

BINATIONAL BORDER TRANSPORTATION PLANNING AND PROGRAMMING STUDY

Task 4

The U.S. Transportation Planning and Programming Processes

La Empresa
Barton-Aschman

January 9, 1998

FINAL REPORT

**BINATIONAL BORDER TRANSPORTATION PLANNING AND PROGRAMMING STUDY
TASK 4 REPORT: THE U.S. TRANSPORTATION PLANNING
AND PROGRAMMING PROCESSES**

Task 4 is generally intended to determine what types of individual and/or cooperative planning and programming processes are in place within or affecting the border region. Planning and programming activities occur on both sides of the border. The focus of this task report is on developing an understanding of the elements that will be needed to establish and conduct a binational transportation planning process that can comply with the intent of relevant U.S. and Mexican laws and administrative regulations pertaining to transportation planning. This report describes the planning process used in the United States.

Publish Date: January 9, 1998

Source: Barton-Aschman Associates, Inc.

Contact: Barton-Aschman Associates, Inc.

100 Park Center Plaza, Suite 450

San Jose, California 95113

Phone: (408) 280-6600

Fax: (408) 280-7533

Key Words: transportation planning, programming, Barton-Aschman, planning process, administrative regulations, Intermodal Surface Transportation Efficiency Act, ISTEA, urban planning, statewide planning, United States, Mexico, border, binational planning.

Preface

U.S./Mexico Binational Border Transportation Planning and Programming Study implements a significant binational policy making document entitled "Memorandum of Understanding on the Planning Process for Land Transport on Each Side of the Border" signed by the federal governments of Mexico and the United States at the first "NAFTA Transportation Summit" held in Washington, D.C., April 29, 1994.

The purpose of this study is to provide policymakers with information needed to establish a continuous, joint, binational, transportation planning and programming process. A goal of this study is to improve the efficiency of the existing binational policy making planning procedures and funding criteria affecting our Border Land Transportation Systems (BLTS). The BLTS should be seen as a binational transportation system made of international bridges and border crossings and land connections to major urban and/or economic centers, principal seaports, airports and multimodal/transfer stations, and ultimately, to national transportation facilities.

Disclaimer

The purposes of the Binational Planning and Programming Study and all of its reports were: to investigate current state and national transportation planning processes in both the United States and Mexico, to review available data on border transportation infrastructure and goods movement, and to recommend an ongoing, binational planning and programming process. The information contained in these reports was not developed to serve as the basis for making funding allocation or distribution decisions at either the federal or state level in the United States.

BINATIONAL BORDER TRANSPORTATION PLANNING AND PROGRAMMING STUDY

Task 4

The U.S. Transportation Planning and Programming Processes

*La Empresa
Barton-Aschman*

January 9, 1998

List Of Contents

4.1 Introduction	1	
4.2 Report Organization	2	
4.3 United States Transportation Planning- Federal Perspective	3	
4.3.1 Overview	3	
4.3.2 Federal, State and Local Government Roles Within the Federal-Aid Highway Program	4	
4.3.3 Current Program Structure and Funding	5	
Sources of Funding		6
Funding Distribution		6
Budgetary Control		6
4.3.4 Funding for Statewide Planning	7	
Eligibility		7
ISTEA Provisions		7
4.3.5 Funding For Metropolitan Planning	8	
4.3.7 Statewide Transportation Planning	10	
Statewide Transportation Plans		11
Statewide Transportation Improvement Program (STIP)		12
Statewide Transportation Planning Factors		12
4.3.8 Metropolitan Transportation Planning	13	
Metropolitan Transportation Planning Factors		14
Transportation Plans and Transportation Improvement Programs		15
4.4 Approval of U.S.-Mexico Bridges and Border Crossings	17	
4.4.1 U.S.-Mexico Binational Bridges and Border Crossings Group	17	
Participants		17
Purpose and Benefits		17
4.4.2 U.S. Interagency Working Group on Bridges and Border Crossings (IWG)	19	
Participants		19
Purpose		20
Major Initiatives and Benefits		20
4.5 California	21	
4.5.1 State, County and City Transportation Planning Responsibilities	21	
4.5.2 State Transportation Planning	22	
California Department of Transportation (Caltrans)		22
Caltrans District 11		23
The California Transportation Commission (CTC)		24
4.5.3 Regional Transportation Planning	24	

The San Diego Association of Governments (SANDAG)	25
Southern California Association of Governments (SCAG)	28
Imperial Valley Association of Governments (IVAG)	28
4.5.4 Local Transportation Planning	29
4.5.5 Private-Sector Involvement in Providing Transportation Infrastructure	29
4.5.6 California's Transportation Planning and Programming Process	31
Congestion Management Programs	31
Regional Transportation Plans	32
California Transportation Plan	33
Fund Estimate	33
Regional Transportation Improvement Programs	33
Proposed Statewide Transportation Improvement Program	34
Traffic System Management Plan and Highway Systems Operation and Protection Plan	34
Statewide Transportation Improvement Program	35
Senate Bill 45 Summary	36
Funding	36
Programming	37
Planning	38
Project Delivery	38
Implementation Timeline	39
Conclusion	39
4.6 Arizona	40
4.6.1 The Arizona State Transportation Planning Process	40
4.6.2 State Transportation Plan	40
Background	40
Process	40
4.6.3 Statewide Transportation Improvement Program (STIP)	42
Background	42
Process	43
4.6.4 Priority Programming	43
Background	43
Process	43
4.6.5 Corridor Profile Studies	44
Background	44
Process	44
Major Input to the State Planning Process	46
4.6.6 Small Area Studies (SATS)	46
Background	46

Process		46
Major Input to the State Planning Process		48
4.6.7 Transit Development Plan (TDP)	49	
Background		49
Process		49
Major Input to the State Planning Process		49
4.6.8 State Transit Plan	49	
Background		49
Process		50
Major Input to the State Planning Process		50
4.6.9 Rail Plan	50	
Background		50
Process		50
Major Input to the State Planning Process		50
4.6.10 Bicycle Plan	51	
Background		51
Process		51
Major Input to the State Planning Process		51
4.6.11 Management Systems	51	
4.6.12 Highway Funding	52	
4.7 New Mexico	53	
4.7.1 Planning	53	
Metropolitan Areas		53
Regional Planning Organizations		53
National Highway System		54
Statewide Plan		54
Coordination With Chihuahua		54
4.7.2 Programming	54	
4.7.3 RPOs	55	
Statewide STIP		55
4.7.4 Relevance to Binational Planning and Programming	55	
4.8 Texas	57	
4.8.1 The Texas Transportation Plan	57	
4.8.2 Texas Unified Transportation Program (UTP)	59	
Category 13C: NAFTA Discretionary Program		65
4.8.3 The Statewide Transportation Improvement Program (STIP)	65	
4.8.4 STIP Financial Plan	65	
4.8.5 Public Involvement	66	
4.8.6 Project Selection Procedures for Current Year Funding	66	
4.8.7 Metropolitan Planning Organizations in Texas	66	
Public Involvement in Metropolitan Areas		66

Transportation Improvement Programs for Metropolitan Areas		67
4.8.8 El Paso	67	
Definition of Area		67
Organization		67
Transportation Policy Board		68
Air Quality Committee		68
Metropolitan Transportation Plan Committee		68
TIP Project Selection Committee		68
Unified Planning Work Program Committee		69
Private-Sector Involvement		69
Planning Issues and Emphasis Areas		69
El Paso MPO Transportation Improvement Program		69
Project Selection Process		70
4.8.9 Laredo MPO	70	
Definition of Area		71
Organization		71
Planning Issues and Emphasis Areas		71
Laredo MPO Transportation Improvement Program		71
4.8.10 Hidalgo County MPO	72	
Definition of Area		72
Organization		72
Planning Issues and Emphasis		72
Hidalgo County MPO Transportation Improvement Program		73
4.8.11 Harlingen-San Benito MPO	73	
Definition of Area		73
Organization		74
Private-Sector Involvement		74
Planning Issues and Emphasis		75
Harlingen-San Benito MPO Transportation Improvement Program		75
4.8.12 Brownsville MPO	76	
Definition of Area		76
Organization		76
Planning Issues and Emphasis		77
Brownsville Transportation Improvement Program		77
4.9 Process Similarities and Differences	78	
4.9.1 Process Flexibility	78	
Output Products		84
Factors to Consider		84
4.9.2 Organizational Responsibilities	84	
State Responsibilities		84
Programming Responsibilities		85
Funding and Implementation of State Projects		85

Metropolitan Responsibilities	86
Metropolitan Programming Responsibilities	86
Funding and Implementation Responsibilities	86
Local Transportation Planning Responsibilities	86
Local Programming Responsibilities	87
Local Funding and Implementation Responsibilities	87
4.9.3 Binational Planning Considerations	87
Similarities	87
Differences	88
4.9.4 Feasibility of a Binational Planning and Programming Process	88
7	
Appendices	
Appendix A Binational Entities	
Appendix B Presidential Permit Process	
Appendix C Executive Order #11423	
Appendix D Executive Order #12847	

List Of Tables

Table 4.1 State Planning and Research Funds for States Bordering Mexico (in Millions of Dollars)	7
Table 4.2 Federal Funds for Metropolitan Transportation Planning 1994 Through 1996 (in Millions of Dollars)	9
Table 4.3 Summary of Categories in the 1997 Unified Transportation Program	61
Table 4.4 Border Area Transportation Planning And Programming Aspects By State	79

List Of Figures

Figure 4.1 California Regional Transportation Planning Agencies	21
Figure 4.2 California's Transportation Planning and Programming Process	30
Figure 4.3 Arizona Plan Development Process	41
Figure 4.4 Arizona High Priority Corridors Of Statewide Significance	47

4.1 Introduction

The Binational Border Transportation Planning and Programming Study is composed of five separate phases: Phase I, Inventory; Phase II, Existing Conditions; Phase III, Future Conditions; Phase IV, Recommendations; and Phase V, Live Data Bank Development for Border Transportation. Task 4, "The Transportation Planning and Programming Processes," is part of Phase I, and a source of information for the completion of Tasks 15 and 16 in Phase IV.

Task 4 is generally intended to determine what types of individual and/or cooperative planning and programming processes are in place within or affecting the border region. Planning and programming activities occur on both sides of the border. In the United States the federal government has stipulated, *for areas or projects receiving federal funds*, certain planning and programming processes and procedures. However, nearly all planning is completed at the state or metropolitan area levels. For projects not using federal funds, states, counties, and municipalities may use their own processes. These tend to be compatible with federally required processes, but vary significantly. Details in planning and programming outputs, methodology and data used vary among the states and among the local agencies within each state. State and local governments make virtually all plan and program decisions; the federal government plays a supporting and coordinating role.

Means to better coordinate features of the transportation planning and programming processes of the two nations will need to be found if the United States and Mexico are to successfully establish a cooperative, comprehensive and continuing transportation planning process along the border. The first step in overcoming these differences is to understand the existing planning processes currently being used within the border region. *The focus of this task report is on developing an understanding of the elements of existing transportation planning and programming processes that will be involved in coordinating binational transportation planning and programming in compliance with the intent of relevant U.S. and Mexican laws and administrative regulations pertaining to transportation planning.*

Given our need to understand how planning is currently accomplished, the primary (Phase I) product from Task 4 is the development of a compendium of transportation planning and programming processes currently in place within the various jurisdictions in the border area. The planning process descriptions for the U.S. border region are taken from interviews with key planning personnel from each of the U.S. border states, Unified Planning Work Programs (UPWPs) published by the designated Metropolitan Planning Organizations (MPOs) serving the urban regions on the U.S. side of the border, and other material provided by U.S. states and the U.S. DOT. Due to the significant variance in the state and MPO planning processes, the discussions that follow are similar but not parallel. Additionally, the different agencies provided input on those areas of the planning and programming process that they considered of importance, and these emphases also vary from agency to agency. The U.S. federal perspective on transportation planning was based on several documents provided for this purpose by the Federal Highway Administration.

This report summarizes the relevant aspects of planning and programming in the U.S. Section 4.2 outlines the report organization. Phase IV will provide an approach to bringing together the U.S. and Mexican processes so that they can function together in a coordinated fashion.

4.2 Report Organization

This report begins with a discussion of the federal perspective on transportation and related planning in the United States. This discussion includes coverage of many important topics relating to how transportation improvement projects are funded through the Federal-Aid Highway Program. Border oversight responsibilities of the U.S. federal government are also described.

The process of approving international bridges and border crossings is then discussed. This chapter includes a discussion of the two major participating groups: the U.S.-Mexico Binational Bridges and Border Crossings Group, and the U.S. Interagency Working Group on Bridges and Border Crossings, their purposes and benefits.

Subsequent chapters describe the specific implementation of the planning and programming process within each U.S. state located along the U.S./Mexico border.

The report concludes with a discussion of similarities and differences in the transportation planning and programming processes used by the states and the metropolitan transportation agencies in the border region.

This report also provides, as Appendix A, brief descriptions about several entities that have some involvement in transportation planning along the border at the present time. These include:

- Joint Working Committee,
- Border Transportation State Technical Advisory Committees,
- Border Technology Exchange Program,
- NAFTA Task Force,
- Western Transportation Trade Network,
- Border Station Task Force,
- Southwest Border Transportation Alliance,
- Land Transportation Standards Subcommittee, and
- Border Trade Alliance.

4.3 United States Transportation Planning- Federal Perspective

Federal funds comprise a major portion of the financial resources used for transportation of goods and resources in the area adjacent to the U.S.-Mexico border. Most of the publicly funded transportation infrastructure is highway related. Likewise, most goods crossing the border also travel by road. Hence, the highways are the prevalent federally funded mode for goods movement. The other principal modes for goods movement within the border area are rail, pipeline, and air. Neither rail nor pipeline is typically funded by the federal government although certain terminal and railroad relocation improvements are eligible for federal funds. Airports can and do have a significant amount of federal funding.

Although not a priority of this study, movement of people across the border also involves public transportation. Federal transit funds are available for public transportation infrastructure, equipment, and operating assistance. Some funds are transferable between transit and highway accounts, although the percentage is usually small.

This study includes surface transportation. Since the highways make up the most important mode of surface transportation in the border area, this report focuses on highways. However, it should be realized that the transportation planning and programming process includes all modes which use federal funds.

A major federal influence on transportation planning and programming is the Federal-Aid Highway Program (FAHP).¹ The FAHP provides funding and sets criteria for both statewide- and metropolitan-level transportation planning. Projects utilizing federal funds must be included in these plans and funding programs. As of the date this report was drafted, the Intermodal Surface Transportation Efficiency Act (ISTEA) is the latest defining FAHP legislation, although its successor act is being discussed in Congress.

This chapter outlines the FAHP both generally, and in terms of federal, state, and local government roles. It also outlines the current program structure and funding for statewide and metropolitan transportation planning. This chapter concludes with a discussion of the FAHP framework and criteria for statewide- and metropolitan-level planning and programming.

4.3.1 Overview

In the United States, the Federal-Aid Highway Program has historically provided the most resources for federal funding for surface transportation. The authorizing legislation, commonly referred to as "Highway Acts," represents the first step in the federal funding process. Since 1978, the highway acts have been passed by Congress as part of comprehensive surface transportation acts.

Highway acts are the primary instruments used by the U.S. Congress to shape and direct the Federal-Aid Highway Program. This is done by eliminating or adding programs, modifying characteristics of programs, and changing program requirements. The most current surface transportation funding program, the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) built upon the tradition of previous federal financial assistance programs, which provided for the distribution of various taxes paid by highway users to the states for the improvement of

¹ *The Federal-Aid Highway Program-An Overview*, published by the U.S. Department of Transportation, Federal Highway Administration, January, 1995. Publication No. FHWA-PL-95-021.

surface transportation facilities.² ISTEA also significantly changed numerous aspects of the previous federal funding programs. For example, a partial listing of changes stemming from ISTEA includes:

- The federal-aid primary, secondary, and urban programs were repealed along with the federal-aid systems those programs supported;
- Several new programs were established, including the National Highway System and the Surface Transportation Program;
- The requirements were changed by requiring a statewide planning process that must include development of a long-range transportation plan and statewide transportation improvement program; and
- Additional emphasis was placed on intermodalism.

The FAHP continues to be a federally assisted, state-administered program, requiring a state matching share, and focusing on a limited mileage of eligible major roads. This strong federal/state partnership has evolved over time and federal and state officials have established clear roles in the FAHP.

4.3.2 Federal, State and Local Government Roles Within the Federal-Aid Highway Program

The federal government, through the Department of Transportation (USDOT), makes surface transportation funding available to the states annually. These funds are administered by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). They are passed on to the states by a combination of formulas and discretionary grants. Most highway funds (about ninety percent) are by formula. Most transit capital funds are discretionary due to the unique characteristics and needs of urbanized areas. Transit operating funds are distributed by formula. The formulas are established with each transportation funding act by Congress.

The Federal Highway Administration (FHWA) makes federal-aid highway funding available to the state transportation departments each year. This distribution is generally accomplished by formulae based on factors that account for relative usage and need. The FHWA also has the legislated responsibility for promulgating standards for federal-aid projects, ensuring compliance with federal laws, and providing technical assistance. The FHWA generally distributes funds by reimbursing the states for approved project expenditures. These activities are carried out through the FHWA's Division offices which are located in each state.

Traditionally, the states have been responsible for selecting, planning, designing, and contracting for the construction of federal-aid highway projects. This responsibility includes working with local governments to determine how the funds will be distributed among projects within state boundaries. The states have also been responsible for maintaining and operating the federal-aid highway facilities in accordance with federal standards and guidelines as well as state requirements and guidelines.

² For description of ISTEA, please see the following documents. Upon enactment of the successor act, the USDOT normally issues similar descriptive material. *Intermodal Surface Transportation Efficiency Act of 1991*, FHWA-PL-92-008, U.S. Department of Transportation, Washington, DC, 1992; *ISTEA Fact Sheets*, Executive Director, Federal Highway Administration, Washington, DC, February 27, 1992.

States work cooperatively with MPOs and transit agencies, where they exist, to prioritize and assign funds for planning and projects. The MPOs, which are separate agencies made up of cities, counties, transit authorities, state DOTs, and other transportation agencies in urbanized areas with over 50,000 population, must develop annual and three year Transportation Improvement Programs (TIPs) including all projects using federal highway and transit in the urbanized areas. Outside areas with MPOs, the states program projects using federal highway and transit funds³.

In designated transportation management areas (TMAs), the MPOs also select projects annually for implementation in conjunction with the states and transit agencies. Projects on the National Highway System and certain other Interstate and bridge projects are selected by the states in consultation with the MPOs. In non-TMA areas with MPOs, the state selects highway projects for implementation in cooperation with the MPOs. Elsewhere the states make the selections. In the border area, TMAs include only the San Diego, El Paso, and McAllen areas.

4.3.3 Current Program Structure and Funding

ISTEA authorized \$125 billion for the FAHP for fiscal years 1992 through 1997. It also significantly restructured the FAHP, as outlined previously, and broadened the FHWA's program parameters to ensure state and local officials have the flexibility they need to choose the mix of projects that best meets their transportation needs. This is one of the most important features of ISTEA.

The restructuring of the FAHP also focused federal attention on the National Highway System (NHS). It established a separate program of aid under the Surface Transportation Program (STP) for roads that have primarily state and local importance. Other programs within the FAHP include:

- Highway Bridge Replacement and Rehabilitation,
- Congestion Mitigation and Air Quality Improvement,
- Emergency Relief,
- Federal Lands,
- Research and Technology, and
- Safety Programs.

Several of the programs within the FAHP allow for flexible funding including the NHS and STP.

The NHS includes the most important roadways in the United States. Of particular importance, the system includes the 45,744 miles of roadway that are the Dwight D. Eisenhower System of Interstate and Defense Highways (commonly called the Interstate System). Funds specifically directed toward improvement of the NHS come through the NHS program (\$3.6 billion per year) and the Interstate Maintenance Program (\$2.9 billion per year).

The STP includes federal aid funding for lower volume highways and other transportation needs (approximately \$4 billion per year). Collectively, these roads comprise about 25 percent of the total road mileage in the United States. The ISTEA requires that a portion of the STP funds be suballocated to urbanized areas greater than 200,000 in population. These funds may also, at the discretion of state and local officials, be used to support transit projects. Similarly, limited transit

³ *ISTEA Fact Sheets*, Executive Director, Federal Highway Administration, Washington, DC, February 27, 1992.

funds may be transferred to highway projects; this enhances programming flexibility. ISTEA also sets aside 10 percent of the STP funds for transportation enhancement activities, such as bicycle and pedestrian facilities, scenic byways, and historic preservation, and 10 percent of the STP funds for safety.

Sources of Funding

The FHAP is a user-supported program. A specific set of user taxes are paid into the Highway Trust Fund. The projected revenues of this fund provide the basis for the level of funds authorized for distribution under the FAHP.

The Highway Trust Fund was established by the Federal-Aid Highway Act of 1956 and the 1956 Highway Revenue Act. It is a mechanism for accumulating specific user taxes, such as gasoline taxes directly related to surface transportation. The trust fund uses those receipts to finance the FAHP. A very important characteristic of the Highway Trust Fund is that it was set up as a pay-as-you-go fund. There must always be enough money in the Trust Fund to make the necessary reimbursements.

Funding Distribution

On average, statutory formulae are used to distribute 91 percent of the highway funds authorized under ISTEA to the U.S. states. The U.S. Congress directs the distribution of five percent of the funds through specific provisions in authorization or appropriation acts. The remaining four percent is distributed through FHWA discretionary allocations.

The FAHP operates on a reimbursement basis. The annual authorizations that the FHWA distributes to the states are in essence a "line of credit" that the state may draw against. The states, after receiving approval from FHWA to use federal funds for a project, proceed with these federal projects using their own money.

After completing the project, or phases of the project, the states then receive reimbursement for the federal share of the cost of the work. The federal share is 80 percent for most projects. The federal share can be increased in states with high percentages of federally owned public lands. The federal share for transit projects is also 80 percent. Limited special project categories may have higher federal shares (e.g., safety improvements).

Budgetary Control

ISTEA authorizes specific amounts of funding by program category for each of the fiscal years 1992-1997. Most of these fund authorizations include a specific period of availability within which a state must obligate the funds that were distributed or lose the opportunity to use them. The period of availability is typically four years. The word "obligation" refers to the federal commitment to reimburse the state for the federal share of eligible expenses on a project.

The U.S. Congress, enacts an annual limitation on the level of obligations states collectively may incur within a given fiscal year. The obligation limitation is a way for Congress to control spending for the FAHP in the context of government-wide efforts to manage the federal budget.

The obligation limitation does not remove any of the "line of credit" that states have received, but it does restrict a state's annual use of available credit. This system basically defers spending until future fiscal years. State and local officials, through the planning process, determine how the obligation limitation is allocated over the various categories of federal aid.

4.3.4 Funding for Statewide Planning

The State Planning and Research Program (SPR) provides funding for both transportation planning and research activities. Funds for SPR projects are derived from a two percent share of funds apportioned for the National Highway System (NHS), the Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement (CMAQ), Interstate Construction (IC), Interstate Maintenance (IM), Interstate Substitution (IS), Highway Bridge Replacement and Rehabilitation (HBRRP) projects. In addition, 1.5 percent of the funds apportioned to a State for Minimum Allocation (MA) projects, as well as regular NHS and STP funds, may be used for SPR activities.

The federal participation rate in SPR projects is 80 percent, unless the Secretary of Transportation determines that it is in the best interest of the Federal-Aid Highway Program to decrease or eliminate the non-federal share.

Eligibility

SPR funds may be used for:

- Engineering and economic surveys and investigations,
- Planning future highway programs and local public transportation systems, including statewide planning,
- Development and implementation of management systems,
- Studies of the economy, safety, and convenience of highway usage and the desirable regulation and equitable taxation thereof,
- Research, development, and technology transfer activities necessary in connection with the planning, design, construction, and maintenance of highway, public transportation, and intermodal transportation systems, and
- Study, research, and training on engineering standards and construction materials for the above systems, including evaluation and accreditation of inspection and testing, and the regulation and taxation of their use.

ISTEA Provisions

Section 6001 of ISTEA amended 23 USC 307(c) and continued the HPR Program, but renamed it the State Planning and Research Program (SPR). Beginning in 1992, SPR funds have been derived from a 2 percent share of the sums apportioned to the states for the IC, IS, IM, HBRRP, NHS, STP, and CMAQ programs. In addition, 1.5 percent of the funds apportioned to a state for MA projects can still be used for SPR activities.

At least 25 percent of the SPR funds apportioned annually must be used for the research, development and technology transfer activities described above, unless the state certifies that the total expenditures for transportation planning will exceed 75 percent of the amount of such funds and FHWA concurs.

The SPR funding for the U.S. states that border Mexico are shown in Table 4.1.

**Table 4.1
State Planning and Research Funds for States Bordering Mexico (in Millions of Dollars)**

Fiscal	Texas	Arizona	New Mexico	California	Total
---------------	--------------	----------------	-------------------	-------------------	--------------

Year	FWHA	FTA	FWHA	FTA	FWHA	FTA	FWHA	FTA	FWHA	FTA
1994	14.56	0.57	3.08	-----	2.72	0.01	20.3	1.28	40.66	1.86
1995	14.63	0.56	2.98	0.13	2.82	0.01	19.94	1.25	40.37	1.95
1996	<u>12.7</u>	<u>0.56</u>	<u>2.37</u>	<u>0.13</u>	<u>2.23</u>	<u>0.01</u>	<u>16.43</u>	<u>1.25</u>	<u>33.73</u>	<u>1.95</u>
Totals	41.89	1.69	8.43	0.26	7.77	0.03	56.67	3.78	114.76	5.76

Source: Federal Highway Administration

4.3.5 Funding For Metropolitan Planning⁴

Federal highway funds are provided to support transportation planning in urbanized areas that have populations of over 50,000 people. These funds come from a one percent pool set aside from the major federal highway funding categories. These funds are called PL funds, and nationally they amount to about \$135 to \$140 million annually. In addition, metropolitan planning may be supported from funding under the major capital programs at the discretion of the state.

The PL funds are apportioned annually to each state in the ratio which its urbanized area population bears to the total urbanized area population in the country (except that no state receives less than one-half percent of the total PL funds.) PL funding in the four border states of Texas, Arizona, New Mexico and California (for the past several years) is shown in Table 4.2.

States must make all PL funds apportioned to them available to MPOs in accordance with a formula developed by the state, in consultation with the MPOs. In developing the formula for distributing PL funds, the states consider population, status of planning, attainment of air quality standards, metropolitan area transportation needs, and other factors necessary to provide for an appropriate distribution of funds to carry out the metropolitan planning requirements of 23 USC 134.

Further funding assistance for metropolitan transportation planning is provided under the federal transit program. These planning funds are less than one percent of the Federal Transit Administration (FTA) funds and generally range from \$39.5 to \$41.5 million annually. They are provided to MPOs through the state via an FTA-approved formula which is developed by the state in cooperation with MPOs. Metropolitan planning obligations in the four border states for the past several years are shown in Table 4.2.

⁴ Memorandum from George Schoener, FHWA, July 8, 1996.

Table 4.2
Federal Funds for Metropolitan Transportation Planning 1994 Through 1996
(in Millions of Dollars)

	Texas	Arizona	New Mexico	California
Fiscal Year 1994				
PL(FHWA)	9.40	2.20	0.69	21.06
Metro(FTA)	2.81	0.66	0.17	7.05
Fiscal Year 1995				
PL(FHWA)	9.38	2.19	0.69	21.00
Metro(FTA)	2.65	0.62	0.16	6.63
Fiscal Year 1996				
PL(FHWA)	9.34	2.18	0.69	20.92
Metro(FTA)	2.65	0.62	0.16	6.63

Source: Federal Highway Administration

4.3.6 Management and Monitoring Systems

ISTEA mandated several management systems intended to increase the transportation agencies' knowledge and ability to better manage their transportation systems. The 1995 National Highway System Designation Act repealed the requirement for management systems, but did continue funding eligibility⁵.

