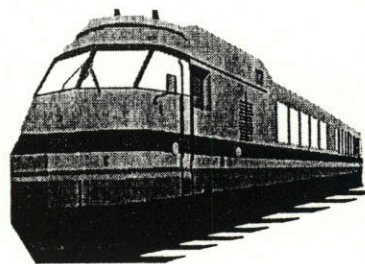
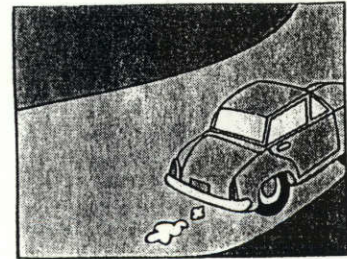
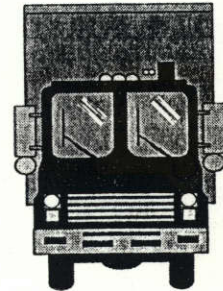
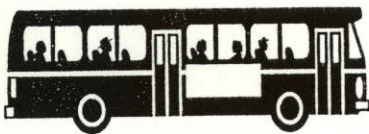
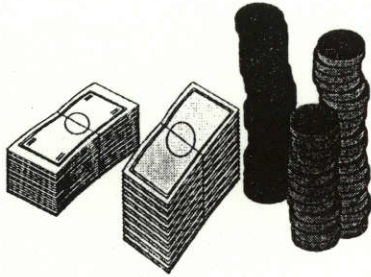


SAN ANTONIO-BEXAR COUNTY URBAN TRANSPORTATION STUDY

MOBILITY 2025 - METROPOLITAN TRANSPORTATION PLAN





Title: Mobility 2025 Metropolitan Transportation Plan		Report Date: December 1999	
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Abstract: The Metropolitan Transportation Plan is the basic framework for the San Antonio-Bexar County Metropolitan Planning Organization's continuous, comprehensive, and coordinated regional transportation planning efforts for the next twenty five years. The Plan provides for the efficient, safe, and convenient transportation of people and goods. The Plan addresses the mobility needs of the Study Area to the year 2025 by identifying transportation improvement projects within four general categories: 1) Improving roadway capacity 2) Maintaining existing roadways 3) Improving public transportation services 4) Other transportation Improvements such as bicycle and pedestrian improvements and other transportation demand management techniques. The Plan also addresses the extensive public involvement process and the transportation modal analysis used in the Plan development.			
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MOBILITY 2025

METROPOLITAN TRANSPORTATION PLAN

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EXECUTIVE SUMMARY

METROPOLITAN TRANSPORTATION PLAN BACKGROUND

Transportation is a dominant factor in all our lives. How well we get to and from work, school, hospitals, shopping centers and recreational facilities is critically important to us all. The ability to travel directly affects our economic and social status as well as our overall standard of living. On a larger scale, the San Antonio metropolitan area's economy and environment depend heavily on the condition and efficient performance of our regional transportation system. Appropriate transportation planning, recognizing the mobility needs and identifying the available resources, will allow for the maintenance and improvement of our transportation system, therefore affecting our economy and quality of life. Public involvement in the planning process is necessary to insure that transportation decisions are not made independently and that Federal tax dollars are used in accordance with legitimate public needs and desires.

Long range transportation planning requirements are not new. Transportation planning by metropolitan planning organizations dates back to the passage of the Federal Highway Act of 1962. This act required that all urban areas with populations of 50,000 or greater develop and maintain a comprehensive, cooperative

and continuing regional transportation planning process. Accordingly, in 1963, San Antonio, Bexar County and the Texas Department of Highways established the San Antonio - Bexar County Urban Transportation Study (SABCUTS). In August 1977, the Governor of Texas designated the SABCUTS Steering Committee as the official Metropolitan Planning Organization (MPO) for San Antonio and Bexar County. This organization is the forum for cooperative transportation planning and decision-making by officials of the urban area's local governments and transportation agencies. The Transportation Steering Committee of the MPO is comprised of nine elected and ten appointed officials representing the State Delegation, the Texas Department of Transportation, the Alamo Area Council of Governments, Bexar County, City of San Antonio, 24 local municipalities and VIA Metropolitan Transit.

