended for early efforts to provide accessibility, and for involving the disabled community in planning bus service.

G. Overall Outreach Activities and Related Considerations in the Urban Transit Planning Process

PAT works with the Allegheny County Transit Council, a formal group of citizen volunteers that represents transit riders. The Council meets on a monthly basis or more often as necessary to review information on transit service, finances and planning efforts. PAT conducts rider and countywide opinion surveys and convenes focus groups.

PAT has involved the public in planning efforts through meetings designed to gather public comments and analysis of projects such as busway extensions and the Spine Line Study. Minority and female-owned businesses have been encouraged to participate in the ACCESS paratransit service, and many have become involved. PAT tried to contract out a local shuttle service in an inaccessible area of Allegheny County to a private carrier, but the transit workers union successfully challenged the initiative in court. The authority has appealed this ruling, and continues to maintain an active list of potential private providers.

H. Planning Activities for a Drug-Free Work Place

The Port Authority has undertaken two primary efforts to support a drug-free workplace. The first, called the Employee Assistance Program, works confidentially to assist employees with a variety of personal challenges including issues related to drug dependency. The second initiative is a drug testing program for employees in safety-sensitive positions, which also trains supervisors to recognize signs of drug use in the workplace.

I. Transit Capital and Operating Plans and Programs

PAT develops transit operating plans and capital programs involving rehabilitation of existing facilities. Plans and programs involving the expansion of fixed guideway facilities are designed in cooperation with SPRPC. Initiatives are generated by the monitoring and planning process described above in sections VI. A, B, and C. General planning guidelines for transit are described in the UPWP. Project justifications, expected costs, and sources of funds are summarized in the TIP. PAT's general manager strongly supports studies of impacts both before and after implementation of major investments, though such evaluation is currently done on a limited basis.

Observations and Suggestions

PAT develops thorough capital and operating plans. The authority is commended for pursuing program evaluation, and should do more to emphasize these efforts. Given the requirements generated by the ADA and CAAA, however, the fiscal capacity to advance new priorities is limited. This capacity could be improved through cooperative efforts by SPRPC, PAT, and PennDOT to use flexible ISTEA funds.

APPENDIX 1

Participants in Pittsburgh Review

Federal Transit Administration (FTA)

Headquarters:
Deborah Burns, Project Manager
Ronald Jensen-Fisher, Senior Community Planner

Region III:
Elaine Burick, Senior Transportation Representative
Alfred Lebeau, Senior Transportation Program Specialist

Region V (Peer Review):
Donald Gismondi, Director, Office of Grants Management

Federal Highway Administration (FHWA)

Headquarters:
Rick Backlund, Community Planner
Frederick Ducca, Community Planner

Region 3:
Steve Rapley, Urban Transportation Planner

Pennsylvania Division:
Robert Hall, Supervisory Community Planner
Jim Smedley, Transportation Planner

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

William Lyons, Volpe Center Project Manager
Beth Deysher, Presidential Management Intern
Frederick Salvucci, Massachusetts Institute of Technology (Consultant)

Southwestern Pennsylvania Regional Planning Commission

Robert Kochanowski, Executive Director
Charles DiPietro, Transportation Planning Director
Wade Fox, Manager of Information Services
Chuck Imbrogno, Transportation Project Manager
Ted Treadway, Project Manager

APPENDIX 1, Cont.

Port Authority of Allegheny County (PAT)

Marilyn Skolnick, PAT Board
William Millar, Executive Director
Allen Biehler, Director of Planning and Business Development
Jim Barthen, Manager of Government Affairs
Richard Feder, Manager of Planning
Gloria Hahn, Legislative Analyst
David Veights, Transit Planner
Cathy Williams, Transit Planner
David Wohlwill, Transit Planner

Pennsylvania Department of Transportation

James Byers, Air Quality Coordinator

APPENDIX 2

Agenda for Urban Transportation Planning Review Meeting

December 3-5, 1991

Southwestern Pennsylvania Regional Planning Commission
The Waterfront
200 First Avenue
Pittsburgh, PA 15222-1573