The management systems include:

- Pavement – evaluate pavement conditions and identify pavement deficiencies and needs; system provides information to be used in implementing cost-effective maintenance, rehabilitation and reconstruction of pavements.
- Bridge – uses an inventory to identify bridge conditions and deficiencies; includes identification of cost-effective projects to improve condition, safety and serviceability as well as maintenance programs.
- Safety – utilizes a systematic system of analyzing accident experience and roadway conditions to incorporate safety improvement into roadway planning, design, construction, operation, and maintenance.
- Congestion – utilizes information on transportation system characteristics and travel conditions and mobility to identify needs and strategies for improving mobility of both people and goods and services.
- Intermodal – systematically identifies important links between transportation modes and strategies and improvements for increasing the effectiveness of those linkages
- Public transportation – Develops an inventory of transit facilities, equipment and operations which is analyzed to identify cost-effective ways to implement and operate transit systems

In addition there are two monitoring systems:

- Traffic monitoring system – comprehensive data base of traffic information used for analyses in the above management systems
- Highway performance monitoring system – federally required data base of road and bridge conditions which supports the above management systems

⁵ *Transportation Infrastructure, States' Implementation of Transportation Management Systems*, GAO/RCED-97-32, U.S. General Accounting Office, Washington, DC, January, 1997.

At the time this report was written, management systems were being encouraged for state DOTs and major metropolitan areas. Congestion management systems were still required for metropolitan areas over 200,000 population. The highway performance monitoring systems were still required for all state DOTs under a separate requirement.

The management systems are intended to provide information systematically into the transportation planning and programming process. With appropriate inventories and analyses of the entire system's components, the resulting plans and programs can be properly planned and prioritized for cost-effective implementation.

4.3.7 Statewide Transportation Planning⁶

Although each state follows the general process stipulated by ISTEA, at least for federally funded projects, each state has a different process for making transportation decisions. In some, the legislature periodically approves the specific transportation capital investment program. Others have independent or quasi-independent commissions, boards, or authorities that are responsible for transportation decisions. But in every state, elected officials and key policy makers bear the ultimate responsibility for making sound transportation decisions. ISTEA recognizes the critical role that these officials play, recognizes the importance of good information to assist them in making their decisions, and provides a consistent framework within which the states can make transportation decisions. The planning process mandated by ISTEA is designed to improve the quality and scope of information these officials receive on transportation options and on the impacts of transportation investments on their state's economy, environment and quality of life.

Since most transportation funding is provided by state governments, or in the case of federal funds, through the state governments, it is important that state decision-makers have the ability to look at a state's needs as a whole over the long term and be able to balance urban and rural needs. ISTEA statewide planning provisions seek to facilitate these decisions through requirements for gathering relevant information and presenting the information in an organized manner that shows transportation needs, impacts and investment choices.

There are two key products that are developed through the statewide planning process. These are the Statewide Transportation Plans and the Statewide Transportation Improvement Programs (STIPs). The Statewide Transportation Plan is intended to present a long-term vision of the state's transportation system. The STIP is a shorter-term listing of projects that are planned for implementation throughout the state over a three-year time frame using FHWA and/or FTA funding and is based on the state transportation plan.

ISTEA recognizes that each state's decision-making process is unique and that different approaches will be needed to accommodate the varying conditions and challenges that face the states. Some states may use a planning process that is oriented toward analysis of data relating to specific facilities or corridors of statewide significance, and others may use a process which is more policy oriented and that provides transportation investment guidance. Either approach may be appropriate depending on the circumstances. Each state's statewide planning process is supposed to focus on issues, challenges, objectives, economic development, or other plans that are most relevant to the state.

⁶ *Statewide Transportation Planning Under ISTEA—A New Framework for Decisionmaking*, published by the U.S. Department of Transportation, Federal Highway Administration, 1996. Publication No. FHWA-PD-96-026. Prepared by Sarah J. Siwek & Associates.

Statewide Transportation Plans

ISTEA provides some guidance for the development and content of the statewide transportation plans. Specifically, ISTEA calls for the statewide plans to consider the full range of modal choices (e.g., highway, rail, transit) and operational, maintenance and technology investment options (e.g., signal synchronization, traveler information systems) that can help meet the mobility and economic needs of system users. ISTEA and the implementing regulations specify that the statewide transportation plan be:

- **Long Term:** A plan should provide a perspective on the state's transportation future for at least a 20-year time frame.
- **Linked to Economic Goals of the State:** A plan should be closely linked to the state's economic development strategy as well as to those environmental, social, and land use policies that guide developments within the state.
- **Linked to Environmental Objectives:** Statewide plans should reflect consideration of environmental issues and impacts, including compliance with specific requirements relating to the attainment of air quality standards.
- **Coordinated With All Modes and Transportation Providers:** A plan should be coordinated with planning undertaken by MPOs, transit agencies, ports, airports, private and public sector groups and others that have or who could have an impact on the transportation system.
- **Intermodal:** A plan should identify the linkages and desired linkages between transportation modes (e.g., truck-to-rail, bus-to-rail, port-to-truck) and address existing gaps in connections.
- **Performance Oriented:** A plan should place adequate emphasis on managing existing assets. This includes maintaining, monitoring, and improving transportation system performance.
- **Participatory:** Users, transportation providers, and the public should be given sufficient opportunity to provide input to a plan's development, not just to comment on a draft final product.
- **Realistic and Financially Sound:** A plan should provide realistic options for addressing mobility needs over the 20-year period. It should contain information on the availability of financial resources needed to carry out the plan.
- **Relevant:** The vision presented by a plan should be reflected in the short-term capital investment and operational decisions that the state and the Metropolitan areas intend to make.

Statewide Transportation Improvement Program (STIP)

The STIP should include all capital and non-capital projects or phases of projects that will be completed using FHWA and/or FTA funding. The STIP also includes all regionally significant transportation projects requiring federal approval or permits even if no FHWA or FTA funding will be used in their construction. A regionally significant project is generally defined as a project on a facility that serves regional needs.

The STIP also provides the state with important linkages to metropolitan area transportation planning. The metropolitan area Transportation Improvement Programs (TIPs) are the metropolitan area counterpart to the state STIP. Since the TIP is developed and approved by MPOs and is included in the STIP, after state approval without modification, there is good justification for the state to work proactively with the MPOs in developing the metropolitan area transportation plans and TIPs.

Projects are included in the STIP based on cooperative decision making by the state and MPOs in metropolitan areas, and by the state and local officials in non-metropolitan areas. The federal government places no restrictions on when the STIPs (or the TIPs) can be modified except that the STIP must be updated and approved at least every two years. In some places local agreements have been made which formalize the schedule for updates. For projects included in the STIP, the implementing agency is usually the state, a local unit of government, or a transit operator. The implementing agencies have the responsibility for scheduling projects and keeping other process participants informed as to the status of project implementation.

ISTEA requires that the STIP be "financially constrained" by year. This requirement helps ensure that sources of funds for new projects are clearly identified and that the operation and maintenance of the existing transportation system is not compromised. Financial constraints are somewhat tighter in metropolitan areas which have been designated as either air quality "non-attainment" or "maintenance" areas by the U.S. Environmental Protection Agency. In these areas projects included in the first two years of the metropolitan area TIP are limited to those for which funds are available or committed.

Statewide Transportation Planning Factors

ISTEA includes 23 planning factors which states should use as a guide in considering the implications of proposed transportation investments; however, since each state's needs vary somewhat, the specific relevance of the individual factors specified in ISTEA is subject to reasonable interpretation. The planning factors for states include:

- Consider the overall social, economic, energy and environmental effects of transportation decisions.
- Consider the effect of transportation policy decisions on land use and development.
- Consider access to specific types of locations, including ports, intermodal facilities, recreation areas, and military installations.
- Consider the consistency of transportation planning with federal, state, and local energy goals.
- Consider the transportation needs of areas outside metropolitan areas through consultation with local elected officials.
- Consider state plans developed under the Federal Water Pollution Control Act.
- Consider recreational travel and tourism.

- Consider investment strategies to improve roads that support rural economic growth and tourism development and other economic activities.
- Consider the concerns of Indian tribal governments.
- Include methods to expand and enhance transit services to increase their use.
- Consider the transportation needs identified through the use of the management systems.
- Preserve rights-of-way for construction of future transportation projects.
- Consider the connectivity between metropolitan planning organizations within and outside the state.
- Incorporate bikeways and pedestrian facilities in projects.
- Address long-range needs of the state transportation system.
- Coordinate and reconcile metropolitan and statewide plans to ensure connectivity.
- Consider strategies for identifying and implementing transportation enhancements.
- Preserve existing facilities and meet transportation needs by using those facilities more efficiently.
- Consider life-cycle costs of transportation systems.
- Consider methods to enhance the efficient movement of commercial motor vehicles.
- Consider any metropolitan area plan.
- Relieve congestion and prevent congestion from occurring where it does not now occur.
- Consider innovative financing of projects.

Each state's statewide planning process should contribute toward overall system management by providing information relevant to assessing the performance of state's transportation system and to managing the assets that comprise the state's transportation system. Many states have developed inventories of transportation system assets and monitored the safety and condition of the state's transportation facilities. In urbanized areas with populations over 200,000, ISTEA specifically requires implementation of a congestion management system. The fundamental objective for providing this information is so that transportation officials can target the expenditure of funds toward cost-effective approaches to improving system operation.

4.3.8 Metropolitan Transportation Planning⁷

ISTEA recognizes the need to put more emphasis on metropolitan areas and support more control over transportation in their own regions. Consequently, many of the provisions included within ISTEA place significant emphasis on broadening participation in transportation planning to include key stakeholders. These include the business community, members of the public, community groups, and other governmental agencies. This diversity challenges transportation professionals and elected officials because meaningful engagement of diverse

⁷ *A Guide to Metropolitan Transportation Planning Under ISTEA—How the Pieces Fit Together*, published by the U.S. Department of Transportation, Federal Highway Administration and the Federal Transit Administration, 1995. Publication No. FHWA-PD-95-031. Prepared by Sarah J. Siwek & Associates.

interests can be difficult. However, broader participation should ensure that decisions will be more responsive to local needs.

The metropolitan planning entity is known as the Metropolitan Planning Organization (MPO). Currently there are approximately 340 MPOs nationwide. MPOs are required in urbanized areas with 50,000 residents or more and a population density of 1,000 persons per square mile or more. The area served by the MPO is defined by geography, population density and the area expected to become urbanized in the next 20 years. If there is a non-attainment area for air quality, this area must also be included in the MPO area. MPO boundaries are not limited to jurisdictional boundaries and are subject to modification only under the agreement of the MPO and the governor.

The structure of MPOs across the nation is similar with regard to function but varies in terms of composition and decision making processes. MPOs are a product of agreement between local officials and the state governor. MPOs created prior to December 18, 1991 have memberships which typically include the key stakeholders as mentioned above. MPOs created after December 18, 1991 must additionally include the operators of the major modes of transportation. The ISTEA legislation further expanded the participation in MPOs based on expanded planning areas. Policy board memberships in MPOs is not always based on local government representation but can also include directly elected members, appointed citizen members, members from special districts or others.

The planning role of the MPO is to coordinate and oversee the metropolitan transportation planning process in cooperation with the state DOT and transit operators. The MPOs are funded from federal planning funds through the state DOT. The MPO may have other sources of revenue to support planning and other activities. The main products of the MPO are a metropolitan transportation plan (MTP) and a metropolitan transportation improvement program (TIP). Key elements and short descriptions of these products are outlined below. MPOs also select projects for federal funding in cooperation with the state DOT and consider other planning issues such as housing and jobs in developing planning products such as the MTP. In air quality non-attainment areas, the MPOs must also make an air quality conformity determination.

Metropolitan Transportation Planning Factors

The five major elements of transportation planning in metropolitan areas are as follows:

- A proactive and inclusive public involvement process;
- Consideration of 16 specific planning factors to ensure that the transportation planning process reflects a variety of issues and considers other concerns such as land-use planning, energy conservation, and environmental management; these include:
 1. Preservation of existing transportation facilities,
 2. Consistency with energy conservation goals,
 3. Need to relieve/prevent congestion,
 4. Land use,
 5. Programming of expenditures for transportation enhancement activities,
 6. Effects of all transportation investments,
 7. International border crossings and access to them,
 8. Connectivity of roads at MPO boundaries,
 9. Transportation needs identified by the management systems,
 10. Corridor preservation,

11. Freight movement,
 12. Use of life cycle costs,
 13. Social, economic, energy, environmental effects,
 14. Expansion, enhancement aid increased use of transit services,
 15. Capital investment to increase transit security, and
 16. Tourism.
- As part of plan development, major investment studies are conducted to address significant transportation problems in a corridor or subarea that might involve the use of federal funds;
 - Development of financial plans for implementing the transportation plan and the TIP; and
 - Assurance that the transportation plan and TIP conform to the State Implementation Plan (SIP) pursuant to the standards of the Clean Air Act Amendments of 1990 (CAAA).

These requirements apply to metropolitan planning organizations, transit agencies and state DOTs which jointly share responsibility for metropolitan transportation planning and program development.

Transportation Plans and Transportation Improvement Programs

Based on consideration of the above described five major elements of transportation planning, MPOs must develop financially constrained, transportation plans that cover a 20-year period. Plans are to identify facilities (including, but not limited to, major roadways, transit, and intermodal facilities) that should function as an integrated system. The plans also need to include both short- and long-term actions that develop and maintain an integrated, intermodal, accessible transportation system that efficiently moves people and goods.

Transportation plans are developed by the MPOs with input from jurisdictions within the metropolitan area and the state. Plan approval is normally a two-tiered process:

- MPO Technical Committee, consisting of technical staff from transportation agencies or departments,
- MPO Policy Committee, consisting of elected officials from local governments within the metropolitan area that typically provide transportation facilities or services.

Transportation plans are multimodal and generally include objectives, proposed facility types, sizes, and services. Plans are usually organized in implementation phases covering about 20 years.

The Transportation Improvement Programs (TIPs) developed by MPOs are short-term documents covering at least three years and must be updated at least every two years. The projects that are included in the TIPs must be consistent with the long-range transportation plan and serve to accomplish the objectives of the plan. The requirement that the TIPs be financially constrained is an important aspect of the process. Financial constraint means that programs are limited to the cost of improvements that can be covered by anticipated available funding. In order for the MPOs to meet this requirement, the state and transit operators must provide information on the availability of funds early in the TIP development process.

The TIP must be adopted by the MPO and the Governor, and in air quality non-attainment areas only, a conformity determination must be made by the FHWA and the FTA. The

conformity determination must show that the proposed TIP will meet the established federal air quality requirements for the metropolitan area. It then becomes, without modification, part of the Statewide Transportation Improvement Program (STIP). The frequency and cycle for updating the TIP should be compatible with that of the STIP.

4.4 Approval of U.S.-Mexico Bridges and Border Crossings

The two main groups involved with approval of U.S.-Mexico bridges and border crossings, the U.S.-Mexico Binational Bridges and Border Crossings Group and the U.S. Interagency Working Group on Bridges and Border Crossings, are discussed in this chapter. They are discussed in terms of their participants, their purpose, and benefits resulting from their intervention.

4.4.1 U.S.-Mexico Binational Bridges and Border Crossings Group⁸

Exchange of technical and policy information on bridges and border crossings between the United States and Mexico is coordinated through the U.S.-Mexico Binational Bridges and Border Crossings Group. This group, formed in 1983, is composed of delegations from the governments of the United States and of Mexico. It is co-chaired by senior officials of the U.S. Department of State and the Mexican Secretariat of Foreign Relations. It meets semi-annually to discuss proposed and existing bridges and border crossings, and related matters on the U.S.-Mexican border.

Participants

The meetings of the group of U.S. and Mexican delegations consist of representatives of federal agencies that have an interest in or responsibility for the conduct of bilateral relations, provision of permits or approval of new crossings (international ports of entry), including inspections, highway/rail access, facilities construction, the environment, and the international boundary. The U.S. delegation is chaired by the U.S. Department of State's Coordinator for U.S.-Mexican Affairs, while the Secretariat of Foreign Relations (SRE) Director General for North American Affairs chairs the Mexican delegation. In recent years, both governments agreed to include representatives of each of their respective border states. These representatives participate as observers.

Purpose and Benefits

The purpose of the meetings is to discuss existing and proposed bridges and border crossings and their related infrastructure and to exchange technical information on bridges and border crossings. This is to enable projects which both federal governments deem beneficial to successfully complete the approval process of the two respective governments. Related issues such as toll roads and other infrastructure projects are discussed as are operational matters involving existing and future crossings. In addition to regular semi-annual meetings, the delegations conduct a "border walk" at least once annually (alternating between the United States and Mexico). These border walks visit U.S. and Mexican border stations at international crossings in a specific area. (For example, a recent U.S.-hosted Border Walk was held in the El Paso area and included bridges in Ft. Hancock, Fabens, and El Paso, Texas, and the land crossing of Santa Teresa, New Mexico—including the nearby cattle crossing.) Until 1995, these were held twice a year, but both governments, recognizing budgetary stringencies, decided to hold one formal "border walk" annually with mini "border walks" to be held at the binational meetings whenever feasible.

⁸ Source: U.S. Department of State, November 1996

The meetings normally consist of three sessions over a three-day period. The first day is devoted to the public sessions in which proponents of proposed bridges and border crossings and related infrastructure projects such as highways make public presentations to the two delegations. This session is open to the press and the public. Next are the technical sessions in which both delegations discuss specific border crossings, exchanging views and technical information.

The third session is a plenary at which positions are summarized. If feasible, one half day is set aside for a mini "border walk" or site visit to nearby border crossings.

Beginning in 1994, the border state representatives were included although their roles in their respective delegations vary somewhat. Each U.S. and Mexican border state is asked to make a presentation on the development of relevant transportation infrastructure projects since the last meeting.

The value of the Group is the exchange of policy views and technical information between the two delegations. The public session permits bridge and infrastructure project sponsors to brief various agencies of both the U.S. and Mexican governments on proposed projects or to provide updates on those already in progress. The participation of state representatives gives direct input to both American and Mexican participants in a way that the FHWA and the DOT cannot. State input is critical on specific projects and is considered in advancing proposed bridge and border crossing projects throughout the approval process. This participation makes it far less likely that bridge and border crossings will complete the approval processes without the required transportation infrastructure.

It should be noted that both the United States and Mexico have separate approval processes. In both cases, the responsibility for approving or permitting new bridge and border crossings rests with the U.S. Department of State and the Mexican Secretariat of Foreign Relations. However, any commitment for a new bridge or border crossing requires the exchange of diplomatic notes between the U.S. Department of State and Mexico Secretariat of Foreign Relations.

For border crossings over the Rio Grande (Texas), bridge sponsors in Texas must obtain approval from the Texas Transportation Commission to construct a bridge before requesting a Presidential Permit. Factors to be considered by the Commission include: the local sponsor's financial resources; whether the bridge is consistent with the state's transportation plan; and the facility's potential impact on the economy of the region, the environment, traffic congestion and free trade. In making its determination the Commission will consult with: Department of Public Safety, Texas Natural Resource Conservation Commission, Texas Historical Commission, Texas Department of Agriculture, Texas Alcoholic Beverage Commission, Texas Department of Commerce, and any other agencies the commission deems appropriate. Under Texas law, the Transportation Planning and Programming Division is the contact point for this process.

This state approval process allows the sponsor to research, compile, and present much of the information needed to support a Presidential Permit. Only after approval is obtained from the Texas Transportation Commission can the bridge sponsor begin the process to obtain a Presidential Permit for construction of the bridge.

The Presidential Permit application process requires consideration of 11 items to be submitted by applicants. These are:

- Applicant identification
- Detailed description of proposed facility and approaches
- Explanation of how the nation's interest will be served by the construction of the proposed facility

- Schedule for permit acquisition, other approvals, funding, construction
- Costs and financing plan, including approach roads
- Plan to secure all approvals
- Verification that Mexican authorities are aware of the proposal and will consider it
- Identification of any impacts on properties on the “National Register of Historic Places”
- Minority and low-income populations likely to be affected
- Commitments needed to ensure adequate support
- Compatibility with Mexican plans and priorities
- Viable plan for inspection facilities, inspection agency staffing, and bridge operation
- Required NEPA documentation

The above items are considered prior to a recommendation for permit approval. The Presidential Permit is the first U.S. federal permit obtained. The process involves review of the application by several federal and state agencies to assess the viability and impact of the proposed bridge. Once this permit is issued, the sponsor may proceed to obtain permits from the International Boundary and Water Commission and the U.S. Coast Guard. Mexico’s Secretariat of Foreign Relations has an analogous process.

A more complete description of the Presidential Permit process is included in Appendix B.

4.4.2 U.S. Interagency Working Group on Bridges and Border Crossings (IWG)⁹

This interagency committee was created to coordinate participation of U.S. federal agencies responsible for bridges and border crossings and the international boundary.

Participants

The approval of new bridges and border crossings between the United States and Mexico is an integral part of the bilateral relations between the two countries. The International Bridge Act of 1972 required Presidential Permits for new bridges (and related structures). An interagency group was formed to facilitate the approval process. The Coordinator of U.S.-Mexico Border Affairs, Office of Mexican Affairs, in the U.S. Department of State chairs this interagency group. This group is composed of federal agency representatives involved in the approval, construction, operation and maintenance of international crossings and the international boundary.

Regular members include the U.S. Department of State (chair), the Department of Transportation, the Federal Highway Administration, the International Boundary and Water Commission (IBWC), the U.S. Coast Guard, the General Services Administration, the Immigration and Naturalization Service, the Customs Service, the Department of Agriculture (Animal Plant and Health Inspection Service-APHS), the Department of Commerce, the Environmental Protection Agency, the Federal Railroad Administration, and others as appropriate.

Members of the Interagency Working Group on Bridges and Border Crossings often are also the federal members of the U.S. delegation to the semi-annual U.S.-Mexico Bridges and Border Crossings Group (see previous section).

⁹ U.S. Department of State, November 1996; Barton-Aschman Associates, Inc.

Purpose

The Interagency Working Group coordinates policy with regard to bridges and border crossings between the U.S. and Mexico and fosters communication among responsible agencies with regard to individual projects. While decisions on individual projects are not made in interagency meetings, member agencies of the Interagency Working Group on Bridges and Border Crossings are asked to provide detailed written comments on all new proposals for bridges and border crossings as part of the Presidential Permit process (bridges) or the approval process (land crossings).

All U.S.-Mexico border crossings require exchange of diplomatic notes approving such projects. Proposed bridge construction in Texas also requires approval from the Texas Transportation Commission to construct a bridge as well as a Presidential Permit; such permits are not required for land crossings in other U.S. states, although the Department of State and Mexico Secretariat of Foreign Relations have similar procedures.

Major Initiatives and Benefits

The Interagency Working Group provides the framework for individual agency input in the Presidential (bridge) Permit or land border approval processes. It has created the Binational Bridges and Border Crossings Group (See Section 4.4.1) that meets semi-annually to exchange policy and technical information on individual bridge and land border crossings, to hear from sponsors of new or related projects, and to learn about border state activities relevant to international crossings.

The IWG also serves as the staff to the U.S.-Mexico Binational Bridges and Border Crossings Group.

4.5 California

This chapter presents a summary description of the transportation planning processes and procedures now being used in the State of California. These processes are similar to those used in the other U.S. states along the U.S./Mexico international border. The roles of the various agencies and various levels of government for identifying, planning, selecting, designing, and implementing projects are discussed.

The border between California and Baja California runs for approximately 138 miles and includes the largest urban region along the entire international border. The San Diego/Tijuana/Tecate urban area is by far the most populous among the twin cities along the 2,000 mile international border between the United States and Mexico. Cross-border travel is common and is served by all major modes of transportation, including private passenger vehicles, commercial trucks, bus transit, light-rail transit, rail freight, and both passenger and cargo air carriers.

Binational planning is an important issue in this region. A 1995 case study by Hamilton, Rabinovitz & Alschuler, Inc. (HR&A) for the San Diego Association of Governments (SANDAG) provided documentation and analysis of the highway planning process on each side of the U.S./Mexico border. It emphasized differences between the U.S./California and Mexico/Baja California approaches and the challenges posed by the absence of an institutionalized cross-border planning process. The study, *The International Border Transportation Case Study, Meeting the Challenges of Binational Highway Planning and Financing in the San Diego-Tijuana/Tecate Border Region*, was funded by the California Department of Transportation and the Federal Highway Administration (FHWA). It provides a very comprehensive and complete analysis of the issues associated with binational planning.

Among the findings of this HR&A report was that “The U.S. highway planning and programming process, particularly in California, is a highly structured system in which public accountability requirements lead officials to follow rigid and lengthy procedures extremely closely. The project team found no consistent distinction between *de jure* (formally established) and *de facto* (in practice) processes.” In other words, the transportation planning and programming process in California closely follows the federal and state rules and regulations. However, local priorities and funding often accelerate the programming phase.

California and its local border-area planning agencies strongly recommend and intend to follow the practice that any transportation studies undertaken within the U.S. border zone that will impact the transportation systems within Mexico provide for appropriate participation of the responsible planning Mexican agency.

4.5.1 State, County and City Transportation Planning Responsibilities

In California, the state and local governments each play an important role in the transportation planning and financing system. A map indicating the geographic areas of jurisdiction for regional transportation planning is included as Figure 4.1. Specific roles and responsibilities of each level of government are described in this section. A later section in this chapter describes California’s transportation planning and programming process.

Figure 4.1 California Regional Transportation Planning Agencies

4.5.2 State Transportation Planning

California Department of Transportation (Caltrans)

At the state level, the California Department of Transportation, or Caltrans, with a FY 1997 budget of nearly \$5.5 billion (\$1 billion of which goes to highway and rail capital projects) and about 16,700 employees, is the key agency concerned with planning and building state highways. The California state highway system is designated by state statutes and comprises about 15,000 constructed miles. The resulting system is composed of a hierarchy of facilities ranging from freeways to rural two-lane roads. It is the legislative intent that the state highway system “serve the state’s heavily traveled rural and urban corridors, that they connect the communities and regions of the state, and that they serve the state’s economy by connecting centers of commerce, industry, agriculture, mineral wealth, and recreation.”¹⁰

In addition to responsibility for the state highway system. Caltrans has responsibilities in transportation planning, rail, transit, air, and nonmotorized services as authorized by statutes. Existing State of California law (Section 14030 of the Government Code) states that “The powers and duties of the Department shall include, but not be limited to . . . planning, designing, construction, operating, and maintaining those transportation systems which the Legislature has made, or may make the responsibility of the Department...”

Caltrans programs are administered through 12 districts and the transportation planning at the state level begins with a district-level system planning process that produces four types of documents: the District System Management Plan, Transportation Concept Reports, the Transportation System Development Program, and Project Study Reports.

- **The District System Management Plan (DSMP)** is produced every two years and describes how the district intends to maintain, manage, and improve the district transportation system over the subsequent 20 years. It is developed in partnership with regional and local transportation planning agencies and summarizes 20-year planning concepts and proposed transportation improvements on a systemwide level. The DSMP integrates land use, modal opportunities, regional arterial plans, transportation system management plans, transportation demand management plans, highway system improvements, and the district highway network into a comprehensive program.
- **Transportation Concept Reports (TCRs)** are planning documents which describe the district and the Department’s basic approach to the development of specific corridors. Considering reasonable financial constraints and projected travel demand, the TCR establishes a 20-year transportation planning concept and identifies modal transportation options needed to achieve the concept. The concept considers operating levels of service (LOS) and modal improvements. It also considers potential long-term needs for the corridor beyond the 20-year planning period. TCRs are prepared by Caltrans district staff in cooperation with local and regional agencies and are updated as necessary as conditions change or new information is obtained.

