

II. Understanding Transportation Planning

The programming of transportation funds through the 2009-2012 TIP must satisfy the provisions of federal and state law while responding to locally identified transportation needs. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and the Clean Air Act Amendments of 1990 (CAAA 90) provide the comprehensive framework for SPC's transportation planning and programming process.

The transportation sections of the *2035 Transportation and Development Plan for Southwestern Pennsylvania* (2035 Plan), identify the long range goals, objectives and transportation strategies for the region. The Transportation Improvement Program is the mechanism for the implementation of the transportation goals, objectives and strategies of the 2035 Plan. All projects included on the 2009-2012 TIP must be drawn from, or be consistent with, the 2035 Plan.

The following sections of this chapter include:

- Metropolitan Transportation Planning: What It Is and How It Works
- Organizations Involved in Metropolitan Transportation Planning
- SAFETEA-LU Fundamentals
- Federal Clean Air Act Requirements
- Transportation Planning and Programming Cycles

Metropolitan Transportation Planning: What It Is and How It Works

There are over 350 metropolitan planning organizations, or MPOs, in the United States. Their primary mission under SAFETEA-LU is to act as the forum for cooperative regional decision-making on federal transportation funds. MPOs are responsible for developing a long range transportation plan with a minimum 20-year planning horizon, which is revisited (as appropriate) at least every four years in air quality maintenance areas like the SPC region; and a transportation improvement program (TIP) that covers a four-year period, and is updated at least every four years. In Pennsylvania, all statewide planning partners update their TIP every two years.

MPOs were created to ensure that existing and future state and federal expenditures for transportation programs and projects are based on a comprehensive, cooperative and continuing planning and programming process. Federal funding for transportation projects and programs in the SPC area are channeled through this planning process.

The regional plans and programs developed by MPOs span different time intervals, each providing a different level of detail. The long range plan anticipates the region's transportation needs over a 20-year horizon. The transportation improvement program, or TIP, is a program of projects derived from the long range plan that typically covers a four-year period. The TIP is the process used to implement the long range plan, and includes only the highest priority projects for which financial commitments are in place

and for which engineering, land acquisition or construction activities are reasonably expected to occur during the TIP period.

Transportation plans must represent, to the greatest extent possible, a consensus of affected parties. Public participation and guidance from community leadership are integral to the planning process in every metropolitan region, as well as cooperation among government agencies at every level.

Organizations Involved in Metropolitan Transportation Planning

U.S. Department of Transportation (U.S. DOT)

Twin agencies within the U.S. DOT, the Federal Highway Administration, or FHWA, and the Federal Transit Administration, or FTA, administer federal transportation law and are ultimately responsible for funding a large share of most transportation projects. The FHWA, with its focus on intermodal transportation systems, and the FTA, with its focus on public transit, ensure that plans prepared by states and MPOs satisfy the standards associated with federal funding. The U.S. DOT and the MPO must also make a finding that regional transportation plans and programs conform to the provisions of the federal Clean Air Act.

U.S. Environmental Protection Agency (EPA)

The EPA plays an important role in reviewing state and local transportation plans to ensure they satisfy federal clean air standards.

Pennsylvania Department of Transportation (PennDOT)

The Pennsylvania Department of Transportation has a major role in just about every aspect of transportation in the Commonwealth. Pennsylvania's Twelve Year Transportation Program, revised every other year, identifies the projects that PennDOT plans to undertake during the programming period. Federal law also requires PennDOT to develop a statewide transportation improvement program and to coordinate with the regional plans of Pennsylvania's MPOs. The maintenance of Pennsylvania's transportation system and services, including the interstates, major expressways, bridges, and safety and intermodal projects among others, are some of the many improvements PennDOT are responsible for implementing.

Pennsylvania Turnpike Commission

The Pennsylvania Turnpike Commission (PTC) is an independent agency, originally created in 1937 to build and operate the nation's first limited-access expressway. The Turnpike Commission is empowered to finance new construction by issuing bonds to be repaid from tolls and other revenues. Special federal and state funds may be used in addition to the toll revenues and bond money for some expansion projects.

Southwestern Pennsylvania Commission

The designated MPO for the Southwestern Pennsylvania region, SPC is an association whose members include Allegheny, Armstrong, Beaver, Butler, Fayette, Greene,

Indiana, Lawrence, Washington and Westmoreland Counties; the City of Pittsburgh; the region's transit operators; PennDOT; the Pennsylvania Department of Community and Economic Development (DCED); the Federal Highway Administration (FHWA); the Federal Transit Administration (FTA); the Federal Aviation Administration (FAA); the U.S. Environmental Protection Agency (EPA); the U.S. Economic Development Administration (EDA); and an appointee of the Governor of Pennsylvania. SPC's primary responsibilities for transportation planning include formulating a fiscally constrained, comprehensive regional plan that satisfies federal air quality standards; and in consultation with PennDOT, making the final selection of projects from the TIP for funding and implementation. SPC also coordinates public involvement efforts and provides technical support to the transportation planning activities of its member governments.