The passage of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) marked a significant change in the planning and development of metropolitan transportation systems. In its Declaration of Policy, ISTEA mandates "a National Intermodal Transportation System that is economically efficient and environmentally sound...and will move people and goods in an energy efficient manner." Specifically, "the National Intermodal Transportation System shall consist of all

forms of transportation in a unified, interconnected manner . . . to reduce energy consumption and air pollution while promoting economic development . . ."

On May 22, 1998, Congress passed the Transportation Equity Act for the 21st Century (TEA-21) authorizing highway, highway safety, transit and other surface transportation programs for the next six years. TEA-21 builds on the initiatives established in ISTEA. TEA-21 combines the continuation and improvement of current programs with new initiatives to meet the challenges of improving safety as traffic continues to increase at record levels, protecting and enhancing communities and the natural environment, and advancing America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.

TEA-21 PLANNING FACTORS

When Congress passed TEA-21, one of the modifications from ISTEA consolidated the previous sixteen planning factors into seven broad areas. The seven planning factors, listed below, closely reflect the Metropolitan Transportation Plan Goals which are listed later in this section.

1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency

2) Increase the safety and security of the transportation system for motorized and non-motorized users

3) Increase the accessibility and mobility options available to people and for freight

4) Protect and enhance the environment, promote energy conservation, and improve quality of life

5) Enhance the integration and connectivity of the transportation system

6) Promote efficient system management and operation

7) Emphasize the preservation of the transportation system

METROPOLITAN TRANSPORTATION PLAN MISSION STATEMENT

In February 1998, the Transportation Steering Committee adopted the following mission statement as part of the MTP:

The San Antonio metropolitan area is served by an environmentally friendly transportation system where everyone is able to walk, ride, drive or wheel in a safe, convenient, and affordable manner to their desired destinations.

Based on the input received through the public involvement process, the following goal statements were derived.

METROPOLITAN TRANSPORTATION PLAN GOALS

- Invest in the development of a regional transportation system that serves to increase the mobility and efficiency of the movement of persons and goods.
- Encourage the cost effective expansion of the regional transportation system to meet the growing mobility needs while ensuring air quality; enhancing the safety of the travelling public; fostering appropriate land use patterns; advancing alternative modes of transportation; and, increasing accessibility for the traditionally under served segments of the community.
- Support systematic and coordinated maintenance programs, and make available the adequate resources to preserve existing roadways and transit systems.
- Increase the efficiency of the existing transportation system and decrease traffic congestion by coordinating traffic operations and developing and implementing strategies to reduce travel demand at both the regional and corridor levels.
- Invest in a public transit system that meets the existing and projected needs of the region by developing effective routes and schedules and constructing functional and attractive passenger amenities.
- Incorporate the spirit and intent of the Americans with Disabilities Act pertaining to mobility and accessibility into all levels of the transportation system.
- Enhance the effectiveness of the regional transportation system by addressing the social, economic, energy and environmental issues of the region in all transportation planning efforts.
- Improve the opportunities for alternative means of transportation that diminish the growth in single occupancy vehicles and enhance air quality by upgrading the availability of bicycle and pedestrian facilities; promoting High Occupancy Vehicle analysis in future project planning; investigating opportunities for fixed guideway systems; and encouraging the conversion to alternative fuels.
- Promote the development of a regional transportation system that recognizes the unique characteristics of the San Antonio-Bexar County area and ensures respect for neighborhoods, historic and archeological resources, the Edwards Aquifer, and other social and environmental issues.

- Promote the development of a regional transportation system that enhances economic activity; provides for employment growth; and encourages public-private partnerships through the equitable distribution of resources.
- Facilitate the involvement and participation of individual citizens, neighborhood and other interested groups, business and community leaders, local governments, and state agencies in the transportation planning process.

An important element of the MTP is to determine how approximately \$9 billion in Federal, State, and local transportation funds should be spent over the next 25 years. One of the findings during the Plan development is, even with a \$9 billion investment in transportation infrastructure, the congestion levels will increase at a faster rate than the available funding levels.