¹⁰*California Streets and Highways Code*, Division 1, Chapter 2, Article 3, Section 300.

The TCR is a preliminary planning phase that leads to subsequent programming and the project development process. As such, the specific proposed nature of improvements may change in later project development stages, with final determinations made during the project study report (PSR), project report (PR), and design phases. Each TCR must be viewed as an integral part of the DSMP and is based on the completion of the 20-year system. Removal of any portion of the system will adversely affect travel on the remaining system.

- **The Transportation System Development Program (TSDP)** is an internal Caltrans system planning document. Its purpose is to identify by district a reasonable and effective list of multimodal transportation improvements (infrastructure/capital outlay), strategies, and demand and system management options to improve statewide, interregional, and regional mobility and intermodal transfer of people and goods. The TSDP includes both a Recommended Plan and a Cost Constrained Plan component and categorizes improvement into two time frames, presently, 2001-2015 and post 2015. It is based on analysis of current and projected future travel demand.

The TSDP is an internal “sketch” planning document that broadens the Department’s assessment of mobility options at an early preliminary planning stage. It expands system planning from a basic analysis to a larger integrated intermodal and multimodal analysis of travel corridors. Improvements, strategies, and system management options identified in the TSDP are the Department’s “candidates” for further detailed examination in state, metropolitan, regional, or local studies and processes. The TSDP is also the Department’s initial identification of areas under consideration for project study reports (PSRs) and major investment studies (MIS) with metropolitan agencies and rail/transit operators.

- **Project Study Reports (PSRs)** are reports which document agreement on the scope, schedule, and estimated cost of a project so that the project can be included in a future Statewide Transportation Improvement Program (STIP). The completion of a PSR for a particular project marks the completion of the planning phase. The programming phase for a specific project is then undertaken with the preparation of a plan, specification, and estimate (PS&E) for the project.

The PS&E phase includes:

- Inclusion of project in a STIP;
- Production and approval of appropriate environmental documents;
- Final design and right of way activities; and
- Advertisement of project, award of contract, and construction of project.

In actual practice, the PSR stage includes considerable design determination and both environmental study and right of way determinations.

Caltrans District 11

Caltrans District 11 is responsible for planning and project implementation in the area that includes all of California’s border with Mexico. In addition to carrying out a variety of

responsibilities to maintain and improve the state's transportation system, Caltrans has played a leadership role in cross-border coordination with its counterparts in Baja California and Mexico City. Among these efforts are:

- Establishment of a Deputy Secretary of Business, Transportation, and Housing (BT&H) position in the state government with responsibilities for border transportation and goods movement issues.
- The formation of an International Border Studies unit within Caltrans District 11;
- Active participation in a variety of organizations addressing cross-border transportation issues, including the Southwest Border Transportation Alliance, the Binational Committee on Bridges and Border Crossings, and the Border Governors Conference;
- Collaborative planning with city and county officials within the border zone on border-area issues;
- Collaboration with SANDAG, the Southern California Association of Governments (SCAG), and the Imperial Valley Association of Governments (IVAG) on regional traffic modeling and project planning for border-area transportation; and
- Creation, with SANDAG, SCAG, IVAG, and others, of a Bistate Transportation Technical Advisory Committee charged with establishing a formalized process of cooperation and collaboration for the states of California and Baja California, their respective planning agencies, and the border municipalities for transportation related planning and project development.

The California Transportation Commission (CTC)

The California Transportation Commission (CTC) is an independent agency that reviews Caltrans' performance and budget. The CTC and Caltrans are required to program, budget, and expend funds in the State Highway Account of the State Transportation Fund in accordance with long-range Regional Transportation Improvement Programs (RTIPs) and a Statewide Transportation Improvement Program (STIP).

The CTC's membership is appointed by the governor and the state legislature. It was established in 1977 to create and adopt a long-range, strategic state transportation plan. The CTC's most important role remains the preparation of the biennial seven-year funding forecast and the STIP, which is the key capital improvements plan for the state.

4.5.3 Regional Transportation Planning

As previously discussed, U.S. federal requirements to qualify for federal funding include the establishment of metropolitan planning organizations (MPOs) for urbanized areas. Along the California/Mexico border two such MPOs exist: SANDAG, covering San Diego County, and SCAG, which covers most of the rest of Southern California and includes Imperial County.

SANDAG is also the designated Regional Transportation Planning Agency (RTPAs) for San Diego County as provided for in State of California statutes. SCAG is the RTPA for Imperial County. RTPAs are responsible for administering certain state funds and preparing ". . . a regional transportation plan and a regional transportation improvement program directed at

the achievement of a coordinated and balanced regional transportation system, including, but not limited to, mass transportation, highway, railroad, maritime, and aviation facilities and services. The plan shall be action-oriented and pragmatic, considering both the short- and long-term future, and shall present clear, concise policy guidance to local and state officials. The program shall support and be consistent with the plan. Each transportation planning agency shall consider and incorporate, as appropriate, the transportation plans of cities, counties, districts, private organizations, and state and federal agencies.”¹¹

The San Diego Association of Governments (SANDAG)

SANDAG is playing an increasingly prominent role in regional transportation policy. This is the result of recent changes in state and federal laws that give MPOs a more forceful role in the transportation priority setting and decision-making processes within their jurisdiction. Under the Intermodal Surface Transportation Efficiency Act (ISTEA), the MPO in an urban area has the authority to determine its transportation priorities in cooperation with the state. This empowerment of MPOs is intended to allow funds to be spent how and where they are most needed and to assist urban regions in funding programs necessary to accomplish the goals of the Clean Air Act.

Transportation planning and decision-making are coordinated by several agencies within the San Diego region. Responsibilities are detailed in a Memorandum of Understanding between Caltrans, SANDAG, the Metropolitan Transit Development Board (MTDB), and other transit operators. Additionally, SANDAG provides a non-voting seat on its Board of Directors to Mexico’s Consul General, for input in the planning and decision-making processes..

As the designated MPO, SANDAG annually develops and endorses the transportation planning work programs for the entire San Diego County in accordance with federal regulations. SANDAG, in its capacity as the RTPA for the San Diego region, is responsible for administration of Transportation Development Act (TDA) funds and development of the Regional Transportation Plan (RTP), the Regional Transportation Improvement Program (RTIP), and other regional transportation studies. SANDAG also serves as the County Transportation Commission for San Diego County.

The MTDB is responsible for TDA project approval and for fixed guideway development and near-term transit planning within its area of jurisdiction, which is the southwest metropolitan area of the county. MTDB also develops a priority listing of transit projects in its area to be included in the RTIP. The North San Diego County Transit Development Board (NSDCTDB), San Diego Transit Corporation, and other transit operators do operational planning and prepare seven-year transit development plans for the areas that each serves. As previously covered, Caltrans and local member agencies of SANDAG do project planning for the highway and street systems in the region to be included in local circulation elements and in SANDAG’s regional highway planning and programming activities.

SANDAG is also responsible for the development and approval of the Transportation Control Measure component of the Regional Air Quality Strategy based on criteria set forth by the Air

¹¹California Government Code, Title 7, Chapter 2.5, Section 65080.

Pollution Control Board (APCB). SANDAG is a co-lead agency with the APCB for meeting the federal air quality requirements.

In January 1991, SANDAG was formally designated as the Congestion Management Agency (CMA) for the San Diego region. As the CMA, SANDAG has adopted the Congestion Management Program (CMP), which it updates biennially. The CMP is developed as an integral element of SANDAG's transportation planning and programming process and has been incorporated into the RTP. The CMP, including its trip reduction element, known as Transportation Demand Management, will also help implement the air quality transportation control measures. These efforts form an integral part of the overall Regional Growth Management Strategy. The CMP is a component of the Strategy's quality-of-life factors and the criteria designed to measure attainment of these factors.

The SANDAG Overall Work Program (OWP)¹² is prepared each fiscal year. The OWPs for Fiscal Years 1996, 1997 and 1998 include several tasks directly related to border issues. As an example of the agency's activities, a summary of the border-zone activities for these years follows.

- **SANDAG's Binational Intergovernmental Coordination Work Task** has four objectives: (1) to provide information and technical assistance to member agencies and assist in the coordination of binational planning activities; (2) to assist government agencies to resolve problems arising from the region's proximity to the international border; (3) to establish working relationships with appropriate Mexican government agencies; and (4) to provide framework and strategy for analysis of binational issues impacting transportation, the economy, and the environment.

This task promotes coordination between SANDAG and the Mexican federal, state, and local governments in Baja California and will be continued in subsequent years. SANDAG meets regularly with the Consul General of Mexico in San Diego and with the Mayor of Tijuana, and their staffs to provide them with information about the San Diego region and SANDAG activities. Staff meets with local and Mexican transportation and land use planners to coordinate highway and development planning efforts in the border area. Staff coordinates with SCAG activities, including their North American Free Trade Agreement (NAFTA) Subcommittee meetings to coordinate activities concerning border infrastructure planning and NAFTA implementation. Technical assistance is being provided to the Municipality of Tijuana to put its land use data into SANDAG's Geographic Information System (GIS), which will then be available to the Municipality. Technical assistance continues to be provided to Caltrans staff working on transportation projects that may be impacted by implementation of the NAFTA.

- **SANDAG's Border Area Transportation Studies Work Task** completed some border area studies and accomplished other border-area transportation planning work in cooperation with Caltrans. Previous work includes a study of the planning processes in California and Baja California and a case study of this planning process involving toll roads on both sides of the border; coordination with Caltrans and local jurisdictions

¹²The OWP in California is the same document as the federal Unified Planning Work Program (UPWP).

in transportation planning activities along the international border; studies of vehicles, goods movement, and pedestrian crossings of the border; and review of trade-related impacts on transportation infrastructure in the border area.

- **SANDAG's California Trade and Goods Movement Study Work Task** was a study of the elements of California's transportation system and the goods that move into, out of, within, and through the state on that system. The objectives of the study were to identify and recommend: (1) the optimum short- and long-term capital investment strategies for the system, and (2) the operational and regulatory improvements needed to take advantage of international and domestic trade opportunities and improve the efficiency of interregional goods movement served by these facilities.

California's transportation system is part of a larger system of corridors that connect it with other western states, Canada, Mexico, and the world. This study assesses the trade and goods movement on the current system, and the likely benefits accruing to the future system. The study includes assessment of California's trade and goods movement patterns within the United States, with Mexico and Canada, and with the rest of the world. The final report for this study was completed in June 1996.

- **SANDAG's Transportation Study of the San Ysidro/Virginia Avenue Port of Entry** had the objective to identify options for improving service to pedestrians, transit users, and automobile occupants crossing the international border with Mexico at the San Ysidro/Virginia Avenue POE. The project began in November 1995 and was completed in June 1996. The purpose of the project was to investigate the feasibility of reusing the closed Virginia Avenue POE, formerly the truck crossing southbound into Tijuana at San Ysidro. The project was closely coordinated with the federal, state, and local agencies and interested community organizations in the United States and their counterparts in Baja California.
- **SANDAG's Traffic Study for the State Route 94 Corridor** is a component of the SR-94 Corridor Study mandated by the California Legislature and undertaken by Caltrans District 11. The SR-94 Corridor Study will develop a plan to manage NAFTA-related growth at the Tecate Port of Entry (POE) and along State Routes 94 and 188. Caltrans has recently (March 1997) completed Phase 1 which identifies the minimum safety and operational improvements needed to keep the highway functioning at a reasonable level of service for the near-term (0-5 years) including possible new highway alignments.

SANDAG is near completion of Element 1 of the traffic study. The objective of Element 1 is to develop forecasts of NAFTA-related growth and commercial truck traffic to/from the Northern Baja California /Tecate area. Element 2 of the traffic study (to be conducted in FY 98) will determine the resultant traffic impacts that would take place at the Tecate Port of Entry and on State Routes 94 and 188. The forecast considers planned activities that will affect NAFTA-related traffic from the Port of Ensenada in Baja California and Mexico's various roads connecting manufacturing areas to the Tecate POE.

Southern California Association of Governments (SCAG)

As the MPO and RTPA for most of Southern California except for San Diego County, SCAG performs the regional planning functions for the Imperial County portion of the California/Baja California border. In that responsibility its activities for transportation planning and programming parallel that of SANDAG. The Overall Work Program for SCAG for FY 1997 includes a continuing activity to provide information on cross-border trade, economic development, transportation, and air quality issues to the SCAG board. There are a number of other elements relating to the border zone, but, with the exception of a study conducted by the Cordoba Corporation and the recently contracted Southwest Passage Study, they are not of note for this discussion.

The study being conducted for SCAG by the Cordoba Corporation is entitled "The NAFTA Impacts in the SCAG Region." The study will be an assessment of current economic, financial, political, and other aspects of the NAFTA's impacts on the Southern California transportation infrastructure. It includes a technical identification of issues, a technical and policy assessment of the identified issues, a series of strategies addressing these issues, and a series of recommendations.

The Southwest Passage Study, being conducted by Jack Faucett Associates, is intended to identify needs for the Southwest Passage and to develop a strategy for its implementation. The strategy for the Southwest Passage is to connect the east/west trade routes along the U.S./Mexico border with a seamless freight transportation system which additionally supports north/south flows. The basic premise of this strategy is that a coordinated transportation system will enhance prosperity on both sides of the border by providing vital transportation links.

Imperial Valley Association of Governments (IVAG)

IVAG is composed of Imperial County and the seven incorporated cities in the county. It was formed to address a wide variety of issues that call for joint agreement of local governments within the area represented. One of the issues it has addressed is improvements to the transportation infrastructure.

IVAG produced a 20-year transportation plan dated June 1990. This plan resulted from a study of the long-term needs of the county based upon input from local governments, SCAG, Caltrans, and the residents of the county. The plan provides long-term programming guidance and direction for the county, SCAG, and Caltrans. It has been incorporated into the SCAG Regional Mobility Plan, with IVAG considered to be equivalent to a transportation commission. IVAG's 1990 plan is currently being updated to reflect the effects, among other impacts, of NAFTA, the growth of border commerce, and the recent opening of a new POE east of the city of Calexico.

IVAG has been very active in coordinating transportation planning with the Municipality of Mexicali and the State of Baja California. It is a full participant in the Bistate Transportation Technical Advisory Committee.

4.5.4 Local Transportation Planning

The fundamental determinant of transportation needs is the allowed land use in an area. Within California land use decisions are the purview of local (city and county) governments and vary in their sophistication of the processes within the responsible local government.

Within California, only the City of San Diego and the City of Calexico are adjacent to the U.S./Mexico border. Several other cities in San Diego County are within the border zone; but, their actions on transportation issues have had minimal impact on the border. However, the City of San Diego and the two border counties of San Diego and Imperial are key participants in border transportation infrastructure as they are responsible for the city street and county road portions of the regional highway system. In fact, at the present time the prime commercial border crossing between California and Mexico at Otay Mesa is in the City of San Diego and is not directly served by a state highway.

The City of San Diego, in particular, has been very active in seeking coordination with the Municipality of Tijuana on a variety of cross-border planning issues, including transportation. Local efforts have included participation on the Mayor's Border Task Force, cross-border exchanges of technical information, traffic studies for areas around the ports of entry (POEs), and active involvement in border-area highway planning. With respect to border-area transportation issues, there appears to be more difficulty in coordination between the U.S. federal government and local governments on the U.S. side than there is between the City of San Diego and the Municipality of Tijuana.

Local (city and county) governments have independent taxing authority and access to other revenue sources that can be used to finance city street, county road, and even state highway improvements. Use of these local funds can result in expedited Caltrans and FHWA implementation of state highway projects.

4.5.5 Private-Sector Involvement in Providing Transportation Infrastructure

In California the private sector has a variety of roles in providing for public transportation infrastructure. Briefly, by mode, they are as follows:

- Airports are normally the responsibility of local governments with the private sector paying for their use.
- State highways, county roads, and city streets
 - ◆ State highways within the border zone, are the overall responsibility of Caltrans. The exception is the southern end of State Highway 125, which is presently unconstructed and is proposed as a private sector toll road under a franchise by the state. This franchise is authorized by specific state enabling legislation. This route, if constructed, will serve the Otay Mesa POE. The franchisee should determine the financial feasibility of proceeding with the project, after environmental clearance, by the end of 1996.

Figure 4.2 California's Transportation Planning and Programming Process

- ◆ County roads and city streets are the responsibilities of the respective local governments. However, their construction or upgrading is often paid by private sector land development activities.
- Marine activities are divided. Ports are owned and operated by local government, but the private sector provides for goods/freight movement into and out of the ports.
- Pipelines are primarily the responsibility of the private sector.
- Railroad activities are also divided. Goods/freight fall under the private sector. Amtrak and state and local governments are responsible for passenger traffic.

4.5.6 California's Transportation Planning and Programming Process

The state, regional and local planning agencies all contribute input to the Statewide Transportation Improvement Program. This planning and programming process is graphically depicted on Figure 4.2, with elements of the process keyed to the following discussion.

Congestion Management Programs

The process begins with the development of Congestion Management Programs (CMPs) in 32 counties within California. California Government Code Section 65089 (a) requires that every county that includes an urbanized area adopt a CMP. The CMP shall include every city and the county. California Government Code Section 65088.1 defines urbanized areas as being over 50,000 population.

These CMPs incorporate the transportation needs and priorities of the cities and counties within each region, and provide the input to the Regional Transportation Plans (RTPs).

The Congestion Management Program (CMP) is an effort to improve the relationship among land use, transportation and air quality. The state law provides countywide Congestion Management Agencies (CMAs) with a significant degree of latitude in meeting the statutory requirements. The purpose of the CMPs is to develop an integrated approach to making transportation programming decisions. This process is intended to work toward the identification of an urban mobility system involving all modes and all transportation providers. The CMP is a countywide program, which is updated annually to address congestion problems in a coordinated and cooperative manner. CMPs are composed of the following five components:

- An element defining the CMP transportation system and level of service (LOS) standards for the highway and roadway portions of the system
- A transit standards element,
- A transportation demand management and trip reduction (TDM) element
- A program for analyzing the impacts of land use decisions
- A seven-year capital improvement program.

The CMP works toward the implementation of the Regional Transportation Plan (RTP) and must be consistent with it. At the same time, the CMP controls projects that are included in the Regional Transportation Improvement Program (RTIP). Thus, the CMP statute establishes a balancing of responsibilities between the CMP and the RTP, which can best be achieved

through a cooperative process. Regional Transportation Plans can provide system definition, level of service, transportation demand management, and transit information for the CMP. RTP databases can assist in developing required CMP databases and models. As they are being developed, CMPs may provide relevant information, policy direction, and funding priorities that may be used in subsequent Regional Transportation Plan updates. If the CMP is found to be consistent with the Regional Transportation Plan, it shall be incorporated into the Regional Transportation Improvement Program.

CMPs include a seven-year capital improvement program. For a project to be included in the Regional Transportation Improvement Program (RTIP), it must be included in the capital improvement program of the CMP. Projects that are not in a RTIP cannot be programmed for Flexible Congestion Relief funds. Projects that are included in the capital improvement program of an approved CMP receive first priority for Traffic System Management funds. Agencies involved in development of the Congestion Management Program include:

- The Cities and the County: Local agencies are actively involved in the preparation of the CMP because the CMP is responsible for making an annual determination that its cities and the county are conforming to the CMP. If local jurisdictions are not in conformance, the increment of local subvention funds made available through the increase in the gas tax may be withheld.
- Congestion Management Agency: The CMA can be either the County Transportation Commission or another public agency, as designated by resolutions adopted by the county board of supervisors and the city councils of a majority of the cities representing a majority of the population in the incorporated area of the county
- Caltrans: Since Caltrans has responsibility for operating the state highway system, they have a range of planning and policy information available. This information is useful in designating an interrelated system of state highways, principal arterials, and other significant routes.
- Regional Transportation Planning Agencies (RTPAs) or Metropolitan Planning Organizations (MPOs): The CMP is required to be consistent with the Regional Transportation Plans. Therefore, there should be consistency between the CMP transportation system and the regional transportation system. CMAs must coordinate with the RTPAs or MPOs to ensure this consistency and, in the event of discrepancies, allow for resolution before adoption of the CMP.
- Transit Providers: Transit providers provide input into the process and to ensure that transit planning and programming can be integrated effectively.
- Air Quality Management/Air Pollution Control Districts: The CMP has an important role in meeting air quality objectives. The Air Quality Management/Air Pollution Control Districts should be involved in defining the system.
- Other CMAs: The system defined by the CMA should be consistent with that defined by neighboring CMAs.
- Public Input: Statutes require that the CMP be adopted at a noticed public hearing.

Regional Transportation Plans

These RTPs are long-range plans, which include future transportation improvements to be programmed in the region over a 20-year period. They are prepared by the Regional Transportation Planning Agencies (RTPAs) and the Metropolitan Planning Organizations

(MPOs) every second year. These Regional Transportation Plans provide the basis for the 20-year long-range State Transportation Plan, which is adopted by the Governor.

California Transportation Plan

The California Transportation Plan (CTP) is updated periodically. It is a long term policy document and functions as the statewide long range plan. The process for developing the plan reflects a broad range of participation and is based on applicable federal and state law, regulation and policy. It is a bottom-up planning process, based on the Regional Transportation Plans (RTPs)¹³ and on the district-level system plans described previously in this chapter. The CTP then provides a statewide framework for future RTPs. The CTP includes a review of California's transportation system and the major policies and objectives for California's transportation system.¹⁴ The plan also includes a transportation economic forecast.

Fund Estimate

The California Transportation Commission (CTC) and the California Department of Transportation (Caltrans) prepare programming guidelines for a seven-year Fund Estimate, which is used to prepare the seven-year Fund Estimate. This Fund Estimate is adopted by the CTC and transmitted to the transportation planning agencies and county transportation commissions for use in preparing their RTIPs. The Fund Estimate is an estimate of all state and federal funds reasonably expected to be available for each program element in the Regional Transportation Improvement Programs (RTIPs) and Statewide Transportation Improvement Program (STIP). This meets the Intermodal Surface Transportation Efficiency Act (ISTEA) requirement that Regional Transportation Plans and Improvement Programs must be financially constrained to reflect revenues reasonably expected to be available over the time periods they cover. Caltrans also prepares programming guidelines for the annual Traffic System Management Plan.

Regional Transportation Improvement Programs

The MPOs and RTPAs also prepare seven-year Regional Transportation Improvement Programs (RTIPs), which include the transportation projects to be implemented, based on the Regional Transportation Plans.

The RTPAs and MPOs prepare their RTIPs and submit them to the CTC. The RTIPs include:

- Flexible Congestion Relief Projects,
- Urban rail transit and commuter rail projects,
- Congestion Management Programs
- Transit Capital Improvements

¹³ *California Transportation Plan 1993*, published by the California Department of Transportation, March 1994

¹⁴ *California Transportation Plan 1993*, published by the California Department of Transportation, March 1994

- Federal Demonstration Projects (portion, if any)
- Congestion Mitigation and Air Quality (CMAQ) program projects
- Regional Surface Transportation Program Projects

Proposed Statewide Transportation Improvement Program

Caltrans prepares a seven-year Proposed Statewide Transportation Improvement Program (PSTIP) and submits it to the CTC and RTPAs/MPOs and county transportation commissions. The PSTIP includes:

- Interregional Road System Plan
- Soundwall Projects
- Intercity Rail Projects
- Federal Demonstration Projects (portion, if any)
- Transit Capital Improvements
- Toll Bridge Projects
- Aeronautics Projects

Caltrans, through its District Offices, identifies specific transportation problems and proposes solutions in the PSTIP.

Traffic System Management Plan and Highway Systems Operation and Protection Plan

Caltrans also prepares:

- An annual Traffic Systems Management (TSM) Plan for major urban areas. Adoption by the CTC is not required. The CTC provides a continuous project allocation. The TSM includes:
 - ◆ Capital projects eligible for funding under this program. That is, projects designed to increase the number of person-trips which can be carried on the highway system in a peak period without significantly increasing the design capacity of the highway system when measured by the number of vehicle-trips and without increasing the number of through traffic lanes. The TSM must include a consolidated priority list of projects submitted from local congestion management plans.
 - ◆ Traffic Operations Control Facilities.
- A four-year Highway Systems Operation and Protection Plan (HSOPP) for submittal to the CTC for adoption. The HSOPP is a plan for the expenditure of funds for major capital improvements that are not included in the STIP, which includes:
 - ◆ Rehabilitation and Safety Projects
 - ◆ Other Highway Construction
 - ◆ Minor Highway Projects
 - ◆ Building Facilities

Statewide Transportation Improvement Program

- The California Transportation Commission (CTC), following public hearings on the PSTIP, adopts a seven-year Statewide Transportation Improvement Program (STIP) and submits it to the Legislature and the Governor by April 1, in even numbered years. The STIP includes:
 - ◆ Flexible Congestion Relief Projects
 - ◆ Interregional Road System Projects
 - ◆ Soundwall Projects
 - ◆ Intercity, Urban and Commuter Rail Projects
 - ◆ Transit Capital Improvements
 - ◆ Federal Demonstration Projects
 - ◆ Toll Bridge Projects
 - ◆ Aeronautics Projects

The MPOs submit to Caltrans seven-year Regional Transportation Improvement Programs by September 1, in even numbered years. Caltrans submits to U.S. Department of Transportation by October 1, in even numbered years, a three-year California Federal Transportation Improvement Program (FTIP), which includes:

- Statewide Transportation Improvement Program, including:
 - ◆ Flexible Congestion Relief Projects
 - ◆ Interregional Road System Projects
 - ◆ Soundwall Projects
 - ◆ Intercity, urban and commuter rail projects
 - ◆ Federal Demonstration Projects
 - ◆ Transit Capital Improvements
- Traffic System Management Program, including
 - ◆ Traffic System Management Projects
 - ◆ Traffic Operation Control Facilities
 - ◆ California Program, including all other federally funded transportation projects.

4.5.7 Changes for January, 1998

Senate Bill (SB) 45 was enacted during 1997 after this report was prepared. It will significantly change the process for transportation planning and programming in California. This will affect projects with state and/or federal funding.

The following is an early summary of the provisions of SB 45. As 1998 proceeds, interpretations and procedures will be refined. For the most current information, readers should contact Caltrans Community Affairs offices throughout the state. In Caltrans District 11 (border area) office in San Diego, contact Mr. Jim Larson at (619) 688-6678.

*Senate Bill 45 Summary*¹⁵

This bill was passed to simplify the programming process and to better establish responsibility and accountability for project delivery. The bill transforms the STIP from a project delivery document to a resources management tool.

Under SB 45, Caltrans continues to be responsible for the operation, maintenance, and rehabilitation of the state highway system. Caltrans will be responsible for programming improvement projects funded through the Interregional Improvement Program; however, for projects funded with Regional Improvement Program funds, Caltrans can only promote and recommend highway improvement projects to the regional transportation planning agencies (RTPA) for inclusion in their regional transportation improvement programs (RTIP).

To an increased degree, Caltrans will now be accountable to the regions, and not just to itself, for designing projects on time and on budget. Caltrans and the regions will have to negotiate the cost and schedule for designing projects. Once an agreement is reached and the amount placed in the STIP, Caltrans will have to meet those commitments.