Public Transportation Operators and Regional Transportation Providers

The public transportation operators in the region provide commuter services, local fixed route bus and light rail services, demand-responsive services, rural services, and medical assistance transportation. CommuteInfo, a program of the Southwestern Pennsylvania Commission, operates in partnership with transportation management associations, transportation providers, businesses and non-profit service organizations throughout Southwestern Pennsylvania. The CommuteInfo program serves as a regional information clearinghouse for commuters and employers for alternative commuting modes including transit, carpooling, vanpooling, and bikepooling. SAFETEA-LU and the Clean Air Act Amendments of 1990 promote travel modes such as public transit that can help to reduce the amount of single-occupant vehicle travel in metropolitan areas.

Local Governments

Counties, cities and many municipalities have planning offices and public works departments that identify and respond to the transportation needs of their residents. Many locally-owned roadways are eligible for TIP funding. Traffic safety, congestion relief and maintenance issues are often local concerns. Zoning and related land use regulations, which by state law are determined at the municipal level, affect decisions about construction.

Councils of Government (COGs) and Community and Economic Development Organizations

Numerous COGs and other community-based organizations throughout the region offer their local government and business members technical support and public advocacy. Transportation improvements are often related to community and economic development, and these organizations assist their members in communicating needs and deficiencies.

Transportation Management Associations (TMAs)

Voluntary associations of employers and residents within a particular transportation corridor have been formed to address common mobility problems. The Airport Corridor Transportation Association (ACTA) serves companies and residents in the Airport

Corridor (broadly defined as the area from Downtown Pittsburgh to the Pittsburgh International Airport). The Oakland Transportation Management Association (OTMA) serves the Oakland area. The Pittsburgh Downtown Partnership Transportation Management Association (PDP TMA) serves the downtown Pittsburgh area. TMAs play a major role in SPC's transportation planning activities.

Freight Transportation Providers

The companies in the region that move, store and transfer freight have a special interest in the efficiency and intermodal connectivity of Southwestern Pennsylvania's transportation system and play an active role in the MPO transportation planning process.

Public Participation Panels (PPPs)

SPC has established a PPP in each member county to conduct public meetings and gather input into the planning and programming processes. SPC's PPPs hold special public meetings at key decision points in the planning process to encourage widespread and diverse public involvement.

Environmental, Neighborhood and Other Citizen Groups

Private citizens and community organizations provide essential input into transportation planning. Federal law requires ample opportunity for input and public review of the planning process by interested parties. Other interested parties also participate through a combination of testimony at hearings, participation on advisory committees, and written comments that are solicited periodically during the planning process.

Individuals and community groups are notified of upcoming planning events through the local media and SPC's website, newsletters and mailing lists. Public review copies of transportation planning documents are available for review at SPC, at City of Pittsburgh and County Planning Departments, and on the SPC website (www.spcregion.org). Documents are also available for public review at many community libraries throughout the region.

Congressional Representatives, State Legislators and Elected Officials

Federal and state elected officials establish the revenue streams that support public spending for transportation purposes. Annual appropriations to finance transportation projects at both the state and federal levels are the work of legislative committees. Pennsylvania's Twelve Year Transportation Program, required by Commonwealth law since 1970, must first be approved by the state legislature. Committees of the Pennsylvania General Assembly and Congress, as well as leaders of municipalities, whose jurisdictions are affected by transportation plans, play an important role in their formulation. State and local officials approve their own funds as the required local match to each federal transportation project.

Environmental, Neighborhood, Tribal and Other Citizen Groups

Private citizens, community organizations and tribal groups provide essential input into transportation planning. Federal law requires ample opportunity for input and public

review of the planning process by interested residents. Other interested parties also participate through a combination of testimony at hearings, participation on advisory committees, and written comments that are solicited periodically during the planning process.

Individuals and community groups are notified of upcoming planning events through the local media and SPC's website, newsletters and mailing lists. Public review copies of transportation planning documents are available for review at SPC, at City of Pittsburgh and County Planning Departments, and on the SPC website (www.spcregion.org). Documents are also available for public review at many community libraries throughout the region.

Transportation User Groups

SAFETEA-LU recommends that transportation user groups, including trucking and intermodal freight interests, pedestrian and bicycle groups and others be consulted in the development of the regional transportation planning documents. Such outreach is conducted through the SPC Public Participation Process as well as through meetings of the SPC Freight Forum and Pedestrian-Bicycle Advisory Committee.