Tuesday, December 3

11:00 - 12:30		Review Team meeting
12:30 - 1:00	Elaine Burick FTA, Region III	Welcome and introductory remarks.
	Deborah Burns FTA, Headquarters	Objectives for planning review.
	Steve Rapley FHWA, Region 3	
	Robert Kochanowski SPRPC	Introductory remarks. Introduction of participants.
1:00 - 1:15	Bill Lyons USDOT/Volpe Center	Overview of meeting and schedule. Discussion of urban transportation planning process (Roman numerals following topics below refer to attached questionnaire, which provides discussion questions). Format for general sessions - topic overview from SPRPC with discussion led by review team members. **How the process works in the Pittsburgh Region.**
		Local Transportation Issues (I.B)
1:15 - 1:45	SPRPC	Presentation
1:45 - 2:15	Elaine Burick, FTA, III Robert Hall, FHWA, PA-Div	Discussion

		Organization and management of the process -- Agencies' roles and responsibilities (II).
2:15 - 2:45	SPRPC	Presentation
2:45 - 3:15	Alfred Lebeau, FTA, III Steve Rapley, FHWA, 3	Discussion
		Products of the process (III).
3:15 - 3:45	SPRPC	Presentation
3:45 - 4:45	Don Gismondi, FTA, V Robert Hall, FHWA, PA-Div	Discussion

Wednesday, December 4

		How the process works in the Pittsburgh Region (continued).
		Elements of 3-C process (multi-modal dimension) (IV).
9:00 - 9:30	SPRPC	Presentation
9:30 - 10:30	Jim Smedley, FHWA, PA-Div Bill Lyons, USDOT/Volpe Center	Discussion
		Approach to air quality (Clean Air Act) (IV.D).
10:30 - 11:00	SPRPC	Presentation
11:00 - 12:00	Steve Rapley, FHWA, 3 Fred Salvucci, Volpe Center/MIT	Discussion
12:00 - 1:00	Lunch	

1:00 - 4:30		<u>Parallel sessions.</u>
		Breakout session at SPRPC
		<u>Format</u> for general sessions - topic overview from SPRPC with discussion led by review team members.
	Ronald Jensen-Fisher, FTA Fred Ducca, FHWA	Transportation planning techniques (V).
		Travel demand forecasting.
		Costing methodologies.
		General session at PAT
		<u>Format</u> for general sessions - topic overview from PAT with discussion led by review team members.
	Bill Lyons, USDOT/Volpe Center	Ongoing transit planning (VI).
		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.J).

Thursday, December 5

8:30 - 11:00		Complete outstanding items.
11:00 - 12:00		Review Team meeting - Findings
12:00 - 1:00	Lunch	
1:00 - 4:00	Elaine Burick, FTA, III Steve Rapley, FHWA, 3	Meeting summary -- Findings and Follow-up Actions (VII). Regional concerns. Next steps.

APPENDIX 3

Documentation Provided By Pittsburgh Regional Agencies

Southwestern Pennsylvania Regional Planning Commission

Unified Planning Work Program - "1991-92 Unified Planning Work Program for SPRPC Region (including Monessen Urbanized Area)"

Transportation Improvement Program - "1991-1994 Transportation Improvement Program for SPRPC Region (including Monessen Urbanized Area)"

Long Range Transportation Plan - "Regional Transportation Plan, Adopted October 29, 1984"

Emissions Inventory - "Interim Period Air Quality Conformity Determination for Southwestern Pennsylvania: Companion Document to the 1991-1994 TIP/Annual Element"

"Transit Financial Capacity: Appendix to the 1991-1994 TIP/Annual Element, September, 1991"

"1990-1991 Transit Privatization Report: Appendix to the 1991-1994 TIP/Annual Element"

"Annual Report on Southwestern Pennsylvania's Bridge Conditions, August, 1991"

"Population, Households, Employment, 1980, 1990, 2000"

"Regional Profile"

"Transportation Issues, Needs and Strategies for Southwestern Pennsylvania"

"A Reference Manual for Members of the SPRPC"

Port Authority of Allegheny County

"1987-1991 Strategic Plan"

"Business Plan & Performance Indicators Fiscal Year 1992"

"Draft Operating and Maintenance Costing Methodology Report: Spine Line Corridor Alternatives Analysis/DEIS, November, 1990"

"The Spine Line: Spine Line Preliminary Findings Now Available, March, 1991"

"Martin Luther King, Jr. East Busway Extension Study"

"Port Authority of Allegheny County Busway Expansion Program, April, 1991"

"Phase I Airport Busway Corridor AA/Deis, September, 1991"

"Status Report on Parkway East Study, June 5, 1991"

"Port Authority of Allegheny County Drug and Alcohol Abuse Program, November 5, 1990"

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