The bill succeeds the 1989 "Transportation Blueprint" legislation and makes fundamental changes in the funding, programming, and planning of transportation improvement in California. It is important to note what SB 45 did *not* change:

- Caltrans remains responsible for the planning, design, construction, maintenance, and operation of the State Highway System (SHS).
- The State Transportation Improvement Program (STIP) adopted by the California Transportation Commission (CTC) remains the key programming tool for the state's transportation improvements, albeit a revised process which now will include some programming of project development and design.
- The operation, maintenance, and rehabilitation of the existing SHS retains a priority draw on available transportation funding.
- Although the Blueprint's numerous programs are largely collapsed into two major programs, the Environmental Enhancement and Mitigation program and the grade separation program were continued as separate programs. The State and Local Transportation Partnership program was provisionally continued to July 1, 1999, at which time it will sunset.

A summary of the major changes made by the bill is set out below.

Funding

- The bill defines the funds available for programming under the STIP to include all State Highway Account, Public Transportation Account, and federal transportation funds, *after* deducting the department's annual administration costs, annual expenditures for the maintenance and operations of the SHS, annual expenditures for the rehabilitation of the SHS, annual expenditures for local assistance, and safety.
- Of the funds available for the STIP, 75 percent are committed to the *Regional Improvement Program* and 25 percent to the *Interregional Improvement Program*.

¹⁵ Caltrans, October 14, 1997.

- The *Regional Improvement Program* funds will be available to regional transportation planning agencies for a broad range of transportation improvements, including not only state highways, but also grade separations, transportation system management projects, transportation demand management projects, soundwalls, rail transit projects, local street and road projects, intermodal facilities, and pedestrian and bicycle facilities. The projects selected by the region must be included in its Regional Transportation Improvement Programs (RTIP).
- The *Interregional Improvement Program* funds will be available for state highway, intercity rail, grade separations, and mass transit guideway improvements included by the Department in the *Interregional Improvement Program* (IIP), which replaces the PSTIP.
- Sixty percent of this IIP amount (15% of funds available for the STIP) is limited in use for interregional routes outside the urban areas and intercity rail; no less than 15 percent of this amount must be spent on intercity rail, including grade separation improvements. This portion of the IIP is exempt from the north-south split.
- The remaining 40 percent (10% of the funds available for the STIP) of the IIP is available for use anywhere on the SHS, as well as for intercity rail, grade separations, and mass transit guideways, and is subject to the north-south split.
- The existing *county minimum* formula which provides at least 70 percent of the STIP funds to the counties (as modified by the north-south split) is replaced with a “*county share*” system which represent 75 percent of the STIP funds, again as modified by the north-south split.
- The *Transportation Planning and Development Account* (TP&D) is renamed as the *Public Transportation Account* (PTA), and its distribution formula is changed.

Programming

- The regional transportation planning agencies are responsible for programming projects in their areas of jurisdiction, after consultation with Caltrans. The expenditure programs developed by the RTPAs for inclusion in the STIP, under SB 45, must be accepted or rejected by the CTC in their entirety. If there is a project in a regional program with which the CTC is dissatisfied, the commission may only reject the entire regional program, not just the individual project.
- The following separate Blueprint programs are eliminated: Flexible Congestion Relief, Transit Capital Relief, Transit Capital Improvement, Intercity, Commuter and Urban Rail Transit, Mass Transit Guideway, Traffic System Management, Retrofit Soundwalls, and intercity rail corridors. Statutes which provided matching funds for CMAQ and RSTP projects were also repealed. The State and Local Transportation Partnership Program is ended on July 1, 1999. The available funds are consolidated for distribution through the STIP process for both the Regional and Interregional Improvement Programs.
- The scope of the STIP (and fund estimate) cycle is reduced from seven years to four years. The first SB 45 STIP is a six-year transitional STIP.
- Adoption of a new fund estimate based on SB 45 is required by January 5, 1998; adoption of the transitional six-year 1998 STIP is required by June 1, 1998.
- Caltrans is charged with preparing the Interregional Improvement Program; the first IIP is due March 1, 1998. Regional transportation planning agencies and county

transportation commissions must also prepare their Regional Transportation Improvement Programs by March 1, 1998.

- Certain project development, design, and construction engineering costs are added to the elements currently programmed in the STIP (right-of-way and construction capital). These elements are to be identified for each project for each year of the STIP.
- The CTC cannot allocate funds for right-of-way acquisition and construction until completion of environmental studies and selection of a preferred alternative.
- Federal funds used for federal demonstration projects that would otherwise be available to the state are to be subtracted from the county share of the county where the project is located.
- A county may reserve its county share for future use on larger projects, seek an “advance” of its county share against Interregional Improvement Program funds, and pool its share with other counties.
- Interim implementing guidelines for the fund estimate and project selection will be developed by the CTC in consultation with Caltrans and regional planning agencies. *More extensive implementing guidelines for the STIP process are to be developed by the Department no later than September 1, 1998, and submitted to the CTC for adoption by December 31, 1998.*
- STIP amendments may only be proposed by the agency that originally submitted the project for programming.

Planning

- Caltrans is required to prepare a 10-year rehabilitation plan for state highways and bridges by May 1, 1998 to serve as the basis of future rehabilitation funding levels. The plan must be updated every two years.
- All projects included in the Regional Improvement Program and in the IIP must be consistent with the applicable regional transportation plan.
- All regional or interregional projects on the SHS must have a completed project study report or major investment study for inclusion in the RTIP or IIP.
- All projects on the SHS must comply with state and federal standards to ensure systemwide consistency with operational, safety, and maintenance needs.
- Up to ½ percent of an urban RTPAs or county transportation commission’s regional expenditures is available for project planning, programming, and monitoring purposes; non-urban RTPAs and commissions may receive up to 2 percent of their expenditures.

Project Delivery

- Project development, design, and construction engineering costs will now be programmed in the STIP in addition to right-of-way and construction capital costs. These elements are to be identified for each project for each year of the STIP.
- As both capital and support costs are debited against the county share for regional improvement projects, Project Managers and project teams delivering these projects will now need to recognize the “customer” role that the regional agencies will now have. Communication regarding the project scope, schedule, and cost (both support and capital) will be required on an ongoing basis. The ability to track and report project expenditures against planned amounts has been elevated in importance.

- The CTC is precluded from programming funding for right-of-way unless they make a finding that the environmental process will be complete in time for right-of-way or construction to proceed within the STIP period.

Implementation Timeline

The following are key dates for the implementation of the provisions of SB 45:

1998 CT Fund Estimate and 1998 CTC Fund Estimate.	January 5, 1998
Interregional Improvement Program and Regional Transportation Improvement Programs.	March 1, 1998
CT 10-year State Rehabilitation Plan.	May 1, 1998
CTC Adoption of 1998 STIP.	June 1, 1998
CT STIP Development Guidelines.	September 15, 1998
CTC Adoption of STIP Development	December 31, 1998

Conclusion

Considerable work remains ahead to incorporate these changes into a smooth process for the development and delivery of transportation projects.

Many critical issues need to be addressed related to the first post-SB 45 fund estimate, identification of project costs, project selection, new accounting demands, and the interplay of the new county-share system with the interregional program. Resolution of these SB 45 implementation issues, along with the ongoing need to identify and meet the public's transportation needs, will require continued collaboration between Caltrans, its regional partners, and the CTC.

4.6 Arizona

4.6.1 The Arizona State Transportation Planning Process

The Federal Highway Administration (FHWA) provides general guidelines for each state's highway program. However, individual states decide which projects to fund, and how to carry out their planning, programming and construction processes for portions of the highway system controlled by their state.

As part of the Arizona Department of Transportation's (ADOT) comprehensive planning process, data from various management information systems and source documents is utilized to enhance the state's management operations and decision making. The following information identifies the processes used to develop the State Transportation Plan, Statewide Transportation Improvement Program, Priority Programming, and the procedures used in developing the primary source documents. In addition, the relationship of the documents and the data collected and maintained for each of the management information systems and other data bases are explained.

4.6.2 State Transportation Plan

Background

With the enactment of the Intermodal Surface Transportation Act of 1991 (ISTEA) and the Clean Air Act Amendments, the United States embarked upon new and fundamental changes for transportation planning, financing, development, and operations by federal, state, regional and local governments. Some of the most significant changes are embodied in the transportation planning process requirements and the new partnerships necessary to achieve their goals. ISTEA is due for reauthorization in September 1997 and there is a possibility that new or revised planning requirements will be forthcoming.

The passage of the North American Free Trade Agreement (NAFTA) directed attention toward existing and potential trade corridors linking Mexico, Canada and the United States and transportation planning to facilitate increased commerce between the three nations.

In response to federal policy, as well as ongoing state policy to strengthen the effectiveness of its decision-making processes, management, and operations, ADOT embarked upon broad and fundamental changes to its transportation planning and decision-making process. The first major product of this effort was Arizona's 1994 multimodal State Transportation Plan (STP). The plan includes all surface modes of transportation: highway, railway, public transit, pipelines, bicycle and pedestrian. The STP serves as the center piece of the integrated transportation planning process. It is a policy document that provides a framework of goals, objectives and strategies to guide transportation decisions over the next 20 years. Regularly updated, the STP presents a strategic vision of Arizona's multimodal transportation planning efforts.

Process

The Plan was developed in accordance with the mandates of ISTEA. The complexity of the development process is depicted on Figure 4.3. There was significant public input to the current STP, with 27 public meetings held throughout the state and over 100 meetings with city, county, regional and tribal officials. In addition a public opinion survey consisting of 1,423 in-depth telephone interviews was conducted.

Figure 4.3 Arizona Plan Development Process

Throughout its development the plan was reviewed by the State Transportation Plan Advisory Committee, a group of 84 individuals representing 58 governmental agencies, businesses and private citizens. The wide range of membership allowed interaction between public and private sector representatives and promoted coordination.

Data collection, coordination, and analysis provided a range of comprehensive information to support plan development. These systems and sources are explained in detail beginning on page 43.

The transportation planning and decision-making entities within Arizona, such as the Metropolitan Planning Organizations (MPOs) for the major metropolitan regions, the rural Council of Governments (COGs), tribal governments, federal agencies responsible for federal lands, and local jurisdictions also provided input to the current Plan.

Other input to the Plan includes; (1) non-metropolitan planning documents, especially the Small Area Transportation Studies, (2) the Needs Assessment Report and (3) the results of public opinion polling and the assessment of public comments and inputs from the public meetings.

As the Plan's goals and objectives, strategic alternatives and other components develop, they are analyzed and evaluated from modal, environmental and fiscal perspectives. These evaluations lead to the assessment of the implications and effectiveness of the proposed strategies.

The Plan is intended to provide a framework of goals, objectives, and strategies to guide future transportation decisions. The Plan is a flexible, fluid document that is responsive to the ever changing circumstances and transportation needs.

The 1994 Arizona State Transportation Plan is completed and is currently being implemented. The Plan is the beginning of Arizona's multimodal transportation planning process. While State System level planning continues, the ADOT transportation planning process is now shifting emphasis from the transportation system as a whole toward specific multimodal transportation corridors of statewide significance. The deficiencies, needs and investment opportunities of surface transportation facilities in these corridors are being investigated in greater detail through the Corridor Profiles Study Program. This program is detailed in Section 4.6.5.

4.6.3 Statewide Transportation Improvement Program (STIP)

Background

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, requires each state to submit a Statewide Transportation Improvement Program. Title 23, Section 135 (f) (1), (2) and (4) requires:

- All highway and transit projects in the state, funded under Title 23 and the Federal Transit Act, must be included in a federally approved STIP.
- Projects in the STIP must be consistent with the statewide long-range transportation plan and metropolitan Transportation Improvement Programs (TIPs).
- The program must reflect expected funding and priorities for programming, including transportation enhancements.

- Additionally, in air quality non-attainment areas, only those projects which have been determined to conform under the requirements of the Clean Air Act Amendments of 1990 may be included in the STIP.
- There must be an opportunity for public comment on the proposed improvement program and it must be reviewed and approved at least biennially by the Secretary of Transportation.

Process

ADOT compiles the three year project list in cooperation with all federal agencies, COGs and MPOs, as required by ISTEA.

All projects are also within the short-range guidelines of the State Highway System Plan. Depending on future conditions, certain projects may be revised as they reach the final design stage or added as transportation needs change. If revisions occur, action to amend the STIP is taken as necessary.

4.6.4 Priority Programming

Background

The statutory power to prioritize individual airport and highway projects lies with the State Transportation Board, a seven member panel appointed by the Governor. Members serve a six-year term and represent all geographic regions of the state. In addition to establishing priorities, this panel awards all highway construction contracts.

The Transportation Board is assisted in setting priorities by the Priority Planning Committee (PPC) appointed by the ADOT Director. The PPC is guided by policies established by the Transportation Board which are periodically reviewed and updated as needed to meet ever changing transportation needs.

The PPC is supported by the ADOT Program Development Committee (PDC). This committee consists of 10 ADOT employees (7 voting members and 3 nonvoting staff members). The various professional transportation disciplines are represented by the voting members to ensure that all issues and concerns of potential projects are addressed. After review of potential projects, the PDC recommends projects for the scoping list to the PPC. As necessary the PDC recommends to the PPC, project changes or modifications.

Process

ADOT planners and engineers identify highway needs using a number of technical measures. These measures include; (1) information from the ADOT pavement management system, (2) traffic counts and projections, (3) truck studies, (4) accident studies, (5) corridor profile studies, (6) the State Highway Plan and (7) SATS.

Each potential highway project must compete for funding and programming with other highway projects. The Scoping List is the first step in this process and is coordinated and developed by the PDC, with input from District Engineers and the MPOs. After approval by the Transportation Board, listed projects are scheduled for a scoping study.

Project scoping is conducted with consultant services and is an overview of issues and concerns relative to the project. After the project has been scoped it is put into the project pool for programming.

Projects are then prioritized using several criteria. These include; (1) significance of the route, (2) route continuity, (3) cost effectiveness measured by the project cost per motorist served and (4) recommendations of the District Engineers.

The highest ranked projects for each program category are then considered for inclusion in the construction program to the extent that funding is available.

After release by the Transportation Board, a Tentative Five-Year Program is distributed throughout the state to local elected officials, transportation agencies and other interested parties. In order to develop cooperation and participation with the general public, a series of hearings are held throughout the state at which all viewpoints can be heard regarding the Five-Year Program.

4.6.5 Corridor Profile Studies

Background

The impetus for the Corridor Profile Analysis Studies came directly from the 1994 Arizona State Transportation Plan. These studies focus on multimodal corridors of statewide significance. The goal of these studies is to develop specific strategies that include all transportation modes to accommodate the transportation needs in the key corridors in Arizona.

Process

A process for establishing corridors of statewide significance and prioritizing these multimodal transportation corridors for future study was developed in the plan. The process utilized for identifying the major corridors was based on the goals of the State Transportation Plan, ISTEA planning requirements, public input and other factors described below.

In order to develop, maintain and preserve an integrated, balanced and multimodal State Transportation System, it is necessary to have a process for transitioning from the plans and policies in the State Transportation Plan into improvement projects and/or investment opportunities such as intermodal facilities, expanded transit service, bicycle - pedestrian facilities and highway projects. This process starts out by identifying significant transportation corridors that can be analyzed and evaluated to develop investment opportunities that fulfill the goals of the State Transportation Plan.

Corridors are defined as broad geographic bands through which various modal links provide important connections for the movement of people and goods. The corridors consist of public facilities (highways and public transit service) and facilities owned and operated by the private sector (railroads, pipelines and intercity bus lines). While some components of these corridors are not owned or operated by the state, the state does have an interest in the operational access to these facilities because of the importance to the entire transportation system and the economic vitality of the state. Therefore, the protection and the development of these corridors should be included in the planning and performance criteria for state modal plans, regional plans and local transportation plans. An example of a multimodal corridor that exists within Arizona is the Phoenix to Tucson corridor. Within approximately a one-half mile width, this corridor includes Interstate 10 (a major truck route), Union Pacific rail freight service, Amtrak passenger service, and intercity bus service.

Identification of the corridors began with a review of reports from several agencies. Also the 23 planning factors identified in the ISTEA transportation legislation and recent statewide

modal plans were used. Data from these documents were also used in ranking corridors of statewide significance. The criteria developed from these sources were placed in three categories:

- Mode of transportation,
- Connectivity, and
- Economic development and recreational areas.

The criteria use for determining the mode of transportation included:

- Routes on the National Highway System,
- Principal Arterials on the Functional Classification System,
- Major Truck routes,
- Accessibility for existing intercity transit service,
- Class 1 Railroads,
- Major Pipelines and
- Bicycle routes.

The criteria used to determine connectivity included:

- Access to international border crossings,
- Access to tribal government headquarters,
- Connectivity between MPOs and future MPOs,
- Access to commercial passenger airports, and
- Access to national parks, monuments and military installations.

In addition criteria relating to other factors, specifically economic development and access to state recreation areas were used.

Using these criteria, 33 corridors of statewide significance were identified. With the establishment of corridors having statewide significance, ADOT made the commitment to conduct Corridor Profile Analysis Studies to identify the needs and investment opportunities that exist in each corridor. However, due to funding limitations not all corridors could be studied at one time. A methodology was developed to prioritize the corridors for more in depth studies and analysis of their needs. A weighted value between 0 and 3 was assigned to each of the criteria listed above. These weights were based on comments received at public hearings and reflect the concerns of the public. A corridor evaluation matrix was developed that summarized the weighted criteria totals by corridor.

The corridors with the highest scores were then given the highest priority. The results identified 14 high priority corridors of statewide significance in Arizona (see Figure 4.4 for corridor locations).

ADOT's Transportation Planning Group (TPG) had the responsibility of developing the Corridor Profile efforts. TPG's Planning Team began this effort in the fall of 1995 and had six corridor studies underway by the middle of 1996. These were:

- Tucson to Nogales,

-
- Phoenix - Kingman - Nevada,
 - Phoenix - Payson - Show Low,
 - San Luis - Yuma - Bullhead City,
 - Prescott - Prescott Valley - Cordes Junction and
 - Phoenix - Flagstaff - Page.

Major Input to the State Planning Process

The information resulting from the Corridor Profile Studies can easily be taken to the more detailed management action and engineering/design level studies that lead to scheduling and implementation of projects. The final reports will assist in the decision making process by providing similar information for corridors throughout the state.

4.6.6 Small Area Studies (SATS)

Background

ADOT in cooperation with the FHWA sponsors a program to prepare transportation plans for local communities. Initiated in 1985, the Small Area Transportation Study (SATS) Program, has completed over 30 SATS. This is a cooperative effort between ADOT, local governments and consulting services. The costs of some studies are as much as \$140,000 and costs depend upon the size of the area, specific transportation issues and complexity of the studies. Recently, the nature of these transportation studies has transitioned from being strictly small urban area studies to larger regional transportation studies.

Process

The SATS program was designed as the model of agency cooperation between ADOT and the non-metropolitan local communities throughout the state. The individual transportation studies are tailored to each community and are intended to be the community's study rather than ADOT's study. Each local community directly manages the study, and identifies local transportation goals, objectives and issues. ADOT is responsible for providing matching funds, technical guidance and appropriate data.

The primary objective of the SATS program is to establish a transportation plan which can accommodate future development and improvements. Each small area transportation study has several sub-objectives within this overall primary objective, these are:

- Provide a local street circulation system plan,
- Reserve right-of-way for future construction,

Figure 4.4 Arizona High Priority Corridors Of Statewide Significance

-
- Provide the opportunity to restrict curb cuts and roadway access,
 - Develop good public relations between the state, the community and the public and
 - Introduce the capital improvement program into the local budget process.

The following phases are part of a SATS:

- The initial scoping process,
- The consultant selection, and
- Conducting the transportation study.

The study scoping process is a cooperative effort between ADOT and the local community. The community first contacts ADOT's Transportation Planning Group to request a meeting to discuss the community's perceived transportation problems and needs. Once the need for a study is established, an Intergovernmental Agreement (IGA) is developed between ADOT and the community which spells out the relationships between the two agencies and funding levels for the study. Funding is provided on a 50/50 match split between ADOT and the local community. A Technical Advisory Committee (TAC) is then selected to guide development of the study. Transportation issues, deficiencies and needs are identified and discussed for both local government and state roadways. ADOT and the local community then cooperatively prepare a formal scope of work.

Based on the scope of work, the community prepares a request for proposal (RFP). Consultant proposals are then solicited and jointly evaluated by ADOT and the local community. Prospective consultants are then interviewed and the study consultant is selected.

The consultant performs the transportation study under the management of the local community. The ADOT TPG and representatives from the local community serve on a TAC with representatives from other interested agencies such as the ADOT Engineering District and COGs. ADOT provides information and data such as traffic counts, aerial photography and accident data to the consultant. The local community provides local reports, data and other information.

The scope of work for each study is tailored to the needs of the individual community and therefore the studies often differ in content and level of detail. However, the general steps of each study are similar and include:

- Identifying major study issues
- Inventorying existing conditions and projecting land use and travel characteristics,
- Analyzing the existing network to identify deficiencies,
- Identifying potential improvements and analyzing future networks,
- Developing short-range and long-range implementation programs,
- Coordinating with the TAC, local, regional and state agencies and
- Providing a public participation process.

Major Input to the State Planning Process

The information from the SATS pertinent to the State Highway System is integrated into the State Intermodal Transportation Plan and in the development of the Corridor Profile Studies.

It is an important mechanism in creating:

- Interjurisdictional cooperation,
- Consensus between decision makers and
- Providing greater flexibility in utilizing limited resources.

This will allow for the development of transportation systems that most effectively meet the identified needs in a more timely manner.

4.6.7 Transit Development Plan (TDP)

Background

Transit Development Plans (TDPs) are short-range plans covering a five-year horizon. These plans are conducted by the four MPOs in the state. They are also prepared for the state's four non-metropolitan planning areas by ADOT and the regional COGs. The TDPs focus on specific improvements desired over the time frame involved.

Process

A TAC is established for each planning area. Capital improvement needs and expansion desires of transit services are evaluated on a community by community basis. Needs for regional connectivity are also evaluated. Demographics are explored to identify population trends, employment characteristics and other changes which may alter mobility demands. An estimated transit demand model is crafted for each subregion using modeling techniques developed through a Transit Cooperative Research Program (TCRP) project. The state's Public Transit Asset Management System, (PTMS) is also reviewed to assure that the needs reflected in the TDPs are congruent with the asset management and replacement schedules in the PTMS. Interviews are conducted with local public agencies, private-sector providers and social service/medical providers to gauge the relative demands for mobility by those who need to access services as well as other travel needs.

The information developed in the TDPs is used, in part to develop the Arizona Transportation Needs Assessment Report, a report to the State Legislature done every five years, projecting unmet transportation needs, by mode, for the decade to come.

Major Input to the State Planning Process

The TDPs are an important element in the development of the State Transit Plan, a modal adjunct to the Arizona State Transportation Plan, the state's long range multimodal policy document. The needs and desires reflected in the public input processes of the state's eight TDPS help to form the policies in the State Transit Plan.

4.6.8 State Transit Plan

Background

The State Transit Plan is a policy plan covering public transit issues in large urban, small urban and rural areas of the state, and in those corridors of statewide significance which provide connectivity between the state's communities.

Process

The State Transit Plan is developed by ADOT assisted by a Plan Advisory Committee consisting of representatives of the various regional planning agencies. Information from the Transit Development Plans of the various agencies, the long-range plans of those agencies, ADOT's *Intercity Bus Analysis Report*, and other pertinent reports are incorporated and referenced in the State Transit Plan. This Plan is a policy plan which details the transit related issues identified in the Arizona State Transportation Plan.

Major Input to the State Planning Process

The State Transit Plan is a modal companion to the Arizona State Transportation Plan. As noted above, the State Transit Plan expands on the transit related finding, goals and objectives of the Arizona State Transportation Plan. It also provides, along with the TDPs, a wealth of community or corridor specific information which is of great value in developing Corridor Profile Studies.

4.6.9 Rail Plan

Background

With the passage of ISTEA in 1991, SPR funding became available for the first time to fund non-highway modal planning programs. From 1991 to 1995, \$40,000 was allocated annually from ADOT's SPR funds for rail planning activities.

This funding permitted the opportunity to update the State's Shortline Data Base. The last time this was done was during the development of the state's first Rail Plan in 1978. By the Spring of 1994, 10 of the state's 13 light-density rail lines had been field reviewed.

Process

As part of this effort, a consultant was hired to assist in the analysis of the state's short-line industry. The analysis concentrated on two areas: (1) the current conditions of the 10 active branch lines and (2) capital needs of these lines over the next 5-, 10- and 20-year periods. The track structure, bridges, highway crossings, maintenance facilities and intermodal operations were reviewed for all branches.

When the program was established in 1991, the intent was to visit each of the branches once a year for review. During the visit, a field audit was conducted for lines that were qualified to receive federal financial assistance. Once every four years, a consultant would conduct the field review to update the previous review.

When SPR funding ended in 1995, staff began conducting field reviews of each branch identifying their conditions and needs in lieu of hiring a consultant. While not as effective as the consultant assisted effort, it continues to provide the information necessary for input to the State Transportation Planning Process.

Major Input to the State Planning Process

In 1994, the updated condition and needs information was used to develop the State's first Rail Plan since the initial 1978 Plan. In addition, the 1994 Plan satisfied the Federal Railroad

Administration's (FRA) statutory requirements to provide a history of the State's Rail System in the Plan. The Plan also provided a detailed analysis of the statewide intermodal facilities.

The information developed by the branch line studies and the State Rail Plan are used as the Rail component of the State Needs Assessment and the State Intermodal Transportation Plan. This information is also included in the development of Small Area Transportation Studies, the Corridor Profile studies and local government transportation plans.

4.6.10 Bicycle Plan

Background

The ISTEA requires ADOT and all MPOs to develop plans and programs that will provide for the development of transportation facilities including bicycle facilities. In December of 1995 the first Bicycle Plan since 1974 was developed by TPG.

Planning and development of bicycling facilities is recognized by ADOT as an energy efficient means of transportation providing the linkage to an intermodal transportation system for the state. The significance of this mode is increasing due to the positive impact it has on reducing traffic congestion and air pollution.

Process

Information regarding highway shoulder characteristics, traffic volumes and suitability ratings of bikeways are collected and analyzed to identify current conditions and needs required to accommodate bicyclists. Surveys are conducted periodically of both cyclists and non cyclists to gather information regarding concerns and attitudes about cycling issues.

The plan is intended to ensure that bicycle facilities are considered and incorporated in the development of the long-range State and MPO Transportation Plans. It is not designed to address specifics of each project but offers general principles and policies to establish cooperation between ADOT and local jurisdictions. It can also increase opportunities to use non-motorized transportation modes and establish some consistency when developing these facilities/systems. ADOT's policy is to consider bicyclists needs when constructing or reconstructing state highways, when financially feasible to do so.

Major Input to the State Planning Process

This information is included in the development of the Small Area Transportation Studies, the Corridor Profile Studies and local government transportation plans. The plan also provides the bicycle element of the State Intermodal Transportation Plan as required by ISTEA.

The following systems provide data to assist in the decision making process and for determining project schedules, priorities and cost analysis.

4.6.11 Management Systems

Arizona implemented the six management systems under ISTEA (pavement, bridge, congestion, safety, intermodal, public transportation). It has maintained these even through they are no longer required under ISTEA. These systems are utilized in developing deficiency analyses, strategies and plans for improvements, and project implementation prioritization. This benefits both the planning and programming processes.

4.6.12 Highway Funding

Similar to other states, Arizona receives an allocation of federal highway funds to support its roadways on the National Highway System. These funds are deposited by ADOT and are used for projects on the state system that are eligible for federal aid. In addition, the Maricopa Association of Governments (MAG) and the Pima Association of Governments (PAG) receive a direct allocation of federal funds for use in their Transportation Management Areas (TMAs).

The state also generates highway user tax revenues through taxes on fuel, motor carrier operations and other highway related users. These revenues are deposited in the Highway User Revenue Fund (HURF) and are allocated by the state legislature in accordance with a statutory distribution formula to ADOT, cities and counties. Funds must be used for planning, designing, maintaining and constructing transportation systems.