SAFETEA-LU Fundamentals

In general, federal transportation legislation designates money for a variety of spending categories, including bridges, highways, safety and operations, public transit, demonstration projects, and discretionary programs. SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users) was adopted in August 2005, as a six-year, \$287 billion funding package that addresses all modes of surface transportation. The legislation, with certain significant changes, is very much similar to predecessor transportation legislation, TEA-21, and before that, ISTEA.

SAFETEA-LU recognizes that each part of the country has its own distinctive mix of transportation challenges and opportunities. Accordingly, it continues the mandate for a planning process that can be adapted to each region's priorities. Metropolitan Planning Organizations (MPOs) were established in every urbanized area of the United States and play a major role in the planning process. State departments of transportation integrate the regional plans into a comprehensive statewide plan for ultimate approval by the U.S. Department of Transportation (U.S. DOT).

SAFETEA-LU includes a separate funding program for highway safety initiatives. States are now expected to develop a strategic highway safety plan that identifies and analyzes safety problems and opportunities. SAFETEA-LU uses these new Highway Safety Improvement Program (HSIP) funds to complete eligible projects from the state safety plan. Highway safety projects identified in the TIP as using HSIP funds will be drawn directly from the state plan.

SAFETEA-LU identifies the following planning factors within the scope of the transportation planning process:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency
- Increase the safety of the transportation system for motorized and non-motorized users
- Increase the security of the transportation system for motorized and non-motorized users
- Increase accessibility and mobility of people and freight
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- Promote efficient system management and operation
- Emphasize the preservation of the existing transportation system

All plans and programs (such as the TIP) that are produced by MPOs should reflect these factors. In air quality maintenance areas such as Southwestern Pennsylvania, regulations also require planning that favors reductions in vehicle travel and emissions, and other ways to improve air quality.

Federal Clean Air Act Requirements

The federal Clean Air Act establishes national ambient air quality standards (NAAQS) and assigns certain responsibilities to state and local governments to meet these standards. MPOs are responsible for testing their long range transportation plans and transportation improvement programs for conformity with these requirements. The 2009-2012 TIP has been demonstrated to be in conformity with these Clean Air Act requirements.

The Clean Air Act Amendments of 1977 (CAAA 77) required that each state prepare plans for improving the air quality within its boundaries, and that transportation control measures be effected locally to reduce pollution from vehicles. The Commonwealth of Pennsylvania established its State Implementation Plan (SIP) in 1978, and revised it in 1982 (1982 SIP Revision).

The Clean Air Act Amendments of 1990 (CAAA 90) introduced more stringent requirements for attaining national ambient air quality standards. Final rules were published in 1993 and revised in 1997. CAAA 90-based regulations identify the framework for demonstrating and assuring conformity of transportation plans, programs and projects with the federal air quality requirements.

Additional revisions to air quality standards for ground-level ozone and particulate matter were adopted in 1997 but delayed by legal challenges until April 2004. The impact of these changes on the Southwestern Pennsylvania region is described in the Air Quality Conformity Determination for the 2009-2012 TIP. A summary of SPC's conformity process and findings are presented in a later section of this report, and are explained in detail in the Air Quality Conformity Determination.

Transportation Planning and Programming Cycles

Regional Long Range Transportation Plan

SAFETEA-LU requires a comprehensive regional transportation plan that anticipates transportation needs for at least 20 years. The current SPC long range transportation plan, the *2035 Transportation and Development Plan for Southwestern Pennsylvania* (2035 Plan), was adopted in June 28, 2007.

All projects approved for subsequent funding must be derived from or be consistent with the long range plan. Every major project is part of the strategy for fulfilling the plan's objectives. Long range transportation plans must be revisited every four years in air quality maintenance areas and every five years in other areas.

Transportation Improvement Program

The transportation improvement program, or TIP, includes a prioritized list of projects recommended for implementation over a four-year period. The TIP is updated every two years. Projects are derived from the 2035 Plan and are consistent with the region's overall vision. The program must also be fiscally constrained, meaning that the cost of the proposed improvement program may not exceed the funds available for project completion. SPC, in consultation with PennDOT, the transit operators, and other project sponsors, must prioritize and select projects for the program.

The major funding source for the projects in the TIP is SAFETEA-LU, which is administered through the U.S. Department of Transportation, the Federal Highway Administration and the Federal Transit Administration. In addition, funds are made available by the Commonwealth of Pennsylvania to match federal funding in varying ratios, and to provide 100 percent funding for certain types of projects. Local counties, municipalities, private developers and toll authorities may also participate in project funding, either as a source of matching funds for federal dollars, or as sole funding entity for specific projects. New funding sources and innovative funding techniques are constantly being sought.