DEMOGRAPHICS

The basis of any effective planning effort rests primarily on an initial determination of the area's demographics (population, households size, employment, household income, and land use) and future projections of these demographics. 1995 was used as the base year by the San Antonio-Bexar County Urban Transportation Study for this update of the Metropolitan Transportation Plan. For the out-years, various federal and state government data sources were used for the

basis of population and employment control totals in five year increments to the year 2025 for the San Antonio area.

From 1970 to 1990 Bexar County experienced annualized growth rates in population of 2.14% and in employment of 4.73% based on census data. Historically, employment has been growing twice as fast as population. This is due to more women joining the work force, more people remaining in the work force longer, and people living in adjacent counties but working within the MPO study area.

Comparing the 1995 population densities to the year 2025 output from the demographic forecasting model, residential development is expected to continue to grow northward. The western part of Bexar County, between Loop 410 and the County Line, also is expected to grow significantly as is the northeast part of the study area. Southern Bexar County is forecast to show medium gains in number of households.

Comparing the 1995 employment densities to the year 2025 output from the demographic forecasting model, employment development is also expected to continue to grow northward. The trend appears to be for the bulk of the growth in employment to remain generally outside Loop 410 to the County Line. One exception to this trend is downtown San Antonio, where growth will be substantial. Continued

growth in the medical center area will be a factor in the northwest.

ROADWAY ELEMENT

As population and employment continue to grow in the San Antonio metropolitan area, a higher burden will be placed on the roadway system. To accommodate the traffic increases on the roadway system, additional travel lanes will need to be added, and operational improvements will need to be made. In addition to congestion levels, factors that were considered while developing the future year roadway network included the impact of freight traffic, impacts to neighborhoods, environmental impacts, and fiscal constraints.

The Metropolitan Transportation Plan (approved December 1994 with project updates) roadway network was assumed to be the base year network for this update. This base network reflects 5,981 roadway lane miles, 55,840,010 daily vehicle miles of travel, 2,690,420 daily vehicle hours of travel, and an overall network speed of 21 miles per hour.

The future year (2025) roadway system was developed using an extensive public involvement process and technical analysis. The future year network reflects 6,750 roadway lanes miles, 55,953,000 daily vehicle miles of travel, 2,340,910 daily vehicle hours of travel, and an overall network speed of 24 miles per hour.

Even with an investment of nearly \$9 billion over the next twenty-five years in transportation infrastructure, the local traffic congestion is expected to increase. Transportation demand management strategies will become increasingly important and, when implemented, can have an effect on growth, land use, travel patterns and travel behavior.

PUBLIC TRANSPORTATION ELEMENT

VIA Metropolitan Transit (VIA) is a political subdivision of the State of Texas, authorized by State Enabling Legislation to receive locally-generated sales tax income at a rate not to exceed one percent and subject to approval by voters within the VIA service area. VIA currently collects sales tax income at a rate of one-half percent as approved in the November 1977 referendum that established VIA. VIA is also supported by fare box revenue, Federal Transit Administration (FTA) funding, advertising revenue, and interest income.

The VIA service area is 1,232 square miles, which is 99% of Bexar County, and currently includes the City of San Antonio, plus sixteen suburban cities and all of the unincorporated areas of Bexar County. Suburban cities located within the service area are Alamo Heights, Balcones Heights, Castle Hills, China Grove, Converse, Elmendorf, Fair Oaks Ranch, Grey Forest, Helotes, Hollywood Park, Kirby, Leon Valley, Olmos Park, St. Hedwig, Shavano Park, Terrell Hills, and portions of

Cibola, Schertz, and Selma. Cities all or partially located within Bexar County but are not part of the VIA service area are Hill Country Village, Live Oak, Lytle, Somerset, Universal City, and Windcrest.

The year 2025 Expanded Bus Service Network represents an orderly expansion of the base year (1995) bus system. Bus service and service frequencies will increase in response to population and employment growth trends.

Between 2001 and 2025, the transit is proposed to add eight new bus routes to the 100 routes VIA currently operates. The analysis indicated additional service would need to be increased (headways reduced) on nearly all of the existing bus routes. New bus routes proposed to be added include an express route on IH 10 East; crosstown routes on Loop 1604, Huebner Road, and Jones-Maltsberger; and circulator routes serving the Seguin Road area, the Converse/ Schertz area, and the Thousand Oaks/ Encino Park area.