The 1995 Highway Needs Assessment Report indicated that approximately \$18 billion dollars of needs exist over the next ten years. Available funding from all sources for the next ten years is approximately \$9 billion.

4.7 New Mexico

This chapter describes the New Mexico transportation planning and programming process. This planning effort is carried out by three main agencies: the New Mexico State Highway and Transportation Department (NMSHTD), the Metropolitan Planning Organizations (MPOs), and the Regional Planning Organizations (RPOs). Plans and programs for transportation actions federal and/or state funds begin at the Metropolitan Planning Organization (MPO) or Regional Planning Organization (RPO) level are then approved and assembled by the state into statewide planning and improvement programs.

4.7.1 Planning

Metropolitan Areas

There are four metropolitan areas in New Mexico: Albuquerque, Santa Fe, Las Cruces, and the Sunland Park portion of the El Paso, Texas metropolitan area. Each of these has an MPO. Each MPO generates its multimodal plans based on a process meeting the federal guidelines and striving to meet its own transportation-related objectives. Each MPO has a Policy Committee and a Technical Committee. Technical Committees are generally the transportation-related technical staff of the public agencies providing transportation in the metropolitan area. The Policy Committees consist of elected or appointed representatives of the governmental units within the metropolitan areas. The New Mexico State Highway and Transportation Department (NMSHTD) is represented on both the technical and policy committees as advisory (non-voting) members. Public involvement is also required throughout the planning process.

The MPO staff, with input and support from staff of other agencies, conducts the technical analyses needed to prepare the proposed plan or program. The plan must be financially constrained to estimated available funding. The plan must also be prioritized for implementation. The plan is then submitted to the Technical Committee for review.

The Technical Committee recommends a plan to the Policy Committee for formal adoption. All plan components and projects within the metropolitan area which use federal or state funds must be approved by the MPO Policy Committee to be considered for implementation. One of the State Highway Commissioners sits on the Policy Committee of the Albuquerque MPO (Middle Rio Grande Council of Governments) as a non-voting advisory member.

The multimodal plan includes pedestrian, bicycle, and rail (intermodal) components. Each of the MPOs also has a public transit operation within its boundaries. The transit plan is developed by the transit operator. The transit plan is incorporated into the MPOs multimodal plan upon concurrence by the Policy Committee.

Regional Planning Organizations

RPOs cover the entire state of New Mexico, although for transportation plan and programming purposes, they do not include the MPO areas. Generally the RPOs cover rural areas of the state plus the small towns and cities. New Mexico has seven RPOs.

The RPOs work cooperatively with the NMSHTD districts to prepare transportation plans. The NMSHTD normally provides the technical expertise to develop the plan. There are six NMSHTD districts. The RPOs, working with NMSHTD staff input, recommend projects and a plan to the NMSHTD districts. While the RPO boundaries and NMSHTD district boundaries often do not

match, each RPO with land within a district presents its recommendations for areas within the respective district. The NMSHTD district coordinates RPO proposals and plans for consistency.

Plans must be financially achievable with projected resources. While these plans are generally highway-oriented, they are also multimodal. They may include rural public transit, railroads and intermodal facilities, and other forms of transportation.

National Highway System

The NMSHTD conducts all planning for the National Highway System as well as the state highway system in general. The department has an extensive database consisting of HPMS and other management system components, of which many are in the ARC-INFO GIS. The NMSHTD has a rating system used to identify roads and bridges which need improvement or replacement. In general, the factors used to determine the deficiency ratings are:

- Pavement condition rating (source: Pavement Management System)
- Capacity/congestion (source: Congestion Management System)
- Projected hazard elimination (source: Safety Management System)
- Bridge sufficiency rating (source: Bridge Management System)
- Intermodal connection needs (source: Intermodal Management System)

The NMSHTD analyzes the improvement requirements based on the rating system and selects improvement or replacement projects. The resulting projects become a part of the state highway plan.

Statewide Plan

The statewide plan is compiled by the NMSHTD. The plan is incorporates MPO plans and considers RPO recommendations. The State Highway Commissioners (one appointed per each of the six districts by the governor) are normally involved at the local level as the subarea plans are developed, so approval as a statewide plan is facilitated.

The commission hosts meetings around the state as it considers plan adoption in order to give state constituents an opportunity to review the plan and provide input.

The statewide plan is normally a set of objectives plus a prioritized set of improvement projects with a horizon of approximately 20 years.

Coordination With Chihuahua

The NMSHTD reports a good working relationship with officials of the State of Chihuahua. There is no formal planning process between the two states. The first major project involving the two states is the development of the Santa Teresa border crossing. This project is to relieve the congestion at the downtown El Paso-Ciudad Juarez crossings. The state of Chihuahua has constructed the San Jeronimo approach road on its side of the border and the State of New Mexico has built a four-lane divided highway, State Road 136, on its side of the border.

4.7.2 Programming

State and federal funds are distributed to each of the six districts by formula. The state currently bases the formula primarily on lane-miles and vehicle-miles of travel. District bridge funding is

also distributed by formula based primarily on bridge lengths and bridge conditions. Planning funds are distributed directly to the MPOs and RPOs by formula. Funding is on a six-year program. The first three years are submitted to the Federal Highway Administration (FHWA) as the Statewide Transportation Improvement Program (STIP); the FHWA approves the first two years and the third years' projects are used a backup in case of delays to the projects in the first two years. Actual project funding is in a one-year annual element which is the first year of the approved STIP. The FHWA and the FTA jointly approve the STIP. The STIP is developed at the district level in the same way as the transportation plan, then combined at the statewide level. The STIP must be approved by the State Highway Commission. Since the commissions are involved at the district level as programs are developed, STIPs are normally approved without extensive changes.

MPOs prioritize their projects for implementation in accordance with locally selected criteria. The New Mexico border zone includes two MPOs: Las Cruces and El Paso (virtually all in Texas). The Las Cruces MPO's project funding criteria are primarily pavement conditions and quality of traffic service. This MPO uses federal and state funds which must be included in its Transportation Improvement Program. For transit capitol project funding, projects in this area compete against other projects, both within and outside New Mexico, depending on funding type in accordance with FTA procedures.

These procedures are generally applied to all projects which are proposed for implementation using state or federal funds. A project rating results with the best ratings being in the highest category for funding. The MPO considers the ratings as well as such criteria as required lead time and geographic distribution within the area, in developing its three-year STIP. The proposed STIP is reviewed in a public involvement process and ultimately approved by the Policy Committee after recommendation from the Technical Committee. Projects in the Las Cruces MPO STIP are included in the state's STIP.

4.7.3 RPOs

RPOs recommend funding priorities to the NMSHTD districts. The NMSHTD generates priority ratings using a formula that is currently its funding criteria. The funding programs are assembled by each of the six NMSHTD districts with participation by the district's state commissioner. They are fiscally constrained to available funds.

Statewide STIP

Once the MPO and six district STIPs are assembled, they go to the State Highway Commission for review and approval. Since the commissioners are involved in the assembly of the programs at the district level, and since the programs are fiscally constrained, approval is facilitated. When the project(s) from a district outstrip the available funds, the commissioner from that district may approach one or more other commissioners to "borrow" funds from another district's allocation, to be returned from the following year's allocation.

As mentioned above, funding is defined in the form of a one-year annual implementation element which is the first of the three year funding plan submitted in the STIP.

4.7.4 Relevance to Binational Planning and Programming

Project decisions are made in New Mexico's border zone at three levels:

- State Highway Commission approval of all state and federal funded non-MPO projects;
- MPO approval for urbanized area projects using state and federal funds; and

- Local agency's approval for projects not using state or federal funds. Any or all of these three could come into play for projects in the border zone.

It is likely that most funding for projects benefiting binational trade in the border area will be for projects outside MPO urbanized areas. Most of these will be for state roads (Interstate, U.S., state route designations). As a result, most funding will need to be handled through the first level, the State Highway Commission, based on proposals generated at the district level by the RPOs and districts. In the Sunland Park and Las Cruces urbanized areas, the El Paso and Las Cruces MPOs would handle the funding requests for projects involving state and federal funds.

4.8 Texas

Texas has a long history of cross-border coordination, and perhaps the biggest challenge, due to its extensive border with four different Mexican states and numerous border crossings (there are 23 crossings in operation between Texas and Mexico). As a result of its long border and its location relative to major concentrations of Mexican population and industry, Texas accounts for the largest share of border-area trade with Mexico.

Texas has the unique challenge of coordinating with four separate Mexican states, each of which goes about its highway planning and implementation process somewhat differently. On the other hand, there is a long history of commitment to binational cooperation between Texas and its Mexican neighbors. This chapter discusses the state and metropolitan government roles and outlines the major work products produced by the planning process.

The Texas Department of Transportation (TxDOT) has been authorized by the Governor of Texas to act in his behalf in matters relating to transportation plans. TxDOT has prepared and continues to maintain numerous programs and documents in order to fulfill these responsibilities. Three documents stand out as vital elements of transportation planning in Texas, these include the:

- Texas Transportation Plan,
- Texas Unified Transportation Program, and
- Statewide Transportation Improvement Program (STIP).

TxDOT also works cooperatively with and supports the five designated Metropolitan Planning Organizations (MPOs) that serve the metropolitan areas along the border between Texas and the Mexican states of Tamaulipas, Nuevo Leon, Chihuahua, and Coahuila. These MPOs include:

- Brownsville,
- Harlingen-San Benito,
- Hidalgo County,
- Laredo, and
- El Paso.

This chapter describes how TxDOT develops the key transportation programming documents and how the MPOs along the border structure their planning processes and prepare their transportation improvement programs.

4.8.1 The Texas Transportation Plan

In 1991, two legislative actions provided TxDOT with the mandate to develop the Texas Transportation Plan. In enacting House Bill 9, the Texas Legislature charged TxDOT with the development of a statewide transportation plan to include the following transportation modes: highways and turnpikes, aviation, mass transportation, railroads, high-speed rail and water traffic. The bill also required TxDOT to seek the opinions and assistance of other state agencies and political entities in developing the Plan. At the federal level, ISTEA requires TxDOT to develop and implement a planning process for multimodal surface transportation that encompasses all areas of the state. ISTEA also mandates that the transportation planning process address 23 different planning factors (described in Chapter 4.3). According to ISTEA, the statewide plan

provides the policy framework that guides the selection of projects and programming them into the STIP.

TxDOT has developed the Texas Transportation Plan and is currently involved in the implementation of the actions outlined in the Plan. Much of the effort in the planning process has focused on policy development. At the outset of the planning process, public outreach helped to identify issues and areas of concern that the Plan should address, as well as a vision of the future of transportation in Texas. Based on this input and information developed during the technical analysis process, six issue committees were established to guide the Plan's development: these were economic development, finance, international trade, mobility and accessibility, corridor preservation, and interjurisdictional coordination.

The International Trade Committee examined issues relating to international transportation in the state. Of particular interest to the committee was the ability of the infrastructure at the border to handle the increases in traffic expected with the passage of NAFTA. The committee also examined procedural issues at the border, and the activities of other NAFTA activity centers in the state, such as the Dallas-Ft. Worth Airport and the Port of Houston.

The various committees' specific recommendations are reflected in the policy recommendations of the Plan. Some of the recommendations of the committee relating to international issues are as follows:

Policy: Ensure adequate transportation capacity to meet international trade-related demands

Actions

- Include international ports of entry and international trade corridors as critical elements of the Texas multimodal transportation system.
- Construct new highway segments to ensure north/south transportation system continuity where needed, using state and federal funds.
- Establish a joint working group to develop a prioritized capital improvement program and associated funding mechanisms to enhance international border crossings.
- Provide “one-stop” shopping for regulatory requirements, compliance monitoring and enforcement for commercial vehicles involved in international trade.

Policy: Maximize the efficiency and effectiveness of freight transportation

Actions

- Review regulations affecting freight transportation and eliminate regulations that negatively affect highway, rail, and waterborne freight competitiveness while maintaining those necessary for public health, safety and environmental protection.
- Use targeted capital improvements, prioritized funding, and other means to expand availability and use of economically efficient and environmentally sound freight transportation modes.
- Establish exclusive truck lanes or restrict trucks to certain lanes on roadways where truck traffic impedes commuter travel

Now that all the actions in the Plan have been adopted, TxDOT is proceeding with the implementation of those actions. Some policies, strategies and actions will require new legislation or changes in the existing regulatory environment. Others will require policy changes or projects to be funded in the STIP or TxDOT's budget.

4.8.2 Texas Unified Transportation Program (UTP)

The Texas Transportation Commission (commission) and the Texas Department of Transportation (TxDOT) use the *Unified Transportation Program* (UTP) as TxDOT's 10-year plan for transportation project development. This includes both federal and state funded projects. By updating the UTP annually, the commission and TxDOT are able to customize the UTP as many of the ISTEA programs become better defined. Annual updating also enables the UTP to serve as an integral part of the planning process required by ISTEA.

The STIP, the three year financial plan, and the UTP are the backbone for developing the intermodal transportation network in Texas.

Categories have been established in the UTP to reflect the various systems outlined by ISTEA such as the National Highway System (NHS), and the Surface Transportation Program (STP) for metropolitan, urban and rural areas. Most of the Texas Trunk System, as established by the commission, qualifies for NHS funds. Categories such as NHS are selected on a statewide basis after evaluations and rankings.

Categories have also been established for various activities that reflect the intended use of specified funds (such as safety, rehabilitation, preventive maintenance, congestion mitigating and air quality improvement, Farm to Market Roads, bridges, etc.) Each of these various activities utilize different criteria to determine projects. The projects use cost, traffic volume, roadway capacity and other factors to evaluate whether a particular proposed improvement is cost effective as a mobility improvement. (Most mobility projects are part of NHS or STP.)

Examples of criteria used for allocation of these funds are:

- Safety projects: accident rate, traffic volume, cost, proposed improvement accident reduction factors, and others.
- Rehabilitation funds: pavement condition, traffic volume, and others.
- The Congestion Mitigating and Air Quality Improvement (CMAQ): population and the severity of air quality non-attainment.

The commission authorizes projects in the UTP in several different ways. One way is for the commission to authorize individual projects for inclusion in certain categories of work, and on an annual basis, review and reauthorize projects as appropriate. These projects are usually mobility and bridge replacement and rehabilitation projects which typically take a significant length of time to develop. This is particularly true of projects with expanded or added capacity, and projects in new locations. These types of projects often require feasibility studies, route studies, public hearings, environmental assessments, assessments of social and economic impacts, and the purchase of right-of-way.

Levels of authority have been established for mobility projects to allow timely project progression through the various stages of project development. NHS mobility projects are evaluated statewide in comparison to other similar NHS mobility projects, based on cost effectiveness ranking and availability of funds. Levels of authorization are assigned based on the project's stage of development and projected funding availability.

Priority 2 is authority for the preparation of plans, specifications and estimates (PS&Es), and right-of-way acquisition. During Priority 2, project plans should be substantially complete (geometric, structural, hydraulic, and pavement design approved by TxDOT's Design Division) and a substantial amount of the required right-of-way acquired. Districts should establish a proposed fiscal year for construction contract award.

Priority 1 is the authority for completion of PS&E's, utility adjustments and construction (projects let to contract). Generally, Priority 1 projects are the highest ranked projects that have letting dates during the most current four fiscal years. Districts should have completed 75 percent of the design work and right-of-way acquisition before moving from Priority 2 to Priority 1. The number of projects in Priority 1 is constrained to four years of anticipated available apportionments. The most recent year of Priority 1 is the current year letting list.

Another way the commission authorizes projects for some of the categories in the UTP is by authorizing program amounts (usually once a year) for activities which reflect the commission's intentions to address a specific activity such as rehabilitation or preventive maintenance. The program amounts for a particular program may be allocated to the districts by a formula (with the formula also approved by the commission). Project eligibility is developed by the districts on an as-needed basis within their allocation. For other programs such as safety or railroad signals, the program amounts are distributed on a statewide basis by the TxDOT division office responsible for the administration of that program (after the division office has evaluated, ranked, prioritized and selected projects for program).

The dollar amounts approved by the commission for the programs are generally based on anticipated apportionments that will become available in the future. Projects in programs are authorized for development so that they will be available for construction when the apportionments are established annually.

Many of the programs are managed by TxDOT as bank balances. Projects developed as part of a bank balance program can be selected of, developed, and let to contract with each project's cost debited to the bank balance of funds available for that program. Most of the bank balance programs consist of minor projects directed toward preserving the current system and safety. The bank balance method of developing projects for programs allows TxDOT (both the districts and divisions) the flexibility to respond to modifications requested by the MPO and others without going back to the commission for every project change or cancellation as long as the bank balance for that program is not exceeded.

A summary and discussion of each category of the UTP is shown in Table 4.3 The discussion includes the description, restrictions, allocation to districts, and policy for each category.

Table 4.3
Summary of Categories in the 1997 Unified Transportation Program

Category Number	Category Name	Programming Authority	Funding	Bank Balance (Yes/No), Responsible Entity	Ranking Index or Allocation Formula	Brief Summary, Restrictions, Etc.
1	Interstate Construction	Commission approval. Project specific	Federal 90% State 10%	No	None	Interstate highway projects remaining on Pre-ISTEA Interstate Needs Estimate
2	Interstate Maintenance	Commission allocation. Allocation formula. Bank balance to districts. Projects selected by districts.	Federal 90% State 10%	Yes, Districts	45% IH ESAL/Ln-Mi 45% IH Ln-Mi 10% IH Ln-Mi W/Sub Condition Scores Multiplied by Materials Cost Factor (MCF)	Rehabilitation of existing interstate Highway System main lanes & structures, construction of HOV lanes, rehabilitation of signs, pavement markings, striping, etc. Funds to be spent on Interstate Highway System. (No added capacity.)
3A	National Highway System (NHS) Mobility	Commission approval. Project specific. Selected statewide based on Cost Effectiveness Index (CEI).	Federal 80% State 20%	No	Cost Effectiveness Index (CEI)	Mobility (added capacity) projects on NHS. Projects ranked in three major groups, expansions, interchanges, and new loops & bypasses, and in three subgroups based on population (counties greater than 200,000; counties between 200,000 and 50,000; and counties less than 50,000). Projects prioritized by cost-effectiveness index.
3B	NHS Texas Trunk System	Commission approval. Project specific. Selected statewide based on CEI.	Federal 80% State 20%	No	CEI	Added capacity projects on the Texas Trunk System which are also on the NHS. Category presently limited to expansions of rural highways from two lanes to four lanes divided. Projects prioritized by cost-effectiveness index.
3C	NHS Rehabilitation	Commission allocation. Allocation formula. Bank balance to districts. Projects selected by districts.	Federal 80% State 20%	Yes, Districts	45% Non-IH NHS ESA/Ln-Mi 45% Non-IH NHS Ln-Mi 10% Non-IH Principal Arterial Ln-Mi W/Sub Condition Scores Multiplied by MCF	Rehabilitation of existing main lanes and structures on non-Interstate portions of the National Highway System.
3D	NHS Traffic Management Systems	Commission approval. Project specific.	Federal 80% State 20%	No	Traffic Management Index (TMI)	Traffic management systems on NHS only in areas of air quality attainment. Projects prioritized by traffic management index.
3E	NHS Miscellaneous	Commission approval. Project specific.	Federal 80% State 20%	No	Identified Need	Relatively small miscellaneous projects associated with other mobility (added capacity) project son NHS. Projects prioritized by identified need.
4A	Surface Transportation Program (STP) Safety	Commission allocation. Statewide bank balance. Selected statewide by federally mandated safety indices.	Federal 90% State 10%	Yes Traffic Operations Division	Safety Improvement Index (SII)	Safety related projects-on and off state highway system. Projects are evaluated using three years of accident data, and ranked by Safety Improvement Index.
4A	STP Safety-Federal Railroad Signal Program	Commission allocation. Statewide bank balance. Selected statewide from prioritized listing.	Federal 90% State 10%	Yes Traffic Operations Division	Railroad Crossing Index (RCI)	Installation of automatic railroad warning devices at most hazardous railroad crossings on and off state highway system, selected from statewide inventory list which is prioritized by index (number of trains per day, train speed, ADT, type of existing warning device, train-involved accidents within prior 5 years, etc.)
4A	STP Safety-Federal Railroad Signal School Bus Program	Commission allocation. Statewide bank balance. Selected statewide from prioritized listing.	Federal 90% State 10%	Yes Traffic Operations Division	Railroad Crossing Index	Installation of automatic railroad flashing warning devices at most hazardous unsignalized railroad crossings on school bus routes on and off state highway system, from statewide inventory list prioritized by index (number of trains per day, train speed, number of school buses per day, train-involved accidents within prior five years, etc.)

Table 4.3
Summary of Categories in the 1997 Unified Transportation Program

Category Number	Category Name	Programming Authority	Funding	Bank Balance (Yes/No), Responsible Entity	Ranking Index or Allocation Formula	Brief Summary, Restrictions, Etc.
4B	STP Transportation Enhancements	Commission selection and approval. Project specific. Recommended by local governmental entities. Committee review.	Federal 80% State 20% or Federal 80% Local 20% or other percentages	No	Committee Recommendation	Projects above and beyond what normally is expected for transportation enhancements-10 general activities as outlined in ISTEA. Projects recommended by local government entities, reviewed and recommended by committee, selected by Texas Transportation Commission.
4C	STP Metropolitan Mobility/ Rehabilitation	Commission allocation. Allocation based on population (1990 Census). Bank balance to Districts. Projects selected by MPO.	Federal 80% State 20% or Federal 80% Local 20% or other percentages	Yes, Districts & MPOs	Population	Transportation needs within urbanized areas with populations of 200,000 or greater. Projects selected by Metropolitan Planning Organizations (MPOs)
4D	STP Urban Mobility/ Rehabilitation	Commission allocation. Allocation based on population (1990 Census). Bank balance to Districts. Districts/MPOs select.	Federal 80% State 20% or Federal 80% Local 20%	Yes, Districts	Population	Transportation needs in urbanized areas with populations less than 200,000 and greater than 5,000. Projects selected by the District in consultation with the MPO.
4E	STP Rural Mobility/ Rehabilitation	Commission allocation. Allocation based on population (1990 Census). Bank balance to Districts. Projects selected by Districts.	Federal 80% State 20%	Yes, Districts	Population	Transportation needs in rural areas (in cities of less than 5,000 population and outside any city limits.) Projects selected by District.
4F	STP Rehabilitation in Urban and Rural Areas	Commission allocation. Allocation formula. Bank balance to Districts. Projects selected by Districts.	Federal 80% State 20%	Yes, Districts	45% Non-IH ESAL/Ln-Mi 45% Non-IH Ln-Mi 10% Non-IH Ln-Mi W/Sub Condition Scores Multiplied by MCF	Rehabilitation of highways in urban and rural areas on the state highway system which are functionally classed greater than a local road or a minor collector.
4G	STP Railroad Grade Separations	Commission approval. Project specific. Evaluated statewide by cost benefit.	Federal 80% State 20%	No	Vehicle & train traffic, accident rates, vertical clearance, roadway characteristics	Replacement of existing highway-railroad grade crossings, and the rehabilitation or replacement of deficient railroad underpasses on the state highway system. Specific locations evaluated by cost benefits derived index (benefits such as improved traffic flow, accident/fatality reduction.)
5	Congestion Mitigation and Air Quality Improvement	Commission allocation. Allocation based on percent of population in non-attainment areas. Bank balance to Districts. Projects selected by MPO & District.	Federal 80% State 20%	Yes, Districts & MPOs	Non-attainment area population weighted by air quality severity	Addresses attainment of national ambient air quality standard in the non-attainment areas (currently Dallas-Fort Worth, Houston, Beaumont and El Paso). Funds cannot be used to add capacity for single occupancy vehicles.
6A	Bridge Replacement/ Rehabilitation-On State Highway System	Commission approval. Project specific. Selected statewide based on Texas Eligible Bridge Selection System (TEBSS).	Federal 80% State 20%	No	Texas Eligible Bridge Selection System (TEBSS)	Replacement or rehabilitation of eligible bridges on state highway system (functionally obsolete or structurally deficient).

Table 4.3
Summary of Categories in the 1997 Unified Transportation Program

Category Number	Category Name	Programming Authority	Funding	Bank Balance (Yes/No), Responsible Entity	Ranking Index or Allocation Formula	Brief Summary, Restrictions, Etc.
6B	Bridge Replacement/ Rehabilitation- Off State Highway System	Commission approval. Project specific. Selected statewide based on Texas Eligible Bridge Selection System (TEBSS).	Federal 80% State 20% or Federal 80% State 10% Local 10%	No	Texas Eligible Bridge Selection System (TEBSS)	Replacement or rehabilitation of eligible bridges off state highway system (functionally obsolete or structurally deficient).
7	State Preventive Maintenance	Commission approval. Allocation formula. Bank Balance to districts. Projects selected by districts.	State 100%	Yes, Districts	70% Lane-Miles 20% Vehicle miles Traveled per Ln-Mi 10% Ln-Mi W/Sub Condition (Distress)	Seal costs and thin overlays to preserve existing state highway system. Up to 20% of a district's yearly allocation can be used for non-preventive maintenance work, provided administrative approval is first obtained from the Construction and Maintenance Division
8A	Farm to Market Roads Rehabilitation	Commission approval. Allocation formula. Bank Balance to districts. Projects selected by districts.	State 100%	Yes, Districts	45% FM ESAL/Ln-Mi 45% FM Ln-Mi 10% FM Ln-Mi W/Sub Condition Scores Multiplied by MCF	Reconstruction and rehabilitation of existing Farm to Market Roads outside of urbanized areas of populations of 50,000 or more, except for those projects on an existing Farm to Market Road stub section into an urbanized area. Funds (up to \$600,000) for reconstruction or rehabilitation to provide access to new prison site.
8B	Farm to Market Roads Expansions	Commission approval. Allocation formula. Selected statewide by cost efficiency.	State 100%	No	Cost per Vehicle Mile	Construction of new Farm to Market Roads (outside urbanized areas of 50,000 population or more). Funds (up to \$600,000) for construction of road to provide access to new prison site.
9	State Park Roads	Commission allocation. Statewide bank balance. Projects selected by Texas Parks and Wildlife Department (TP&WD)	State 100%	Yes, Transportation Planning & Programming Division	None, Selected by TP&WD	Construction and rehabilitation of roadways within or adjacent to state parks subject to Memorandum of Agreement between TxDOT and Texas Parks and Wildlife Department. Locations selected and prioritized by TP&WD.
10A	Traffic Control Devices	Commission allocation. Allocation formula. Bank balance to districts. Projects selected by districts.	State 100%	Yes, Districts	50% Non-IH Lane Miles 50% Population	Installation and rehabilitation of non-interstate signs, pavement markings, traffic signals, and illumination systems including minor roadway modifications to improve operations. Funds can also be used to install new traffic signals as well as modernize existing traffic signals.
10B	Rehabilitation of Traffic Management Systems	Commission allocation. Allocation formula. Bank balance to districts. Projects selected by districts.	State 100%	Yes, Districts	Sophistication of equipment installed, type of control center and miles of system under control.	Rehabilitation and maintenance of operational traffic management systems.
11	State District Discretionary	Commission allocation. Allocation formula. Bank balance to districts. Projects selected by districts.	State 100%	Yes, Districts	70% Vehicle-miles traveled on/off system 30% registered vehicles (Each district receives a minimum \$1 million allocation).	Miscellaneous projects on state highway system selected at the district's discretion. Funds should not be used to purchase right-of-way.
12	Strategic Priority Program	Commission approval. Project specific.	Federal 80% State 20% or State 100%	No	None, Selected by Transportation Commission	Commission selected projects which promote economic development, provide system continuity with adjoining states and Mexico, or address other strategic needs as determined by the commission.
13A	State Funded Mobility	Commission approval. Project specific.	State 100%	No	None, Selected by Transportation Commission	Commission selected projects on state highway system developed without federal participation.