Every year, a large number of transportation projects are proposed to SPC for possible inclusion in the TIP. The region's transportation partners screen them to assure their consistency with the 2035 Plan, determine whether they satisfy the relevant statutes and, where they do, identify them in a prioritized and fiscally constrained program. Decisionmaking is always difficult given the large number of candidate projects and the limited fiscal capacity.

Copies of the *Draft 2009-2012 TIP Summary Report* for the region were available during the public comment period from May 27 through June 25, 2008 on SPC's website (www.spcregion.org), at SPC's offices, and the planning offices of each SPC member government: Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington and Westmoreland Counties, and the City of Pittsburgh. Copies were also available in many of the region's public libraries. A list of libraries participating in SPC's public document review network is available in SPC's Public Participation Plan, and is included as a reference in the Public Participation Report, which was developed at the end of the May/June 2008 public comment period. The Public Participation Report, a companion document to the 2009-2012 TIP, documents the public outreach process used in development of the TIP.

Federal law requires that all TIPs must be fiscally constrained to the amount of revenue that can reasonably be expected. As a result, developing the TIP often involves making choices among competing projects. During biennial updates, first priority is given to advancing previously programmed projects.

In air quality maintenance areas such as Southwestern Pennsylvania, regional TIPs must be shown to conform to provisions of the federal Clean Air Act. The TIP and accompanying air quality conformity assessment must also be available for public review and comment before final adoption.

Once it has been approved at the regional level, Southwestern Pennsylvania's TIP is submitted to PennDOT for approval by the Governor, as well as to the U.S. DOT. SAFETEA-LU also requires that TIP projects be incorporated into a state TIP (or STIP), which compiles projects from throughout the Commonwealth.

A project must appear on the TIP before it can receive federal financial support. The TIP represents the schedule and an estimated cost for the project at the time of TIP development and is the first step in seeking authorized funding. Cost estimates change as engineering design decisions are made for various project elements. Unexpected difficulties identified during engineering work and market conditions at the time of construction also influence estimated schedules and costs. Thus, the TIP is a dynamic document subject to change.

As conditions change, SPC makes adjustments in the TIP periodically through its technical committees. The Transit Operators Committee and Transportation Technical Committee meet monthly to review and consider changes in project status, schedule, scope, funding source, or costs. Any necessary changes are made using the TIP Revision Procedures that are identified in Appendix 7 of this report. Where required, TIP changes are reviewed and approved by SPC, PennDOT, and U.S. DOT.

Commonwealth's Twelve Year Transportation Program

By state and federal law, PennDOT must plan and program its own transportation spending. The Commonwealth's Twelve Year Transportation Program, which is revised every other year, represents Pennsylvania's priority list of transportation projects. The

state's program identifies projects that will be funded solely by the state as well as those that will use a mix of state and federal money. A greater emphasis is typically placed on the program's first four-year period, which is identical to, and a compilation of, the various metropolitan and rural TIPs across Pennsylvania.

Projects identified in the regional TIP must be included in the Commonwealth's Twelve Year Program before to be eligible for state funds. Likewise, state projects that require federal funds must be included on the SPC TIP to be eligible for federal funds. Projects must be included on both programs before the project can be implemented using federal funds. Compatibility between the TIP and Twelve Year Program is ensured through the coordinated statewide programming process that has been used since 1999 for the development of both programs. However, if an emergency arises, both the TIP and the Twelve Year Program can be amended during the year. TIP amendments are adopted at the MPO level and the Twelve Year Program is amended through action by the State Transportation Commission (STC). Small changes can be made administratively by a technical committee or by the project sponsor for specific minor actions regarding project status, scope, funding source or cost that are identified in the TIP Revision Procedures.

State Transportation Improvement Program

A State Transportation Improvement Program, or STIP, is required by SAFETEA-LU. It is a four-year spending program prepared by PennDOT in which the state's metropolitan TIPs are combined with projects from Pennsylvania's rural counties. Upon endorsement by the Governor, PennDOT then submits the STIP to the U.S. DOT for approval. The STIP serves many of the same planning functions provided by the Commonwealth's Twelve Year Program, which has been in effect for many years.

Local Transportation Planning

Most municipal projects are related to an extensive network of locally-owned roads and bridges maintained through their own engineering or public works departments, and funded solely with county and other municipal tax revenues (or state gas tax money passed directly to the local government). These local projects do not appear on the transportation programs of either the Commonwealth or the region.

County, City of Pittsburgh and other municipal governments can also participate in the TIP process, can suggest improvements on PennDOT roads, and can request TIP funds for eligible local projects through SPC's public involvement process and through SPC's Transportation Technical Committee (TTC) and Transit Operators Committee (TOC).

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