Annual bus ridership is projected to increase from an estimated 42,452,718 passengers in year 2000 to 58,245,440 passengers in year 2025. To serve this anticipated growth, annual bus miles are projected to increase from an estimated 22,354,245 in year 2000 to 29,092,081 in year 2025. The bus fleet is expected to grow to an estimated 602 buses during this 25-year time period.

VIAtrans, paratransit service for persons with disabilities, is expecting a slight increase in the level of directly operated service and a greater increase in the level of purchased (contract) service. VIA forecasts a 43% increase in total VIAtrans miles and passengers by the year 2025.

VIA's financial forecast indicates that future revenues will keep pace with future costs but does not include major new revenue sources or expenses associated with the construction of a potential fixed guideway system.

BICYCLE ELEMENT

The following vision statement was developed in the Bicycle Mobility Plan:

The San Antonio-Bexar County study area can be one where residents and visitors will choose to bicycle. Bicycling will be a pleasant, safe transportation alternative for trips of all kinds and for all segments of the population.

Bicycling goals include:

- G-1** To double the percentage of trips made by bicycle in the Bicycle Mobility Plan study area and continue to increase bicycle trips through the 25-year life of the mobility plan.
- G-2** To reduce the number of bicycle-related traffic accidents by 10

percent by 2005 and continue to reduce bicycle accidents through the 25-year life of the plan.

- G-3 To increase awareness of bicycling as a viable transportation alternative both in the planning community and among the general public.

Bicycle Mobility Plan Objectives

The Bicycle Mobility Plan adopted a dual strategy to achieve these goals. First, the plan identified how future transportation investments in the study area can include appropriate facilities to promote bicycling and the safety of bicyclists. Second, the plan identified how the existing infrastructure can be modified to improve opportunities for bicycling and make cycling safer.

- O-1 All new transportation facilities in the study area will, at a minimum, accommodate experienced cyclists.
- O-2 In key bicycle corridors, transportation facilities will accommodate travel by bicycle for all types of cyclist.
- O-3 Identifies strategies for accommodating bicyclists of all abilities in key corridors in the study area.
- O-4 Identifies strategies for overcoming major barriers to bicycle travel in the study area.

PEDESTRIAN ELEMENT

In order to provide an accessible pedestrian facilities system that is safe, continuous, convenient, attractive, and affordable, the following goals and objectives have been developed.

Safety: Provide pedestrian facilities that are safe for general pedestrian travel and for extraordinary travel circumstances.

Connectivity: Unite parts of the pedestrian facilities system into a continuous system by completing system gaps, providing linkages to activity centers, and connecting with other modes of travel.

Intermodal Facilities: Increase pedestrian access to, and around, intermodal facilities by providing new linkages and improving existing connections.

Design: Employ fully accessible (barrier-free), state-of-the-art design for all new and replacement pedestrian facilities.

Expenditures: Effectively utilize available resources to provide for basic pedestrian mobility and accessibility needs.

CONGESTION MANAGEMENT

Although the San Antonio area may rank among the least congested cities compared to other major American cities, there are locations in the area which experience traffic delays, and locally, are

perceived as congested. These congested areas are major contributors to the air quality concerns and to the overall efficiency of the areawide transportation system. With non-attainment of air quality standards rapidly becoming a real possibility for this area, congestion management strategies and transportation control measures must be applied effectively toward relieving a substantial portion of these concerns.

Goals of the Congestion Management System are to:

- increase the efficiency of the existing transportation system and decrease traffic congestion through coordination of traffic operations
- develop strategies to reduce travel demand at both the regional and corridor levels and diminish the growth in single occupancy vehicle
- enhance air quality by improving the opportunities for alternative means of transportation.

PUBLIC INVOLVEMENT PROCESS

A proactive approach to an effective public involvement process requires several elements:

- Early, continuous, and meaningful public involvement;

- reasonable public access to technical planning information;
- collaborative input on transportation alternatives, evaluation criteria and mitigation needs;
- transportation planning meetings that are open to the public; and
- access to the planning and decision-making process prior to closure.