Table 4.3
Summary of Categories in the 1997 Unified Transportation Program

Category Number	Category Name	Programming Authority	Funding	Bank Balance (Yes/No), Responsible Entity	Ranking Index or Allocation Formula	Brief Summary, Restrictions, Etc.
13B	Hurricane Evacuation Routes	Commission approval. Project specific. Recommended by consensus of coastal districts.	State 100%	No	None, recommended through the consensus of coastal districts. Selected by Transportation Commission.	Expansion, reconstruction, rehabilitation, etc. of hurricane evacuation routes to increase safety, access and mobility for transportation of people and goods in coastal areas in emergency situations.
13C	NAFTA Discretionary Program	Commission allocation. Allocated to border districts based on number of border crossings existing or under construction. Bank balance to districts.	State 100%	Yes, Districts	Allocation based on the number of border crossings existing or under construction	Projects on the state highway system to address immediate demands on transportation infrastructure in border area districts because of projected increases in international trade resulting from rectification of the North American Free Trade Agreement (NAFTA).
13D	Urban Streets	Commission allocation. Allocated by population in urbanized areas. Bank balance to MPOs. Projects selected by MPO.	State 80% Local 20% (on participating items of work)	Yes, MPOs	Allocation based on urbanized area population	Reconstruction, restoration and added capacity of certain city streets (classified as collector or higher) in urbanized areas with populations of 50,000 or more. (To AASHTO standards.)
14	State Rehabilitation	Commission allocation. Allocation formula. Bank balance to districts. Projects selected by districts.	State 100%	Yes, Districts	45% Non-IH ESAL/Ln-Mi 45% Non-IH Ln-Mi 10% Non-IH Ln-Mi W/Sub Condition Scores Multiplied by MCF	Rehabilitation needs on non-interstate portion of state highway system. Rehabilitation might not qualify for federal funding. Roadway must be rehabilitated to applicable design standards.
15	Federal Demonstration Projects	Commission approval to participate. Projects listed in ISTEA or other federal legislation.	Federal 80% State 20%	No	None	Projects listed in ISTEA or other federal legislation.
16	Miscellaneous-Railroad Grade Crossing Replanking Program	Commission allocation. Statewide bank balance. Selection based on conditions of riding surface.	State 100%	Yes, Traffic Operations Division	Condition of crossing's riding surface and cost per vehicle using crossing	Replacement of rough railroad crossing surfaces on the state highway system (approximately 140 installations per year statewide). Projects selection based on conditions of the riding surface (highway, railroad and drainage) and cost per vehicle using the crossing.
16	Miscellaneous-Railroad Signal Maintenance Program	Commission allocation. Statewide bank balance. Contributions to maintain signals.	State 100%	Yes, Traffic Operations Division	Number of crossings and type of automatic devices present at each.	Contributions to each railroad company based on number of crossings and type of automatic devices present at each crossing.
16	Miscellaneous-Construction Landscape Program	Commission allocation. Allocation formula. Bank balance to districts. Projects selected by districts.	State 100%	Yes, Districts	Varies	New landscape development projects such as typical right-of-way landscape development, rest area/picnic area landscape development, and erosion control and environmental mitigation activities.
16	Miscellaneous (Federal)	Commission approval to participate. Federal allocation.	Federal 100% or Federal 80% State 20%	No	None	Federal programs such as Forest Highways, Indian Reservation Highways, Federal Lands Highways, and Ferry Boat Discretionary.
17	State Principal Arterial Street System (PASS) (Contains both PASS and PASS Metro Match)	Pre-ISTEA program.	State 100% or State 50% Local 50%	No	None	Only projects which were approved in the previous Urban System/Principal Arterial Street System (PASS) programs.

Source: TXDOT

Category 13C: NAFTA Discretionary Program

One category of funding deserves special mention because of its immediate relevance to the Binational Transportation Planning and Programming Study. This is Category 13C, TxDOT's NAFTA Discretionary Program. This category addresses the immediate demands on the infrastructure in the border districts because of the projected increases in international trade resulting from the recent ratification of the North American Free Trade Agreement (NAFTA).

Projects seeking funding under this program must be NAFTA-related and be located on the state highway system. All 13C projects must be developed in accordance with applicable state environmental requirements; and they must be designed, constructed, operated and maintained in accordance with state laws, regulations, directives, safety standards, design, and construction standards. Projects in this category must also have the concurrence of the MPO if located within a designated metropolitan area. Projects that are located within an air quality non-attainment may need to be included in the Transportation Improvement Program of the MPO.

Border districts receive allocations based on the number of existing border crossings and the number of those under construction. Lists of eligible projects are compiled by the districts and are reviewed by the Transportation Planning and Programming Division to ensure that the projects are truly NAFTA related.

This program is managed as a bank balance program. NAFTA discretionary programs are usually one year programs, with the program funds available for use within a four year period. Match for preliminary engineering, construction, and right-of-way purchase/utility adjustments has to be provided in accordance with the TxDOT Policy for Matching Funds-Participation Ratios.

4.8.3 The Statewide Transportation Improvement Program (STIP)

The Texas Department of Transportation, authorized by the Governor to act in his behalf in matters relating to transportation plans, develops the Statewide Transportation Improvement Program (STIP) in an effort to fulfill responsibilities assigned to the state in section 135 of ISTEPA.

The Texas STIP complies with ISTEPA requirements. It combines recommendations from TxDOT districts and MPOs, reviewed and prioritized by the central office, and reviewed and approved by the Texas Transportation Commission. Projects are proposed per the criteria listed in Table 4.2.

4.8.4 STIP Financial Plan

A financial plan for all federally funded highway projects, and major state funding for projects, within the state documents the three-year availability of funding for each project or project phase. The Financial Plan demonstrates financial feasibility of the proposed STIP for three fiscal years. Required matching funds from state and local sources are also indicated. Expected resources from private sources are also included.

It should be recognized that from a project development standpoint, certain impracticality occurs when the STIP development process and resulting Financial Plan allows for a zero percent overprogramming of projects. Historically approximately 30 percent of projects are deferred to later letting due to environmental considerations, government permitting requirements, right-of-way negotiation, utility relocation, and other factors outside the control of TxDOT. Shifting of projects within the three-year TIP provides the flexibility essential to

management of programs. Transfer of funding among categories and programs on an annual basis assures against loss in federal apportionment and obligation authority. Should federal apportionment be reduced by obligation authority, the availability of considerably more state and local dollars than required to match federal funds will allow TxDOT to either fund projects with 100 percent state funds or defer the projects until federal obligation authority is available.

4.8.5 Public Involvement

A public hearing is held for each Department of Transportation District and Metropolitan Planning Organization to encourage citizen input to the proposed Transportation Improvement Program.

4.8.6 Project Selection Procedures for Current Year Funding

In accordance with Section 134(h)(2) of Title 23 USC as amended, the Texas Department of Transportation uses the following project selection procedures for areas outside the metropolitan area boundaries:

- The approved STIP is utilized for programming of projects through out the state; and
- Any project listed in the first year of the approved STIP shall be considered as the first priority and may be implemented as soon as plans are completed or grant approval and funds are appropriated; and
- Should any project not be implemented from the first priority because of unforeseen delays, then projects will be selected from the same funding category from the second or third years (which would have been considered the second or third priorities), and those projects may be implemented as plans are completed or grants are approved and funds appropriated.

4.8.7 Metropolitan Planning Organizations in Texas

Most Metropolitan Planning Organizations have developed their own Project Selection Procedures based on the transportation needs in their region. The MPO projects identified in their TIPs are evaluated in order to develop the recommended program of projects contained in the current STIP. MPO TIPs, as adopted by their policy committees, are incorporated verbatim into the STIP.

This section describes how the border MPOs in Texas structure their transportation planning processes, select projects for their transportation improvement programs, and involve the general public.

The MPO public involvement programs and the general processes used to develop the TIP must comply with the same fundamental state and federal regulations; therefore, these processes are similar for each MPO. The next section describes the public involvement process and the TIP development process that are similar for all the border MPOs in Texas. The structure of the border MPOs are described in the last sections of this chapter.

Public Involvement in Metropolitan Areas

Each MPO in Texas maintains a public involvement program that typically includes area citizens, groups, agencies, and transportation providers. These programs strive to work in a proactive way to provide complete information, timely public notice, full public access to key decisions, and early and continuing involvement in developing the Metropolitan Transportation Plan (MTP) and the Transportation Improvement Program. Through this process, each MPO's

public involvement program integrates the concerns of a wide variety of parties and provides education on transportation issues.

All regular and special meetings of MPO policy and technical committee meetings are generally open to the public, and the agendas are published in the local newspapers. Public comment is encouraged and welcomed at these meetings. Public meetings and/or hearings, and document review sessions are generally held for major projects such as the MTP and the TIP. MPO staff also frequently presents information on proposed projects to neighborhood groups, civic organizations and other government agencies and public interest groups.

Transportation Improvement Programs for Metropolitan Areas

Each MPO must develop its own TIP for the area in cooperation with the state and affected transit operators. The TIP is updated every two years and approved by the MPO and TxDOT. TxDOT has developed a uniform TIP format for the MPOs to follow in order to produce a uniform state TIP. As in the statewide TIP, each MPO TIP must include a financial plan. The MPO TIP is financially constrained over the three-year TIP period and it must show that the plan can be "reasonably implemented." Each MPO TIP also includes the criteria and process by which projects are prioritized for implementation. In addition, each MPO has developed a public involvement process that will provide citizens, affected public agencies, and other interested parties the opportunity to comment on the proposed program. Following approval of each MPO TIP, they are included in the STIP.

4.8.8 El Paso

Definition of Area

The El Paso Urban Transportation Study (EPUTS) covers the entire County of El Paso and the City of Sunland Park, New Mexico, as well as its non-attainment area. The City of El Paso is a designated Transportation Management Area (TMA) and urbanized area with a population of over 200,000. The TMA designation applies to the metropolitan planning area. The primary participants in the TMA's planning process are: The City of El Paso, El Paso County, Town of Horizon City, Texas Department of Transportation-El Paso District, the City of Sunland Park, New Mexico, the Town of Anthony, the City of Socorro, and Sun Metro.

Organization

The MPO coordinates urban areawide, multimodal transportation plans. Transportation planning involves the study of present transportation patterns in relation to existing and projected urban development. The MPO, in cooperation with TxDOT, is responsible for preparation of the Metropolitan Transportation Plan (MTP), Transportation Improvement Plan (TIP), Unified Planning Work Program (UPWP), and other documents as required by the ISTEA of 1991. The MTP must provide for future traffic by improving existing transportation infrastructure, as well as programming future transportation facilities, expanding transit services and planning new highways and arterials that complement the statewide multimodal transportation plan and the maintenance of facilities, while meeting the goals established by the Clean Air Act Amendments (CAAA) of 1990. Additionally, the MPO provides for the programming of funds in accordance with provisions of the MPO/Texas Department of Transportation (TxDOT) contract and federal regulations.

The City of El Paso, in 1988, was permanently designated by the Governor of Texas to be the MPO for the El Paso urban area. This function is carried out by the MPO staff in the City of El

Paso Department of Planning, Research and Development. The area under intensive study is El Paso County and Sunland Park, New Mexico.

Transportation Policy Board

The Transportation Policy Board (TPB) was established in compliance with the federal mandate that requires all urbanized areas with a population of 50,000 or greater to have a transportation planning committee to ensure that all urban transportation studies are performed in accordance with local government's desires and in conformance with federal and state laws, rules and regulations. The committee is composed of elected public officials from the local governments that have authority for project implementation. Membership in the TPB also includes state senators and representatives, the TxDOT District Engineer, and the Director of the Mass Transit Department (MTD).

The TPB is responsible for giving the MPO overall transportation policy guidance in the transportation planning process. It ensures proper coordination of transportation modes; cooperatively establishes transportation needs; and proposes projects from all transportation modes for recommendation to those governmental units responsible for program development and project implementation.

In January 1996, the TPB abolished the Steering Committee (technical advisory committee). New ad hoc subcommittees for specific projects and activities were created. The work committees are:

- Air Quality
- Metropolitan Transportation Plan
- TIP Project Selection
- Unified Planning Work Program

Following are descriptions of the work committee roles:

Air Quality Committee

Coordinates local transportation planning conformity with federal/state/local air quality plans, as required by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 and the Clean Air Act Amendments (CAAA) of 1990. Reviews, interprets and presents transportation/air quality rules, regulations and policies. Participates in Texas and New Mexico state mobile source technical working groups and other coordination meetings. Develops and proposes transportation plans and programs that mitigate mobile source air pollution problems to help the EPUTS area meet National Ambient Air Quality Standards. Recommends actions to the Transportation Policy Board and/or presents air quality reports to the TPB.

Metropolitan Transportation Plan Committee

Develops the Metropolitan Plan (which must be updated every three years). The committee reviews network alternatives and related demographics and provides technical guidance to MPO staff. When updating the plan, the committee meets periodically (as necessary) to review the plan updates.

TIP Project Selection Committee

Programs TIP, CMAQ, STP, and USP projects utilizing the project selection process outlined in the TIP document. The TIP must include priorities by fiscal year, project cost estimates, and a fiscally responsible financial plan. PSC membership was expanded in January 1996 to allow for better representation of the EPUTS area.

Unified Planning Work Program Committee

Reviews the UPWP document to ensure that work activities are adequate and support the planning process in the development of a multimodal transportation system to serve the needs of the urban communities in the EPUTS area.

Private-Sector Involvement

The private sector is encouraged to the maximum extent possible, to participate in the development of transportation plans and programs. Private transportation providers are invited to participate in the MTP update process and TIP development.

The MTD continually informs the private sector about the opportunities to bid for services through competitive solicitation, advertising, and notifications to vendors.

Planning Issues and Emphasis Areas

The 1997 and 1998 UPWP addresses six key interrelated transportation issues and areas of concern for local governments. Adequate planning for the MPO's short- and long-term transportation needs requires continuous monitoring of the following issues and trends:

- Population
- Employment
- Financing
- Environment
- North American Free Trade Agreement (NAFTA)
- Regional Transportation Initiatives

Funding for maintenance or improvement of the transportation system in the EPUTS area is expected to fall short of meeting needs. This demands creative strategies for financing and implementing transportation improvements.

El Paso MPO Transportation Improvement Program

The El Paso metropolitan area TIP is a multi-year program of capital improvements for highways and transit. The TIP is prepared by the cities of El Paso and Socorro, Texas; Sunland Park, New Mexico; the Texas Department of Transportation; and El Paso County according to regulations issued by the U.S. Department of Transportation. The TIP is developed by the Project Selection Committee. The TIP is then reviewed by the TPB, which recommends the TIP be presented at a public meeting. The TPB adopts the TIP after completion of the Project Selection Process. The TIP is used as a local guide in budgeting funds and programming construction and transit improvements by local officials, TxDOT, FHWA, and FTA.

The inclusion of a project in the TIP reflects a consensus of priority needs among locally elected officials, local transportation agency representatives, and representatives of TxDOT. The TIP is in effect a listing of needs, estimated costs, and recommended implementation dates. The TIP may be amended as transportation needs change and as funding levels change.

Project Selection Process

A specific project selection process is used by the Project Selection Committee (PSC) to select TIP projects. The PSC is composed of Transportation Policy Board members plus members of local transportation agency staffs.

The Project Selection Process consists of four major steps;

Step 1: Submission of Projects

All projects for consideration for inclusion in the TIP are to be submitted to the MPO office for review by the date determined by the chair of the Steering Committee.

All projects must have a description of work, length in miles, construction cost estimates, and local and/or private sector funding participation sources.

Step 2: Selection Criteria

Projects submitted will be evaluated for consistency with the following criteria:

- Appropriateness of the project and consistency with the study area long range plans,
- Availability of funding commitment; projects will be programmed within limits of the TIP,
- Relationship to free trade or other economic development factors,
- Promotes Clean Air Act (CAA) objectives,
- Promotes completion of National Highway System (NHS),
- Improves circulation at or adjacent to ports-of-entry,
- Reduces traffic in high congestion corridors,
- Promotes intermodal transportation,
- Meets Transportation System Management objectives, and
- Eliminates traffic safety hazards.

Step 3: Public Meeting

The TIP is presented to the general public at a public meeting to allow public input into the TIP preparation process.

Step 4: Transportation Policy Board

The Transportation Policy Board reviews and adopts the TIP for submission to the state and federal agencies.

All projects in the TIP are included in the Year 2015 El Paso Metropolitan Transportation Plan. In developing recommendations for selecting TIP projects, the Project Selection Committee considers the use and flexibility of federal funds.

4.8.9 Laredo MPO

The Laredo Urban Transportation Study in its capacity as the Laredo MPO, provides transportation planning for the Laredo Metropolitan Area as required by ISTEA.

In 1995, the Laredo Urban Transportation Study (LUTS) published the Laredo Metropolitan Transportation Plan: 1995-2015. In addition, the Urban Plan of Los Dos Laredos was

published in 1994, which outlines the concurrent growth and development of the Laredo and Nuevo Laredo and recommends actions to strategically address cross border issues that effect both communities.

Definition of Area

The Laredo Metropolitan Area includes the City of Laredo and portions of Webb County.

Organization

The Laredo Metropolitan Planning Organization (MPO) is governed by the Policy Committee, which is chaired by the Mayor of Laredo and includes the State Senator for District 21, the State Representative for District 42, the TxDOT Laredo District Engineer, the Webb County Judge, and three City Councilpersons from the Laredo City Council. The Policy Committee is the body of the MPO that provides review and has decision-making authority over transportation planning efforts in the MPO area. The Laredo MPO also uses a Technical Committee to provide professional and technical review of work programs, policy recommendations and the transportation planning activities. Professional staff from the State, Webb County, the City of Laredo, and private sector transportation interests serve on the Technical Committee.

Planning Issues and Emphasis Areas

The Laredo MPO is currently working on several important planning issues, including:

- Completion of the Metro Rail Transit MIS,
- Alternatives Analysis and Environmental Study of the FM3464 Corridor,
- International Commercial Cargo Inspections and Bridge Crossings Operations Model,
- Implementation of transportation modeling and traffic count calibration, and
- Transit service route enhancements plan.

Laredo MPO Transportation Improvement Program

LUTS adopted Project Selection Procedures that are consistent with the long-range transportation planning process. LUTS follows the basic state and federal regulations in developing the TIP for the metropolitan area. These include:

- Prioritizing the list of projects to be carried out over a three-year period,
- Developing a financial plan which shows the source of funds for each project and that indicates the TIP is financially constrained,
- Consistency of projects in the TIP with the long-range plan,
- Opportunity for public involvement and comment during development of the TIP, and
- Coverage of the entire metropolitan area.

4.8.10 Hidalgo County MPO

Definition of Area

The Hidalgo County Metropolitan Planning Organization study area is located next to the Mexican border in the Lower Rio Grande Valley. The MPO is comprised of the cities of McAllen, Pharr, Edinburg, Mission, Weslaco, Mercedes, Donna, San Juan, Alamo, Hidalgo, and Palmview. The MPO is also comprised of unincorporated urbanized areas of Hidalgo County.

Organization

The Hidalgo County MPO is composed of the Technical Committee and the Policy Committee. The Technical Committee's membership is mainly officials and planners from the cities and from the county within the MPO boundary. This committee is responsible for making planning recommendations to the Policy Committee for immediate action. The Policy Committee is comprised of TxDOT and elected officials from the cities and the county within the same MPO boundary. The Policy Committee is responsible for policy-making in transportation planning issues.

The Hidalgo County MPO contains subcommittees which deal with more specialized issues. Other committees or subcommittees of the technical committee are formed as the need arises.

Planning Issues and Emphasis

Planning activities in the Fiscal Year 1996 included the completion of the Hidalgo County Thoroughfare Plan, completion of a metropolitan bicycle plan, the initial collection of freight data, maintaining transportation improvement programs for Fiscal Years 1996, 1997, and 1998 and completion of Phase 1 of a transit study. The MPO also completed the implementation of a pavement management system and congestion management system.

The tasks in the 1997 UPWP fall into six primary activities: Administration/Management, Data Development and Maintenance, Short-Range Planning, Metropolitan Transportation Plan, Management Systems, and Special Studies. Each of these work areas are briefly described below.

- **Program Support and Administration.** This activity contains the continuing work associated with the administrative and operation support of the coordinated, comprehensive, and continuing (3-C) transportation planning process; the development and maintenance of the Transportation Improvement Program (TIP) and UPWP.
- **Data Development and Maintenance.** Contained in this activity are work elements designed to collect, update, and report the basic data required to performed both long and short transportation facility and service planning. This activity includes an area-wide Household Transit Needs Assessment survey.
- **Short Range Transportation Planning.** Contained in this planning activity are projects relating to immediate implementation and near term time frame for transit service and roadway operations. Also included in this planning emphasis is task 3.1 Service Coordination.
- **Metropolitan Transportation Planning.** This includes activities associated with the publishing or updating of the area's long-range multimodal transportation plan and travel demand models.

- **Management Systems.** Work included in this activity are the development, implementation and operation of the management systems. Even though some of the management systems are optional at the state level, the MPO thinks it is unwise to have committed the resources to the systems and then abandon them in FY 97. The state is still requiring some of the management systems.
- **Special Projects.** The objective of this activity is to provide for work elements that are generally outside the scope of the 3-C planning process, but are necessary to the continued development of a viable transportation plan in the area.

Hidalgo County MPO Transportation Improvement Program

The Hidalgo County MPO cooperatively develops, on an annual basis, a three-year program outlining transit, highway, and traffic improvements within the metropolitan area. The basic state and federal regulations are followed in developing the TIP for the metropolitan area. These include:

- Prioritizing the list of projects to be carried out over a three-year period,
- Developing a financial plan which shows the source of funds for each project and that indicates the TIP is financially constrained,
- Consistency of projects in the TIP with the long-range plan,
- Opportunity for public involvement and comment was offered during development of the TIP, and
- Coverage of the entire metropolitan area.

The Hidalgo County MPO also established specific project selection criteria for Metropolitan Mobility (4C) projects. The scoring criteria are as follows:

Criteria A: Cost Effectiveness (cost/vehicle-mile)	20 points
Criteria B: Safety Index (accidents/vehicle-mile)	20 points
Criteria C: Existing Pavement Condition	15 points
Criteria D: Congestion Management System	10 points
Criteria E: Environmental	10 points
Criteria F: Adjacent Land Development/Connectivity	10 points
Criteria G: Project R.O.W. Status	15 points
Criteria H: International Border Crossing/Intermodal Terminal	<u>10 points</u>
Total Points Possible	110 points

4.8.11 Harlingen-San Benito MPO

Definition of Area

The Harlingen-San Benito Metropolitan Planning Organization Study Area is bounded by the city limits and extraterritorial jurisdiction (ETJ) of Harlingen, San Benito, Palm Valley, Primera and Combes.

Organization

The Harlingen-San Benito MPO, also known as the Harlingen Transportation Study, is an association of local governments designated by the Governor of Texas under 23 USC 134(b)(5)/FTA Sec 8(b)(6) for mutual benefit and to help coordinate planning and development activation within the Harlingen-San Benito metropolitan area.

The Harlingen-San Benito MPO consists of two groups. The Policy Committee is principally made up of elected officials representing the Cameron County, City of Harlingen, San Benito, Palm Valley, Primera, Combes and the Texas Department of Transportation. These decision makers of general purpose local government provide valuable input from the perspective of the general public and business community. The Policy Committee normally receives agenda items or recommendations from the Technical Committee. On occasion, the Policy Committee may refer agenda items back to the Technical Committee for further technical review. The function of Policy and Technical Committees include:

- Developing and maintaining a comprehensive transportation planning program in conformance with Section 134 and 49 USC
- Developing and approving all policy procedures for transportation planning in the metropolitan area
- Reviewing and approving the Metropolitan Transportation Plan and the Transportation Improvement Program
- Ensuring that established public involvement procedures are carried out appropriately for all major transportation activities
- Establishing and revising the Metropolitan Area Boundary as appropriate
- Preparing certifications

The Harlingen-San Benito MPO Advisory Committee consists of staff representatives of the MPO agencies and the MPO staff. The Technical Committee reviews agenda items initiated at the staff level of review issues at the request of the Policy Committee, a community group, or any interested party. The Technical Committee provides technical advice to the community at large and to the Policy Committee who normally takes action after the necessary review and public involvement process. The function of the Technical Committee includes:

- Presenting transportation agenda items from their various agencies
- Developing the Transportation Improvement Program
- Reviewing transportation plans and studies
- Making recommendations to the Transportation Policy Committee
- Reviewing transportation issues at the request of the Transportation Policy Committee

Private-Sector Involvement

Private developers and other interested parties play a major role in land use development and construction of the transportation infrastructure. The Harlingen-San Benito MPO recognizes this role and encourages private sector participation in MPO projects and programs as required by ISTEA. The Harlingen-San Benito MPO approaches private sector involvement in two principal ways. It encourages private sector participation at MPO Policy and Technical Committee meetings or public hearings by maintaining a list of interested parties and advising

them of scheduled meeting dates, agenda and place. The MPO also maintains a list of interested transportation consultants and invites them to submit proposals for transportation projects.

Planning Issues and Emphasis

The key planning issues facing the Harlingen-San Benito Metropolitan area are highway, bridge and road infrastructure development to meet the highly projected growth in the area.

The Intermodal Surface Transportation Efficiency Act (ISTEA) 1991 emphasizes the need for MPOs to address the following 16 factors:

- Preservation of existing transportation facilities
- Consistency with energy conservation goals
- Need to relieve/prevent congestion
- Land use
- Programming of expenditures for transportation enhancement activities
- Effects of all transportation investments
- International border crossings and access to
- Connectivity of roads at MPO boundaries
- Transportation needs identified by the management Systems
- Corridor preservation
- Freight movement
- Use of life cycle costs
- Social, economic, energy, environmental effects
- Expansion, enhancement aid increased use of transit services
- Capital investment to increase transit security
- Tourism

Harlingen-San Benito MPO Transportation Improvement Program

The TIP is a three-year intermodal program of transportation projects within the Harlingen-San Benito MPO study area. The TIP includes projects consistent with the Metropolitan Transportation Plan (MTP) and the requirements of ISTEA. The TIP was cooperatively developed by intergovernmental agreement between the Texas Governor's Office, TxDOT, the Harlingen-San Benito MPO, FHWA, and FTA.

The TIP identifies federal and state funded intermodal and multimodal transportation projects and project schedules by priority rank within the three years. Highest priority projects are scheduled to be initiated in Year 1. Projects of second priority are scheduled to be initiated in Year 2, and projects of third priority are scheduled to be commenced in Year 3. This TIP is financially constrained by a financial plan that identifies the funding sources and the amounts available to implement the program.

The Harlingen-San Benito Metropolitan Transportation Plan is the region's long-range transportation plan, and this plan is the primary source of projects considered for inclusion in the TIP. During the preparation of the TIP adequate time and opportunities are provided for public review and comment before the program is adopted. TIP projects from the previous year that were not initiated or completed are advanced to the current year. First year projects are considered selected for scheduling and implementation. Projects may be advanced from the second and third year only if delays are encountered in implementing first year projects.

The Transportation Improvement Program adopted by the Harlingen-San Benito MPO provides a three-year improvement plan and grants authority to the TxDOT Pharr District to select projects for implementation from this TIP in accordance with stated priorities. The preparation of the TIP along with periodic revisions, as required, is an on-going MPO/TxDOT activity. The MPO Technical and Policy Committees work cooperatively with TxDOT staff to refine and further develop the projects included in the TIP.

TxDOT staff in the Pharr District office have formulated project selection criteria that are used to prioritize projects, and to select which projects should be included in the TIP. The criteria and the points awarded to these different factors are:

Criteria A: Cost Effectiveness (cost/vehicle-mile)	30 points
Criteria B: Safety Index (accidents/vehicle-mile)	15 points
Criteria C: Existing Pavement Condition	15 points
Criteria D: Local Participation	10 points
Criteria E: Environmental	10 points
Criteria F: Adjacent Land Development/Connectivity	5 points
Criteria G: Project R.O.W. Status	5 points
Criteria H: International Border Crossing/Intermodal Terminal	<u>10 points</u>
Total Points Possible	100 points

Using this method of selecting projects provides a means to explain the relative merits of the alternative projects. This helps the MPO and the general public understand the reasoning behind how specific projects are selected for inclusion in the TIP.

4.8.12 Brownsville MPO

Definition of Area

In addition to the Brownsville City limits, areas outside of the city to the east, north, and west are included within the Brownsville MPO area.

Organization

Transportation planning in the Brownsville urbanized area is performed by the Brownsville Metropolitan Planning Organization, the designated MPO for the area, in close cooperation with the Texas Department of Transportation. The Brownsville MPO is organized into two committees: The Technical Committee, an advisory group that examines technical information and makes recommendations, and the Policy Committee which makes final decisions for the MPO. Staff at the Brownsville Planning and Community Development Department provide administrative support and services to carry out these tasks. This MPO staff works closely with the MPO Technical Committee and TxDOT staff in implementing the MPO work tasks.

Planning Issues and Emphasis

The Brownsville MPO is currently working on several important planning activities, including:

- 6th/7th Street overpass project.
- The Geographic Information System (GIS) Needs Assessment Study, which involves the customization of existing GIS software. An existing GIS base map will be modified for transportation planning purposes for the MPO.
- Long-range transportation planning as pertains to future land use, travel demand, population, and employment growth.
- Review of the MPO's long-range transportation needs and priorities in anticipation of the pending adoption of a new Metropolitan Transportation Plan in 1999.

Brownsville Transportation Improvement Program

The Transportation Improvement Program adopted by the Brownsville MPO provides a three-year improvement plan and grants authority to the TxDOT Pharr District to select projects for implementation from this TIP in accordance with stated priorities. The preparation of the TIP along with periodic revisions, as required, is an on-going MPO/TxDOT activity. The MPO Technical and Policy Committees work cooperatively with TxDOT staff to refine and further develop the projects included in the TIP.

TxDOT staff in the Pharr District office have formulated project selection criteria that are used to prioritize projects, and to select which projects should be included in the TIP. The criteria and the points awarded to these different factors are:

Criteria A: Cost Effectiveness (cost/vehicle-mile)	30 points
Criteria B: Safety Index (accidents/vehicle-mile)	15 points
Criteria C: Existing Pavement Condition	15 points
Criteria D: Local Participation	10 points
Criteria E: Environmental	10 points
Criteria F: Adjacent Land Development/Connectivity	5 points
Criteria G: Project R.O.W. Status	5 points
Criteria H: International Border Crossing/Intermodal Terminal	<u>10 points</u>
Total Points Possible	100 points

Using this method of selecting projects provides a means to explain the relative merits of the alternative projects. This helps the MPO and the general public understand the reasoning behind how specific projects are selected for inclusion in the TIP.

4.9 Process Similarities and Differences

This chapter describes the similarities and differences in the transportation planning and programming processes used by the U.S. state and metropolitan transportation agencies that serve the area adjacent to the U.S.-Mexico international border. The chapter concludes with a brief discussion that emphasizes which aspects of the U.S. process that could be considered for incorporation into a binational transportation planning and programming process.

4.9.1 State Process Comparison

Table 4.4 summarizes key characteristics of state and MPO transportation planning and programming processes as they now exist (reflects provisions of California SB 45 effective in January 1998). It is apparent that there are differences in the way they are performed, but that all result in a long range statewide plan with some level of project definition and 6 to 10 year programs for Implementation.

Three states (California, New Mexico, Texas) use a bottom up approach to plan development. Arizona's is developed by its headquarters office although with plenty of local input. New Mexico relies on its RPOs for early plan development work and has its state transportation commissioners involved with the RPOs (New Mexico Transportation Commissioners each represent a specific district – as do Arizona's). None of the other three states have commissioners involved at the local level on a formal basis.

All states eventually develop project definitions, alignments, cost estimates and environmental evaluations prior to programming projects on a letting schedule. Some programs are longer than others. All have a one year current year element. Each state has its own multi-year program (different lengths) in addition to the federally required three year STIP. The state programs include both federally and state funded projects.

All states use financially constrained programming.

Coordination across the border varies. In California, SANDAG has the Mexican Consul on its Policy Committee in an advisory capacity. There is a long standing but less formal transportation planning coordination between El Paso and Juarez. Elsewhere according to the consultant's conversation with state DOT representatives, there are state DOT offices or personnel charged with communication and coordination roles, but the actual planning and programming coordination is on an as-needed project-oriented basis.

4.9.1 Process Flexibility

The fact that there are similarities *and* differences in how the various agencies plan and program transportation improvement projects is perhaps one of the most significant attributes of the U.S. process. This is because, even though much of the U.S. process is specified in federal regulations, the regulations provide states and metropolitan areas the *flexibility* to conduct the planning and programming processes in ways that are appropriate and relevant to the local area as long as they are consistent with the federal guidelines.

**Table 4.4
Border Area Transportation Planning And Programming Aspects By State**

	California	Arizona	New Mexico	Texas
Planning - State				
Initiating entity	Caltrans headquarters and district	ADOT headquarters, Intermodal Transportation Division (ITD)	Statewide by NMSHTD Transportation Planning Division (TPD); district plans by RPOs and MPOs where applicable	TxDOT central office, Transportation Planning and Programming Division
Person (title) charged with initiating plan effort	Caltrans headquarters Deputy for Planning, District Directors	ITD Director/State Engineer	Statewide by TPD Director	Director, Transportation Planning and Programming Division
Frequency of full plan update	no mandated schedule (2 years for State Rehabilitation Plan)	5 years	3 years	4 years
Plan horizon	20 years (10 years for State Rehabilitation Plan)	20 years	20 years	20 years
Plan preparer (title)	Headquarters prepares California Transportation Plan (CTP); Districts prepare District System Management Plan which is input to the statewide plan; MPOs prepare Region Transportation Plans; district with MPOs for development of Transportation (corridor) Concept Plans	Planning Group Manager, but with input from MPOs rural COGs, tribal governments, federal agencies responsible for federal lands, local jurisdictions	TPD Program Development Engineer using input from public, MPOs, RPOs, tribal, state, and federal agencies.	Same as above. Central Division receives input from districts (which include their respective MPO long range plans), external committees, modal transportation representatives
Provider of technical support (office title)	Many	Same as above	TPD	Same as above
Modes specifically included in plan	First version (1993) of statewide plan has road/highways, transit, rail, non-motorized, airport, port, intermodal (State Rehabilitation Plan includes only state highways and state-owned bridges)	Highway, railway, public transit, pipelines, bicycle, pedestrian	Roads, public transit, airports, rail (intermodal), bicycle, pedestrian, equestrian	Highways, turnpikes, aviation, public transit, railroads, high speed rail, water traffic, non-motorized
Plan detail	State plan is vision, concept, and policy-oriented; CTP is state policy. Subsequent development plans and corridor concept plans. System development plans (district level) are corridor specific; corridor concept plans are mode, alignment, and project specific. State Rehabilitation Plan covers improvements to all state highways and state-owned bridges needing rehabilitation and includes costs for at least first four years.	State plan is a policy framework of goals, objectives and strategies; subsequent corridor profiles study program examines designated corridors of statewide significance. There is a state rail plan and state transit plan. There are also small area studies for small urban areas as well as MPO urbanized area studies to better define plans.	State plan is policy oriented; financially constrained corridor level strategies are addressed; project specifics are developed for six year program	Texas Transportation Plan provides policy framework to guide subsequent selection of projects; includes policies related to international trade related transportation needs. Projects are selected for the Unified Transportation Program (UTP) referenced below under programming
Statewide travel forecasting model?	Yes, for statewide issues. MPO/District models for district level development and corridor concept plans	Forecasts done using regression	No	No

Table 4.4 (Continued)
Border Area Transportation Planning and Programming Aspects by State

		California	Arizona	New Mexico	Texas
Projects prioritized		Not at planning stage; prioritized at programming stage	No; part of programming process	Corridors are prioritized	NA - policy guide; specific projects not included
Projects scheduled by period		No	No	Yes	NA
"Management systems" now used		Pavement, bridge, safety, congestion, transit, intermodal	Pavement, bridge, safety, congestion, intermodal, public transit, traffic monitoring, highway performance (HPMS)	Pavement, bridge, congestion, public transit	Pavement, bridge, congestion incorporated at District and MPO level
Public involvement		Yes	Yes	Yes	Yes - extensive periodic program
Approval by:	Local	Note; approval process mandated by law. MPO (made up of local governments and Caltrans)		MPO, where applicable	
	DOT	At District by District Director in coordination with MPO; headquarters compiles district plans and forwards to Secretary of Transportation (Business, Transportation and Housing Agency) for recommendation of state plan (not approval)	No	Secretary of Highways and Transportation	Texas Transportation Commission
	State government	Governor	State Transportation Board	New Mexico Highway Commission	No
Coordination with Mexico		Selected coordination with appropriate level of government at project initiation and through Border Technical Transportation Advisory Committee (BTTAC)	Arizona/Mexico Commission	With SCT, state and local government	Yes for certain plan actions; day-to-day coordination is done by border Districts
Coordination with adjacent states		Yes, by headquarters and district	Yes	Yes	Yes
Planning - MPOs					
Existing in border area		2 (SANDAG in San Diego County, SCAG in Imperial County and greater Los Angeles area)	None along border; Pima Association of Gov'ts. within 100 km of border but not involved in border area planning	El Paso (Sunland Park) on border; Las Cruces MPO also within 100 km of border; also 2 Regional Planning Organizations (RPOs) which have transportation planning responsibilities: South Central NM COG (Dona Ana, Sierra, Socorro Counties) and Southwest NM COG (Catron, Hidalgo, Grant, Luna Counties)	5 (El Paso, including the Sunland Park area of New Mexico; Laredo; Hidalgo County; Harlingen-San Benito; Brownsville)

Table 4.4 (Continued)

Border Area Transportation Planning and Programming Aspects by State

		California	Arizona	New Mexico	Texas
Frequency of full plan update		2 years - SANDAG 3 years - SCAG	NA	3 years	3 years - El Paso 5 years - other border MPOs
Horizon		20 years	NA	20 years	Various
Modes specifically in plan		Highway/roads, public transit, non-motorized, rail	NA	Road, public transit, bicycle, pedestrian	Roads, public transit, non-motorized
Projects prioritized		Yes, by groups	NA	Yes	Yes
How plan incorporated into statewide plan		Compiled by headquarters	NA	Included as addendum	Long range plans considered in policy determinations by TxDOT central Division
Coordination with Mexico		Through BTTAC, Mexican Consul General (who sits on SANDAG board)	NA	Yes	Regular planning coordination between El Paso and Juarez; project-by-project as needed elsewhere
Programming - State					
Initiating entity		Headquarters, District and MPO upon request of California Transportation Commission (CTC) but generally in accordance with specified schedule	ADOT headquarters	NMSHTD TPD	Transportation Planning and Programming Division
Person (title) charged with initiating Programming effort		Headquarters, District and MPO	Planning and Engineering Manager	TPD Director	Transportation Planning and Programming Division Director
Programming frequency (years)		2	Annual update	2	1
Horizon: (years)	STIP	Has been 7 years for STIP; 6 years for 1998 STIP; 4 years for 2000 STIP and beyond	3	6, first 3 years to FHWA for approval	3
	State Program	Has been 7 years for STIP which includes state funded projects, but will change to 6 years for 1998 STIP and 4 years for 2000 STIP; several separate programs make up total state program	5	6	10, with 2 action priority levels
Program preparer (title)		Caltrans headquarters prepares and recommends for PSTIP (projects outside urban areas and projects of statewide significance); MPO for RTIP (projects in urban areas); starting 1998 CTC incorporates region RTIPs without change; CTC adopts program	State Transportation Board assisted by Priority Planning Committee (appointed), and supported by ADOT Program Development Committee with input from ADOT District Engineers and MPOs	TPD Program Development Engineer. RPOs, MPOs recommend priorities, TPD generates priority ratings by formula; fiscally constrained (by district) funding programs assembled by district with participation by district's state highway commissioner (inter-district borrowing permissible)	Transportation Planning and Programming Division Director with input from Districts which include their respective MPO TIPs. Projects selected using specified criteria established for each of many project types (see Table 4.3)

Table 4.4 (Continued)

Border Area Transportation Planning and Programming Aspects by State

	California	Arizona	New Mexico	Texas
Provider of technical support (office title)	Many	ADOT disciplines representing disciplines of the Priority Planning Committee	TPD	Districts, MPOs, other divisions
Components included	Starting 1998 25% of state funds are for interregional projects which “facilitate interregional movement of people and goods;” 75% for regional projects; Caltrans selects interregional projects for programs and MPO programs regional projects; STIP includes only projects using federal and state funds; projects with no state funds are in local agency programs	STIP - all highway and public transit projects which are federally funded; state program	Federal, state, local	STIP - projects using FHWA or FTA funds UTP - Projects using state or federal funds; see Table 4.3 for categories; includes a specific category for NAFTA discretionary program
Project scheduling	By year	Annually	Annual; fiscally constrained by year	First year, then by priority (2 priorities - #1 highest rated, completed at least 75% of design and right-of-way (ROW) acquisition; #2 authority to prepare PS&E and acquire ROW)
“Management systems” used	Same as above	Same as above	Pavement, bridge, congestion	None at state programming level; incorporated at planning level
Prerequisites for inclusion in program	In Caltrans’ Interregional Highway Plan, MPO regional plan/system development plan, with completed route concept report. MIS for major projects. Project must have Project Study Report (PSR) and cost estimate to be programmed; program is financially constrained starting 1998	Consistent with statewide plan, MPO TIPs, public comment. Prioritized using route significance, continuity, cost-effectiveness, District Engineer recommendation	Preliminary scoping report; content depends on specific project; schematics, environmental analysis, and cost estimates always required; MIS for major projects.	Recommendation from Districts in cooperation with MPOs; review and prioritization by central office and approval by Texas Transportation Commission; MPO TIPs incorporated verbatim.
Public involvement	Yes	Yes	Yes, at MPO and RPO levels	Yes, at state, district, and MPO levels
Approval by:	Local	Same as above	MPO, where applicable	MPO for TIP
	DOT	Caltrans District Director at district level, then Deputy Director for Planning and Programming at state level	State Transportation Board	Texas Transportation Commission for UTP, STIP
	State government	California Transportation Commission	State Transportation Board	NA
Coordination with Mexico	Same as above		Not yet	Project-by-project at District, MPO level

**Table 4.4 (Continued)
Border Area Transportation Planning and Programming Aspects by State**

Process Similarities and Differences

	California	Arizona	New Mexico	Texas
Coordination with adjacent states	Same as above		Yes	Yes
Programming - MPOs				
Programming frequency	annually - SANDAG 2 years - SCAG	NA	2 years	2 years
TIP horizon years	RTIP 7 years - SANDAG RTIP 3 years - SCAG	NA	Las Cruces MPO - 6 years El Paso MPO - 3 years	3
Components	All federally, state, and locally funded projects on regional transportation plan; Caltrans selects interregional state funded projects and MPOs select regional projects	NA	Road, public transit	federally funded road, public transit projects, state funded projects, regionally significant projects
Project prioritization and scheduling	Annual prioritization - SANDAG; all projects scheduled in RTIP	NA	Annual project scheduling; fiscally constrained by year	First year projects identified
"Management systems" used	Same as above	NA	Pavement, bridge	Incorporated at planning level
Prerequisites for inclusion in TIP	Same as for state	NA	Depends on specific project; schematics and cost estimate always required	Consensus among MPO technical and policy committees of priority need based on established criteria which vary by MPO (see sections 4.6.8 - 4.6.12)
How projects (TIPs) incorporated into STIP	Prepared by districts and MPOs; compiled by headquarters; starting 1998 Caltrans must incorporate region programs without change	NA	Compiled by headquarters	Compiled by Transportation Planning and Programming Division

Source: Caltrans, Arizona Department of Transportation, New Mexico State Highway and Transportation Department, Texas Department of Transportation, August-December, 1997.

Output Products

This flexibility is bounded by the logical need for these agencies to produce the same essential planning and programming *outputs*. These include long range transportation plans and shorter range prioritized lists of improvement project funding commitments. These long range visions and short range commitments are the most critical process similarities between the U.S. transportation agencies. But even with respect to these vital outputs, there are differences in:

- Technical aspects of plan development,
- Data used and produced,
- Project evaluation, selection, and prioritization criteria,
- Approval process, and
- Scope and extent of plans.

These differences are typically attributable to local circumstances. For example, states or metropolitan areas with transit systems or seaports will need to emphasize planning for these systems when they *develop plans*. Because of this need the *data used and produced* to support these planning and programming processes will need to be relevant to the passenger or freight demand and performance characteristics of these transportation modal systems.

The *evaluation, selection, and prioritization criteria* need to reflect local objectives and issues to be addressed as well as more technical considerations. They need to be relevant and helpful in assessing need and prioritizing funding commitments. Since separate transit and port operating agencies are common in U.S. cities, the plan and program *approval process* needs to recognize the actions of the appropriate governing body.

Factors to Consider

There are also similarities with respect to the factors that states and metropolitan areas must consider during the development of transportation plans and programs. Federal regulations currently specify 23 factors that states must consider and 16 factors that metropolitan areas must consider. However, the federal regulations also provide the states and metropolitan areas the same kind of *flexibility* in determining the depth of analysis needed to appropriately consider these factors within the local transportation planning and programming process.

4.9.2 Organizational Responsibilities

The respective responsibilities of state and local governments for planning, programming and implementing transportation improvement projects are also important similarities.

State Responsibilities

Each state is responsible for developing a State Transportation Plan adopted by the governing body of the state department of transportation. The governing body is usually a commission or board appointed by the Governor.

The State Transportation Plans cover all the transportation modes that are considered significant within the state and provide policy guidance for the management, maintenance and improvement of the state transportation system over a long range period of about 20 years. Since all modes of transportation are covered, the State Transportation Plan is developed using input from multiple DOT departments or divisions.

The State Transportation Plans are developed through a participatory process that provides users, transportation providers and the public an opportunity to be involved in the development of the plan, not just in commenting on a draft product.

Programming Responsibilities

As described in the preceding chapters, the federal-aid highway program is a federally assisted, state administered program. Traditionally, the states have been responsible for selecting, planning, designing and contracting for the construction of federal-aid highway projects. The act of selecting projects is commonly called programming. The word programming, in this context, means the actions necessary to choose which projects will be built and the actions required to commit funds at a specific time toward planning, designing, and constructing the selected projects.

The four border state DOTs have the responsibility for complying with both federal and state laws relating to the programming of projects. All capital and non-capital projects or phases of projects that will use FHWA or FTA funding must be included on the Statewide Transportation Improvement Program (STIP). While the STIP can include non-federally funded projects, each of the four states have their own funding program covering state and federally funded projects. The Statewide Transportation Improvement Program is ultimately approved by the state Governor and the U.S. Secretary of Transportation through his designated representatives - the FHWA Division Administrator and the FTA Regional Administrator. State approval is often accomplished by the Governor's appointees to the state transportation commission. The appointees for the U.S. border states are: The California Transportation Commission, the Arizona Transportation Board, The State Highway Commission in New Mexico, and the State Transportation Commission in Texas.

The Statewide Transportation Improvement Program provides the state with a linkage to metropolitan area transportation planning, since the metropolitan area Transportation Improvement Programs are the metropolitan area counterpart to the Statewide Transportation Improvement Program. Additionally, the states are responsible, under state law, for the roadways that comprise the state highway systems. Since the Transportation Improvement Programs for metropolitan areas are developed and approved by MPOs and are included in the Statewide Transportation Improvement Program without modification, there is good justification for the state to work proactively with the MPOs to develop the metropolitan area transportation plans and Transportation Improvement Programs.

The federal government does not restrict how often the Statewide Transportation Improvement Program can be modified. However, ISTEA requires that the Statewide Transportation Improvement Program be financially constrained by year and that it be updated and approved at least every two years.

Funding and Implementation of State Projects

For projects that have been included on the Statewide Transportation Improvement Program, the implementing agency is usually the state, a unit of local government, or a transit operator. The implementing agency will normally have to comply with applicable federal, state, and local procurement regulations during the implementation phase of a project. The construction contracts will normally have to be approved by the governing body of the implementing entity. This could include the state transportation commission or board, the city council, transit agency board of directors or other such bodies.

Metropolitan Responsibilities

The fundamental metropolitan responsibilities are to maintain a long range metropolitan area transportation plan and a shorter range transportation improvement program. Another important responsibility is for the metropolitan planning organization (MPO) to maintain a transportation planning process to support and maintain the long range plan, and the Transportation Improvement Program.

MPOs typically operate through a hierarchical committee structure composed of representatives of the governmental jurisdictions contained within the region. The highest level of committee (Usually called the Policy Committee) is generally composed of local elected officials; however, since there is also a need for certain non-elected transportation officials to be represented, many either include them directly, or have a second (advisory) 'policy' committee that includes both elected and important non-elected transportation officials. These committees have the ultimate responsibility within a metropolitan area for approving the plans and planning documents.

The MPOs also use a technical committee, composed of key staff from the governmental jurisdictions within the region and the state department of transportation, as the focal point for developing the region's transportation plans and programs.

Metropolitan Programming Responsibilities

The Transportation Improvement Program is the main programming mechanism used by MPOs. This program includes all highway and transit capital and non-capital projects within the metropolitan planning area that will be using federal funding or that will be requiring federal approval or permits. The Transportation Improvement Program must be approved by the MPO and the State Governor, and only in air quality non-attainment areas, a conformity determination must be made by the Federal Highway Administration and the Federal Transit Administration. The conformity determination must show that the proposed TIP will meet the established federal air quality requirements for the metropolitan area. The Transportation Improvement Program then becomes, without modification, part of the Statewide Transportation Improvement Program.

Funding and Implementation Responsibilities

For projects that have been included on the metropolitan area's Transportation Improvement Program, the implementing agency is usually the state, a unit of local government, or a transit operator. The implementing agency will normally have to comply with applicable federal, state and local procurement regulations during the implementation phase of a project. Construction contracts will normally have to be approved by the governing body of the implementing entity. This could include the state transportation commission or board, the city council, transit agency board of directors or other such bodies.

Local Transportation Planning Responsibilities

The transportation planning responsibilities of the local governments are generally related to state mandated requirements for development planning and zoning. The names of various planning documents vary a little from state to state; but typically each state requires cities and/or counties to maintain a comprehensive/general development plan that includes a transportation element. For example, in Texas the Comprehensive Plan must include a Thoroughfare Plan; in California the General Plan must include a Circulation Element. Often these plans also include pedestrian and bike plans as well.

Process Similarities and Differences

Regardless of whether the transportation plan is called Thoroughfare Plan, Circulation Element or by another name, the intent is to publicly show the community's planned transportation system so that the entire community is fully informed of the local government's future plans. This information is often needed in conjunction with requests for development approval of transportation related projects such as trucking terminals, intermodal facilities, warehousing facilities, or other product distribution centers.

Pedestrian, bicycle and seaport planning functions are normally accomplished by local government agencies. Pedestrian and bicycle implementation planning is generally accomplished during the review of proposed development projects. Seaport planning is normally accomplished by the port authority staff.

Local Programming Responsibilities

Typically, local governments annually adopt capital improvement plans describing the capital improvements that will be undertaken by the respective local government for the next one to five years. These plans also describe the sources of funds that will be used to pay for each planned capital improvement and the anticipated timeframe for constructing the improvements.

From a transportation perspective, the capital improvement program is similar to the regional Transportation Improvement Program, except that the capital improvement program includes projects that will be funded from non-federal sources. In addition to the local governments general fund, non-federal sources of funding could include bond funding, assessment district funding, developer funding, and other possible sources.

Local Funding and Implementation Responsibilities

Local governments have the primary funding and implementation responsibilities for non-state projects. Often, local governments also have project specific funding and implementation responsibilities for projects that are being funded in part by federal or state funds.

4.9.3 Binational Planning Considerations

Based on the preceding discussion, the similarities and differences that will come into play in the binational planning process are as follows.

Similarities

- Federal long-range planning requirement
- Multimodal plans
- 20-year planning horizon
- Financially attainable plan
- Address 23 planning factors (state and 16 metropolitan factors)
- Project prioritization is required
- Three-year STIP with an annual funding element
- State transportation program for state-funded projects
- Public involvement

MPOs relate in a similar way to the state

- Decisions are *finalized* by the state transportation commission for state projects and by the MPO policy committee for local agency projects funded with federal funds
- Multimodal plans

Differences

- State agency level where planning and programming is first formulated
- Involvement of state transportation commission/board members
- Statewide plan detail
- Plan objectives and issues to be addressed
- State program length
- Data used and produced
- Data file structures and formats
- Technical methodologies
- Project evaluation, selection, prioritization criteria
- Planning, programming, implementation policies
- Available or intended funding methods
- Project design standards and criteria
- Approval process
- Resources available to support technical planning and programming activities

4.9.4 Feasibility of a Binational Planning and Programming Process

Each of the U.S. states has a process which has a common foundation in the federal guidelines and requirements, but varies to meet the needs and policies of the specific state. Realistically, the state-federal relationships could be considered strong state and weak federal. As a result, the U.S. states have shown strong affinities for their own individuality in planning and programming.

On the other hand, the U.S. states realize an increased need to coordinate across the border with the Mexican federal communications and transportation secretariat (SCT), and in the future, increasingly with the Mexican states. “Disconnects” identified in existing binational transportation planning and programming have been obvious due to insufficient binational understanding and coordination.

The basic planning and programming approaches on both sides of the border are similar. Specific details vary significantly. In discussions with the JWC during its May and August, 1997 meetings, it became clear that there is interest in coordinating the outputs of the planning and programming process. Due to differences in the way things are done and an institutional need to retain individual processes, it is likely that any binational efforts will involve coordinating and resolving differences at strategic points in the process. These might include:

- issue identification and planning analysis scoping
- coordinated or joint special binational studies

Process Similarities and Differences

- comparison and coordination of preliminary plans (or updates), particularly regarding binational plans and projects
- annual and longer range implementation programs, especially scheduling
- coordinated implementation and/or operations
- improved communications

This does not include joint or integrated technical analyses, combined programs (among the U.S. states or binationally), or even a common data base at this time. However, increased coordination does appear possible. This would significantly improve past performance in bringing connecting facilities on line at about the same time and with similar capabilities (e.g., new bridges with all access roads complete at about the same time on both sides of the border).

The April 29, 1994 Memorandum of Understanding between the United States and Mexico contemplated a binational process. Binational plan and program coordination appears to be very feasible and achievable in the relatively short term. It could be an extension of the existing process by which the Binational Bridges and Border Crossings Group reviews applications for permits for new bridges across the border, only more comprehensive and covering the entire 100 kilometers on each side of the border.

Phase IV of this study addresses the opportunities for a binational transportation planning and programming process and suggests such a process for the border area.

Appendix A

Binational Entities

Joint Working Committee

This committee was created as a result of a Memorandum of Understanding signed April 29, 1994, by U.S. Transportation Secretary Peña and Mexican Transportation Secretary Gamboa. The committee has recognized the following principles to be the basis of their ongoing cooperative efforts:

- Respect,
- Trust,
- Commitment to communicate, and
- Desire to understand.