The MPO developed an extensive public involvement approach beginning with a statistically valid benchmark of citizens' attitudes and perceptions concerning the region's current transportation system, the Regional Transportation Attitude Survey. A Technical Working Group (TWG) and a Citizens Working Group (CWG), each consisting of approximately 70 participants, were created to assist in the development of the Plan. While working with these groups as well as with a student group, the general public was kept apprised of the MTP Update process through quarterly MTP Update newsletters. The MPO also had a ten minute video developed called "The Metropolitan Transportation Plan - It's Your Future" which has been aired in various venues throughout the development of the Plan. Members of the news media have been invited to each of the MTP Update worksessions resulting in several articles in the daily and weekly newspapers. Additionally, articles

describing the MTP Update process were published in the MPO's quarterly newsletter and distributed to the MPO's master mailing list of more than 900 individuals and organizations. A second video is in the process of being developed which will describe both the process and the results of the Metropolitan Transportation Plan.

Additionally, during August and September 1999, MPO staff made informational presentations to small groups of citizens and local policy making bodies. The presentation outlined the process used to date to develop the Metropolitan Transportation Plan, describing both the technical work and the extensive public involvement process.

Five public meetings were held during September 1999 in five sectors of the Study Area. These meetings began with a general presentation, which outlined the process used to develop the Metropolitan Transportation Plan, describing both the technical work and the extensive public involvement process. After the general presentation, the citizens were divided into small groups, facilitated by knowledgeable agency staff. In the small groups, the facilitators asked the participants to respond to questions regarding the projects currently identified in the Plan.

In summary, the public has been involved in the planning process early,

continuously, and in a meaningful way; were provided reasonable technical information; collaboratively determined alternatives and solutions. This process made them true partners in creating the metropolitan area's new long-range transportation plan.

FINANCIAL PLAN

The transportation system in the San Antonio-Bexar County study area will need to be maintained and enhanced to meet the mobility needs of people and goods for the 25-year horizon of this plan. To meet the growing travel needs, it is necessary to identify reasonable and available federal, state, and local transportation funds, both public and private. Traditional transportation funds are available through a variety of sources, many of which contain restrictions on how they can be used and/or allocated. It is also necessary to estimate relevant expenses including capital for both maintenance and operation of the system.

In order to meet the expected mobility needs, the Financial Plan investigates the available existing and forecasted funding amounts from governmental sources. Specifically, it looks at recent historical trends in transportation-related expenditures and projects them forward for 25 years. A revenue summary is provided on the following page.

REVENUE SUMMARY

Funded Projects

Roadway Projects : See pages 1 - 33 of the Project List (Section 12)

Transit Projects: See pages 34 - 42 of the Project List (Section 12)

Estimated Traditional Revenue Sources

Roadway (includes Section 5310 funding) -----	\$5,554,697,000
Transit (years 2001-2025) -----	\$4,039,724,000
Transit (year 2000)-----	<u>\$134,000,000</u>
Total Traditional Revenue -----	<u>\$9,728,421,000</u>

Unfunded Projects

See Supplemental List of Unfunded Roadway and Transit Projects in Section 12

Potential Additional Revenue Sources

Advanced Transportation District -----	\$1,322,518,700
Metro Trans System Development Program -----	<u>\$1,135,027,890</u>
Total - Extended Financing Programs -----	<u>\$2,457,546,590</u>

(local portion only; does not include matching federal dollars)

Toll Facilities -----	to be determined at a later date
Commuter Rail District -----	to be determined at a later date
Public/Private Ventures -----	to be determined at a later date

TRANSPORTATION STEERING COMMITTEE ACTION

The MPO Transportation Steering Committee took action on the Metropolitan Transportation Plan at their meeting on December 6, 1999. The action was divided into eight separate motions, adopting seven major components of the project list with Motion #8 adopting the Metropolitan Transportation Plan document. These motions are further described below.

Motion #1 Roadway Component

After a brief presentation by the mayor of the City of Leon Valley, the motion was made to remove the phrase "with flyovers" in the SH 16 (Bandera Road) project descriptions in the project list and to adopt the roadway component of the Metropolitan Transportation Plan. The motion carried unanimously.