The JWC will:

- Operate in a flexible, action-oriented environment, and
- Create the communication mechanisms necessary for its success.

The JWC also oversees funding and logistics for a binational border study and reviews its findings, conclusions, and recommendations.

Participants

The Committee consists of 20 members: four delegates from the U.S. Department of Transportation (DOT); four members from the Mexican Secretaria de Comunicaciones y Transportes (SCT); the U.S. State Department, the Mexican Secretariat of Foreign Relations (SRE) and delegates from each of the 10 U.S. and Mexican border states. DOT and SCT co-chair the JWC.

Purpose

The JWC adopted the following mission statement at its first meeting.

1. "To integrate and enhance ongoing processes, programs and projects that lead to binational, interstate, and local cooperation and coordination in intermodal transportation planning.
2. To share findings, experiences, and recommendations with other entities.
3. To enhance, through safe and environmentally conscious improvements, the movement of people and goods across the U.S.-Mexico border."

Major Initiatives and Benefits

The committee is directing a binational border study to inventory and analyze existing information and infrastructure and to develop an ongoing, coordinated, binational planning process.

The JWC represents an innovative forum for the exchange of information between the United States and Mexico on both a state and federal level. It is also unprecedented in that the committee will establish a U.S.-Mexico border multimodal transportation planning process.

Border Transportation State Technical Advisory Committee

The binational transportation study's Joint Working Committee is advised by four Border Transportation State Technical Advisory Committees (BTSTACs) that cover the geographical and political boundaries of neighboring U.S. and Mexican border states. Membership is determined by each state according to its need.

Participants

Four BTSTACs have been created; one for each U.S. border state and their adjacent Mexican states. For example, the states of Texas, Chihuahua, Coahuila, Nuevo Leon and Tamaulipas constitute one of the four BTSTACs. The other three BTSTACs consist of New Mexico-Chihuahua, Arizona-Sonora, and California-Baja California. Participants in each U.S. and Mexican state were selected by the state transportation agency in each state.

Purpose and Benefits

The BTSTACs are intended to ensure local consensus, coordination, and communication among transportation planning and programming agencies from both sides of the border, and that barriers of language, custom, and policy do not deter open mutual understanding and communication.

BTSTACs review the Binational Study contractors' draft deliverables and any other technical issues needed during the progress of this study. Some BTSTACs also identify issues which they request be analyzed.

BTSTAC coordination of local, regional, and statewide agencies, and private-sector transportation providers and users is intended to ensure appropriate representation of state and regional interests in the study's direction and outputs.

Land Transportation Standards Subcommittee (LTSS)

This is a subcommittee of the Committee on Standards-Related Measures, created by Chapter 9 of the North American Free Trade Agreement (NAFTA).

Participants

This trilateral subcommittee is composed of representatives from the governments of the U.S., Canada, and Mexico.

Purpose and Benefits

According to NAFTA, the subcommittee's purpose is to develop recommendations of standards for bus and truck operations, rail operations, and transportation of hazardous materials among Canada, Mexico and the United States. The recommendations for standards relating to motor carrier operations (e.g., weights and dimensions; tires; brakes, parts and accessories; inspections; emissions; and other environmental pollution levels not covered by other NAFTA provisions) were to be developed by the LTSS by January 1, 1997, three years from the date of NAFTA's entry into force. Under NAFTA, Mexican and U.S. trucks were to be allowed to provide cross-border service in border states beginning December 17, 1995.

The LTSS will establish five working groups pursuant to Article 913 of NAFTA. These working groups will meet as often as necessary to accomplish NAFTA goals. These working groups determine standards in the following functional areas:

- Committee 1: passenger Vehicle and Driver Standards
- Committee 2: Commercial Vehicle Standards (Weights and Measures)
- Committee 3: Highway and Traffic Control
- Committee 4: Railroad Standards
- Committee 5: Hazardous Materials

This committee affords the opportunity to monitor and provide input to the negotiations among the three NAFTA nations as they discuss the compatibility of transportation standards.

Border Technology Exchange Program (BTEP)

BTEP is a program funded by the Federal Highway Administration (FHWA) to increase technical and professional relationships between the U.S. border states and their neighboring Mexican border states. The U.S. states are working closely with the Mexican border states to exchange infrastructure planning information, identify each state's technical needs and to establish positive, open communications. Training courses, workshops and conferences on transportation-related topics are being used to meet those needs.

Purpose and Benefits

BTEP's purpose is to improve working relationships with the Mexican border states for planning purposes and to provide information and capability to help improve transportation systems in the border region to increase commerce and safety.

The program involves personnel exchanges, courses in improving infrastructure safety and efficiency, and reciprocal visits for the purpose of planning and information exchange. This is a forum to develop ongoing working relationships with all the Mexican border states. By working closely together and sharing transportation priorities, participants in BTEP can help ensure the best use of funds in the border region.

Southwest Border Transportation Alliance (SWBTA)

The alliance was organized in September 1992. Each year a representative from a different state chairs SWBTA.

Participants

SWBTA consists of representatives designated by U.S. border state departments of transportation in Arizona, California, New Mexico and Texas. Other transportation agencies, such as the Texas Turnpike Authority, also participate in the alliance in the role of technical support.

Purpose and Benefits

The alliance adopted the following mission statement in May 1994:

1. "To promote effective transportation partnership among the U.S. border states to identify borderwide issues, needs and opportunities.

2. To implement binational planning with Mexico to improve transportation movement.
3. To communicate with federal agencies, Congress and our respective governors.
4. To provide transportation technical support to optimize the economic and safety benefits from our border states.”

The SWBTA's purpose is "to determine the infrastructure needs, binational planning programs and funding mechanisms that will provide optimum serving of the intermodal transportation of people and goods needed at the U.S.-Mexico border region."

SWBTA's goals are:

- To create a continuous, cooperative, coordinated, comprehensive binational planning process for transportation along the U.S.-Mexico border;
- To serve as a transportation technical advisory group in developing the interjurisdictional linkages necessary to define and address border transportation issues on a technical level; and
- To develop coordinated technology exchange and information programs that provide a consistent information platform and process to use in developing the interjurisdictional and interdisciplinary linkages to define and address border transportation issues.

The SWBTA supported the two-year FHWA initiative to negotiate with the Mexican Ministry of Communications and Transportation a Memorandum of Understanding (MOU) that the two countries' Secretaries of Transportation signed on April 29, 1994. The MOU establishes a Joint Working Committee (JWC) to direct a study leading to a coordinated, binational, border transportation planning process. SWBTA members serve on the JWC and SWBTA DOTs will fund half the cost of the US\$2.5 million study.

The FHWA Office of International Programs (OIP) views SWBTA as an ideal coordinating entity for monitoring the Border Technology Exchange Program (see elsewhere in this Appendix). The SWBTA also coordinates its activities with those of the Western Transportation Trade Network (WTTN), since all SWBTA states participate in the WTTN.

SWBTA provides an effective forum for the southwest border state DOTs to address southwest regional transportation issues and coordinate border-related planning. SWBTA is also important as a regional body interacting with the six Mexican border states.

In a relatively short period of time, SWBTA became recognized as an effective organization by Mexican transportation officials at the state and national level. SWBTA is a viable example for other regional border groups.

NAFTA Task Force

The NAFTA task force operates under the aegis of the Transportation Base State Working Group as provided for under Title IV, Motor Carrier Act, Section 4008, Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA).

Participants

The task force consists of representatives from Arizona, California, Maine, Montana, New Mexico, Texas and Utah. There are also representatives from the Federal Highway Administration, the National Conference on State Legislatures, the International Registration

Plan, HELP, Inc., the American Trucking Associations, the National Governors' Association and the International Fuel Tax Agreement.

Purpose and Benefits

According to Section 4008 of ISTEA, the task force was established for the purpose of (a) proposing procedures for resolving disputes among States participating in the International Registration Plan and among States participating in the International Fuel Tax Agreement including designation of the Department of Transportation or any other person for resolving such disputes; and (b) providing technical assistance to States participating or seeking to participate in the Plan or in the Agreement."

This task force is an forum for recognizing and discussing the fundamental differences in motor carrier operations among U.S. and Mexican states and Canadian provinces. Since the recommendations of the task force are forwarded to the Base State Working Group, this is an important opportunity to influence that body.

Gulf States Governors Conference

This group, which is modeled after the Border Governors' Conference, addresses those issues unique to the Gulf Region. There are three subcommittees associated with the Infrastructure Committee: (1) Surface Transportation, (2) Ports and Coastal Waterways, and (3) Aviation.

Participants

The Conference consists of representatives from five U.S. states, Alabama, Florida, Louisiana, Mississippi and Texas, and six Mexican states, Campeche, Quintana Roo, Tabasco, Tamaulipas, Veracruz and Yucatan.

Purpose and Benefits

The purpose of the Conference is to foster, promote and implement cooperative relationships between and for the mutual benefit of the member states and their private sector communities in support of the North American Free Trade Agreement (NAFTA) and the objectives of the accord.

Its objectives are to (1) work toward the successful implementation of NAFTA, (2) develop and implement a formal mechanism for member states to coordinate joint or bilateral economic development activities, communications, transportation and infrastructure development, tourism, joint ventures, business partnerships, health and environmental collaborations, agriculture, and education and cultural exchange programs, (3) promote existing trade and production processes for member states to determine potential private sector business opportunities, (4) provide appropriate support for the public and private sectors of the member states by sharing information on regulations, laws, trade data and customs, and (5) develop and implement other strategies for the mutual development of the member states as deemed necessary.

This forum provides an opportunity for transportation officials from the U.S.-Mexican states in the Gulf Region to interact with each other.

Western Transportation Trade Network (WTTN)

WTTN was established at the 1993 Western Association of State Highway and Transportation Officials (WASHTO) conference to put order into the growing competitive nature of north-south trade corridor promotion in the western United States. The concept is to get state DOTs and other interests to cooperate in regional transportation and trade corridor development to make best use of limited federal funds. The network is under leadership and authority of WASHTO's Policy Committee.

Participants

The Colorado DOT is designated by WASHTO Policy Committee resolution as the lead state for WTTN. Other members are planning directors of the DOTs for the other western states.

Purpose and Benefits

The Western Transportation Trade Network is charged with defining and implementing a multimodal transportation and trade network, thereby facilitating coordination of transportation planning among western states to promote economic growth and maximize regional trade opportunities among Canada, the United States and Mexico.

International Affairs Committee, Commercial Vehicle Safety Alliance

Participants

This committee is chaired by the Department of Revenue for the state of Colorado.

Purpose and Benefits

This committee was formed to:

1. Consider transborder concerns relating to infrastructure required to facilitate international trade and to focus on transborder concerns related to the regulatory infrastructure required to facilitate international trade;
2. Review compatibility and differences in safety regulations and out-of-service criteria between nations;
3. Transmit international concerns to other standing committees; and
4. Ensure that highly technical terms and documents are precisely interpreted or translated.

The committee has commissioned translation of materials to be used to train Mexican inspectors according to U.S. safety inspection standards. This is a continuing project.

Shared expertise and input to committee, and alliance activities has a positive effect on international motor carrier safety.

Border Trade Alliance (BTA)

Participants

The BTA is a U.S. grass roots organization of public and private entities along the U.S.- Mexico border.

Purpose and Benefits

According to BTA, its purpose is to act as a voice for communities along the border in U.S. regulatory and legislative processes, to improve the flow of U.S.-Mexican commerce, develop resources necessary for border economic growth, and advocate public- and private-sector interests.

BTA has compiled a series of infrastructure improvement recommendations from 13 U.S. border cities and more than 400 infrastructure experts who submitted reports for their communities. The first report in the series includes recommendations for binational administration and financing of infrastructure projects.

BTA shares a common concern with many other groups to improve commerce flow through adequate, appropriate transportation infrastructure development.

Appendix B
Presidential Permit Process

MEMORANDUM¹⁶

SUBJECT: The process By Which A Presidential Permit is Obtained Allowing Construction of a Project Between the United States and Mexico.

Introduction

The information contained in this Memorandum is a summary explanation of the legal basis for and procedures to be followed with respect to obtaining a Presidential Permit for construction, operation and maintenance of a facility on the

U.S.-Mexico border. Completion of any U.S.-Mexico project will also require close coordination and planning with Mexican sponsors and authorities. The legal requirements discussed herein are in addition to other requirements imposed by federal and state law. This document should not be relied upon as an exhaustive review of all steps that must be taken from concept development through construction. It is intended only as a road map to help the applicants identify major issues they are likely to confront.

The State Department's Legal Authority

The legal authority for the State Department's role in approving the issuance of Presidential Permits by making a determination as to their necessity and whether construction would be in the national interest, is found in Executive Order 11423¹⁷ of August 16, 1968 (33FR 11741), as amended by Executive Order 12847¹⁸ of May 17, 1993 (58 FR 29511) and, to the extent applicable, the International Bridge Act of 1972 (33 U.S.C. Section 535 *et seq.* The Department of State is also responsible for coordinating compliance with any requirements of the national Environmental Policy Act (42 U.S.C. Section 4321 *et seq.*)

Early Consultations are Desirable

The applicant should consult, as early as possible in the planning process, with all of the U.S. Government agencies involved including the General Services Administration, the Federal Inspection Service Agencies, the Environmental Protection Agency, the Department of the Interior (Fish and Wildlife Service), the U.S. Coast Guard (if the project is an international bridge), and the U.S. Section of the International Boundary and Water Commission. At the state level, the applicant should also consult with the appropriate state agencies, including those responsible for the environment, parks, wildlife, highways, historic preservation and any other state agency known to be involved so that questions or concerns that may be raised by these agencies are made known to the applicant as soon as possible.

How to Apply and What to Include in the Application

Applications for Presidential Permits for cross-border facilities on the Mexican border should be made to the Secretary of State, Attention: Coordinator, U.S.-Mexican Affairs, Office of Mexican Affairs, Room 4258, Department of State, Washington, D.C. 20520. Thirty copies of

¹⁶ U.S. Department of State, Office of Mexican Affairs, U.S.-Mexico Border Affairs; January 1997.

¹⁷ Included as Appendix C of this document.

¹⁸ Included as Appendix D of this document.

each application and of any supporting documents, drawings, etc. should be submitted. Applications should include the following:

1. Each application should precisely identify the person or entity applying for the permit. If the applicant is a county, municipality or other public body, the applicant should state its legal authority to make the application. The application should reveal any intention on the part of the applicant at any time to transfer, sell or assign to any other entity the facility for which approval is sought.
2. The application should describe in detail the proposed facility, including its location, design, the safety standards to be applied, access routes and detail of the proposed construction methods. The application should also include photographs of the construction site, maps which identify, *inter alia*, the parcel of land intended to be provided by the sponsor as a site for the border crossing, engineering drawings including the anticipated cross-section, technical specifications and such other explanatory materials as are available.
3. The application should explain how, in the view of the applicant, the national interest would be served by construction of the proposed facility. This explanation may be supported by any reports, correspondence, and other material indicating the desirability and feasibility of the proposed facility. Similar facilities in the area should be described and the names and addresses of their owners included. Existing and projected levels of international road traffic should be set forth and the type of road system that would serve the facility on each side of the border described. In the case of bridges, the application should indicate the projection of such traffic to be carried by the proposed bridge for the construction year and the design year (presumably 20 years), as well as the effect that traffic would have on and its compatibility with, the existing road. Maps showing the location of similar existing facilities, U.S. and Mexican roads with traffic counts, weight restricted routes and of any new roads needed to make the project feasible would be very helpful. These maps and other application materials should show where the projected traffic is expected to come from and the likely impact, in terms of number of vehicles, of any traffic diversion caused by the bridge on other border area crossings. This last information would help establish the required size of any inspection facility at the bridge site.
4. The application should set forth the applicant's plan of action for construction of the facility. Such a plan would include an expected schedule for securing the necessary permits and approvals, arranging financing, and performing construction. If any specific problems can be expected in this connection, they should be outlined with an indication of how they might be resolved.
5. The application should describe the planned financing of the proposed facility, including estimated costs, details of financing and proposed toll structure. If the facilities, including access roads, will involve funding from state or federal sources, the application should so specify and should set forth any steps taken to arrange for such funding.
6. The application should indicate all steps taken, or that will be taken to secure the approval of local, state, and federal officials in Mexico. The Government of Mexico has expressed its desire that applications for construction permits for facilities be made at more or less the same time in the two countries. The application should indicate the views of Mexican officials toward the facility, so far as these are known. The application should describe planned arrangements for construction of the Mexican

- portion of the facility, including ownership of the Mexican facilities and plans for financing the Mexican portion. Copies of any agreements concerning these matters should be attached. According to the 1972 Act, all required authorizations from the Government of Mexico must be obtained before an international facility may be constructed.
7. Satisfaction of all Mexican requirements is not necessary before a person may apply to the Department of State for a Presidential Permit. However, the applicant should affirm and present evidence that the Mexican authorities have been consulted and will at least consider construction at the location proposed. In this way, the unnecessary expenditure of resources by both the applicant and the U.S. Government may be avoided.
 8. The National Historic Preservation Act of 1966 requires federal agencies to consider the effects of their actions on historic properties and to seek comments from the Advisory Council on Historic Preservation. Before a Presidential Permit can be issued, it must be determined that the proposed project will not adversely affect any property included on or eligible for inclusion in the National Register. Information that would facilitate such a determination should be included by the applicant.
 9. In order to assist the Department in fulfilling its obligations pursuant to Executive Order 12898 (“Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations”), the application should identify minority and low-income populations likely to be affected by construction of the bridge or other structure that would be authorized by issuance of the Presidential Permit.
 10. The application should describe any other permits or approvals from U.S. federal, state and local agencies that are understood by the applicant to be required in connection with the proposed facility, and should describe steps being taken to secure them.
 11. In furtherance of the recommendations contained in the August 8, 1994 NEC Whitepaper, “Staff Recommendations of the Task Force on Border Infrastructure and Facilitation for Improved U.S. Border Operations,” the application should (1) show that there are the commitments necessary to ensure an adequate support infrastructure, including access roads, consistent with state and regional plans; (2) take into account Mexican development plans and priorities; and (3) propose a viable financing plan for inspection facilities and inspection agency staffing, as well as for the crossing itself.

Environmental Review

1. Pursuant to the National Environmental Policy Act (NEPA), the Department of State must take into account, in considering any application for a Presidential Permit, significant environmental impacts, if any, whether direct, indirect or cumulative, of the proposed facilities and directly related construction. Depending upon those impacts, the Department of State may be required to prepare, circulate for comment and file environmental documentation prior to deciding whether to grant the Presidential Permit application. To facilitate this process, each application should be accompanied by any environmental documentation it believes to be required under NEPA and the Regulations found in 40 CFR Parts 1500-1508, whether that is an environmental assessment (EA) or an environmental impact statement (EIS). It should be noted that if an EA is produced, it may be necessary, depending upon the finding of the Department of State to produce an EIS.

2. Upon receipt of the application including the environmental documentation considered appropriate by the applicant, the Department of State will circulate that documentation to other federal executive agencies and to state authorities for comment. The Department publishes a notice in the Federal Register inviting public comment. If the proposed project is located within or near an area that is declared to be a non-attainment area under the Clean Air Act (CAA), there is additional consultation in which the Department of State must engage concerning the level of environmental documentation required. Should questions from the agencies arise, they will be referred to the applicant. The Department of State will work with the applicant to ensure these are satisfactorily addressed. The applicant may be required to prepare an amended application reflecting any agreements and commitments made in the course of addressing agency concerns. The Department of State would then circulate any amended application for final agency review. If, following the review, the Department of State determines there will be no significant environmental impact, the Department will issue a Finding of No Significant Impact (FONSI). If a significant impact is found, an EIS must be prepared before the Presidential Permit may be issued.

Further detail on the environmental review process is attached. Guidance related to EAs, EISs and NEPA is contained within 40 CFR Parts 1500-1508.

National Interest Criteria

Once all of the consultation and findings referred to above have been made, the Secretary of State makes a decision as to whether or not construction of the facility in question would be in the national interest. If construction is found to be in the national interest, federal agencies are so informed. Unless any objection is expressed, the Presidential Permit is issued 15 days thereafter.

Other Necessary Approvals Prior to Construction Authorization

1. Under the provisions of the International Bridge Act of 1972 (22 U.S.C. 535, 535c - 535h), the Coast Guard has jurisdiction pertaining to the construction, modification, operation and maintenance of any bridge connecting the United States with a foreign country. Applicants should consult with the U.S. Coast Guard regarding that agency's permit process.
2. Plans for construction of the facility in question must be submitted for approval by the International Boundary and Water Commission located at El Paso, Texas and Ciudad Juarez, Mexico. The Commission must determine that the effects of the facility will not be contrary to existing bilateral arrangements between the U.S. and Mexico.
3. Receipt of a Presidential Permit does not guarantee the availability of sufficient U.S. personnel to provide essential inspection services. Applicants should periodically coordinate with the Federal Inspection Service (FIS) agencies to keep abreast of staffing decisions that could impact the opening of the facility they are proposing.

More Information

Any questions regarding the contents of this Memorandum should be addressed to the Coordinator, U.S.-Mexico Border Affairs, Office of Mexican Affairs, Room 4258, Department of State, Washington, D.C. 20520 (tel: (202)647-8529).

Appendix C
Executive Order #11423

Executive Order #11423
Providing for the Performance of Certain Functions Heretofore Performed by the
President With Respect to Certain Facilities Constructed and
Maintained on the Borders of the United States

August 20, 1968

WHEREAS, the proper conduct of the foreign relations of the United States requires that executive permission be obtained for the construction and maintenance at the borders of the United States of facilities connecting the United States with a foreign country; and

WHEREAS such executive permission has from time to time been sought and granted in the form of Presidential permits for the construction, connection, operation, and maintenance at the borders of the United States of such border crossing facilities as water supply and oil pipelines, aerial tramways and cable cars, submarine cables, and lines for the transmission of electric energy; and

WHEREAS Executive Order No. 10485 of September 3, 1953, empowers the Federal Power Commission to issue permits for the construction, operation, maintenance, or connection, at the borders of the United States, of facilities for the transmission of electric energy between the United States and a foreign country and for the importation or exportation of natural gas to or from a foreign country; and

WHEREAS Executive Order No. 10530 of May 10, 1954, empowers the Federal Communications Commission to issue and revoke licenses to land submarine cables in the United States; and

WHEREAS it is desirable to provide a systematic method in connection with the issuance of permits for the construction and maintenance of other such facilities connecting the United States with a foreign country:

NOW, THEREFORE, by virtue of the authority vested in me as President of the United States and Commander in Chief of the Armed Forces of the United States and in conformity with the provisions of Section 301 of Title 3, United States Code, it is ordered as follows:

SECTION 1. (a) Except with respect to facilities covered by Executive Orders No. 10485 and No. 10530, the Secretary of State is hereby designated and empowered to receive all applications for permits for the construction, connection, operation, or maintenance at the borders of the United States, of: (i) pipelines, conveyor belts, and similar facilities for the exportation or importation of petroleum, petroleum products, coal, minerals, or other products to or from a foreign country; (ii) facilities for the exportation or importation of water or sewage to or from a foreign country; (iii) monorails, aerial cable cars, aerial tramways and similar facilities for the transportation of persons or things, or both, to or from a foreign country; and (iv) bridges, to the extent that congressional authorization is not required.

(b) With respect to applications received pursuant to subsection (a)(i) above, the Secretary of State shall request the views of the Secretary of the Treasury, the Secretary of Defense, the Attorney General, the Secretary of the Interior, the Secretary of Commerce, the Secretary of Transportation, the Interstate Commerce Commission, and the Director of the Office of Emergency Planning. With respect to applications received pursuant to subsection (a) (ii) above, the Secretary of State shall request the views of the Secretary of Defense and the Secretary of the Interior. With respect to applications received pursuant to subsection (a) (iii) or (iv) above, the Secretary of State shall request the views of the Secretary of the Treasury, the Secretary of Defense, the Attorney General, and the Secretary of Transportation.

(c) The Secretary of State may also consult with such other department and agency heads and with such state and local government officials as he deems appropriate with respect to each application. All federal government officials consulted by the Secretary of State pursuant to this section shall provide such information and render such assistance as he may request, consistent with their competence and authority.

(d) If the Secretary of State finds, after consideration of the views obtained pursuant to subsections (b) and (c), that issuance of a permit to the applicant would serve the national interest, he shall prepare a permit, in such form and with such terms and conditions as the national interest may in his judgment require, and shall notify the officials required to be consulted under subsection (b) above of his proposed determination that the permit be issued.

(e) If the Secretary of State finds, after consideration of the views obtained pursuant to subsections (b) and (c), that issuance of a permit to the applicant would not serve the national interest, he shall notify the officials required to be consulted under subsection (b) above of his proposed determination that the application be denied.

(f) The Secretary of State shall issue or deny the permit in accordance with his proposed determination, unless, within fifteen days after notification pursuant to subsections (d) or (e) above, an official required to be consulted under subsection (b) above shall notify the Secretary of State that he disagrees with the Secretary's proposed determination and requests the Secretary to refer the application to the President. In the event of such a request, the Secretary of State shall refer the application, together with statements of the view of the several officials involved, to the President for his consideration and final decision.

SEC. 2 (a) The Secretary of State may provide for the publication in the FEDERAL REGISTER of notice of receipt of applications, for the receipt of public comments on applications, and for publication in the FEDERAL REGISTER of notice of issuance or denial of applications.

(b) The Secretary of State is authorized to issue such further rules and regulations, and to prescribe such further procedures as he may from time to time deem necessary or desirable for the exercise of the authority conferred upon him by this order.

SEC. 3. The authority of the Secretary of State hereunder is supplemental to, and does not supersede, existing authorities or delegations relating to importation, exportation, transmission, or transportation to or from a foreign country. All permits heretofore issued with respect to matters described in Section 1 of this order, and in force at the time of issuance of this order, and all permits issued hereunder, shall remain in effect in accordance with their terms unless and until modified, amended, suspended, or revoked by the President or, upon compliance with the procedures provided for in this order, by the Secretary of State.

Appendix D
Executive Order #12847

Executive Order #12847
Amending Executive Order #11423
May 17, 1993

By the authority vested in me as President by the Constitution and the laws of the United States of America, including section 301 of title 3, United States Code, and in order to amend Executive Order No. 11423 of August 16, 1968, to provide for the issuance of permits for the full range of facilities that may be constructed and maintained on the borders of the United States, it is hereby ordered as follows:

Section 1. Section 1(a) of Executive Order No. 11423 is amended to read: "Except with respect to facilities covered by Executive Order Nos. 10485 and 10530, the Secretary of State is hereby designated and empowered to receive all application for permits for the construction, connection, operation, or maintenance, at the borders of the United States, of: (i) pipelines, conveyor belts, and similar facilities for the exportation or importation of petroleum, petroleum products, coal, minerals, or other products to or from a foreign country; (ii) facilities for the exportation or importation of water or sewage to or from a foreign country; (iii) facilities for the transportation of persons or things, or both, to or from a foreign country; (iv) bridges, to the extent that congressional authorization is not required; and (v) similar facilities above or below ground."

Sec. 2. Section 1(b) of Executive Order No. 11423 of August 16, 1968, is amended by deleting the text "subsection (a) (iii) or (iv)" and by inserting "subsection (a) (iii), (iv) of (v)" in lieu thereof.

Sec. 3. All permits heretofore issued with respect to matters described in section 1 of Executive Order No. 11423, and in force at the time of issuance of this order, and all permits issued hereunder, shall remain in effect in accordance with their terms unless and until modified, amended, suspended, or revoked by the appropriate authority.

William J. Clinton

The White House, May 17, 1993