Motion #2 Funded Transit Component

Councilwoman Debra Guerrero questioned Mr. John Milam, General Manager, VIA Metropolitan Transit, on two items 1) VIAtrans service improvements and 2) increasing the dollar amount contribution for infrastructure to the City of San Antonio. The planned communications improvements for the VIAtrans system were briefly described by Mr. Milam. These Automated Vehicle Location (AVL) improvements will enable VIAtrans dispatch staff to know the location of the

VIAtrans vans at all times in order to manage the fleet more effectively. This system is expected to be in place early next calendar year. Mr. Milam also stated that VIA and the City of San Antonio were beginning discussions regarding VIA's contributions to the City of San Antonio for street improvements. The motion was made to include the VIAtrans AVL description and VIA's contribution to street maintenance in the Plan text. Mr. Michael Martin asked that Bexar County and the suburban cities be included in the infrastructure discussions with VIA. The motion carried unanimously.

Motion #3 Bicycle/Pedestrian/Rideshare Component

The motion was made and seconded to adopt the bicycle, pedestrian, and rideshare components of the Metropolitan Transportation Plan. There was no discussion. The motion carried unanimously.

Motion #4 Toll Road Component

The motion was made and seconded to adopt the toll road component of the Metropolitan Transportation Plan as an option for further consideration, but not as an endorsement of the project. There was no discussion. The motion carried unanimously.

Motion #5 San Antonio-Austin Commuter Rail Component

The motion was made and seconded to adopt the San Antonio-Austin Commuter Rail component of the Metropolitan Transportation Plan as an option for further consideration, but not as an endorsement of the project. The Commuter Rail project will be listed on an illustrative list of projects in the Plan as there is currently not an identified funding source. The motion carried unanimously.

Motion #6 High Occupancy Vehicle Lane/Busway Component

The motion was made and seconded to adopt the High Occupancy Vehicle Lane/Busway component of the Metropolitan Transportation Plan as an option for further consideration. These projects will be listed on an illustrative list of projects in the Plan as there is currently not an identified funding source. The motion carried unanimously.

Motion #7 Light Rail Component

Mr. Bill Barker, Director of Planning at VIA Metropolitan Transit, made a presentation on VIA's System Plan effort. After much discussion, the motion was made and seconded to adopt the Advanced Transportation component, including a fixed guideway component. This motion does not constitute any endorsement. The motion carried unanimously. These light

rail projects will be listed on an illustrative list of projects in the Plan as there is currently not an identified funding source.

Motion #8 Metropolitan Transportation Plan

The motion was made and seconded to adopt the Metropolitan Transportation Plan. There was no discussion. The motion carried unanimously.

INTRODUCTION

METROPOLITAN TRANSPORTATION PLAN BACKGROUND

Transportation is a dominant factor in all our lives. How well we get to and from work, school, hospitals, shopping centers and recreational facilities is critically important to us all. The ability to travel directly affects our economic and social status as well as our overall standard of living. On a larger scale, the San Antonio metropolitan area's economy and environment depend heavily on the condition and efficient performance of our regional transportation system. Appropriate transportation planning, recognizing the mobility needs and identifying the available resources, will allow for the maintenance and improvement of our transportation system, therefore affecting our economy and quality of life.

The fundamental purpose of transportation planning is to insure that our ability to move people and goods throughout the metropolitan area keeps pace with the growing demand for mobility. Transportation improvement projects, both roadway and transit, by their very nature take a long time to accomplish. This long range planning must be accomplished in a continuing, comprehensive and coordinated manner. It must also be consistent with the economic, social and environmental goals and objectives of the local governments within the San Antonio-Bexar County Urban

Transportation Study Area. Public involvement in the planning process is necessary to insure that transportation decisions are not made independently and that Federal tax dollars are used in accordance with legitimate public needs and desires.

Long range transportation planning requirements are not new. Transportation planning by metropolitan planning organizations dates back to the passage of the Federal Highway Act of 1962. This act required that all urban areas with populations of 50,000 or greater develop and maintain a comprehensive, cooperative and continuing regional transportation planning process. Accordingly, in 1963, San Antonio, Bexar County and the Texas Department of Highways established the San Antonio - Bexar County Urban Transportation Study (SABCUTS). In August 1977, the Governor of Texas designated the SABCUTS Steering Committee as the official Metropolitan Planning Organization (MPO) for San Antonio and Bexar County. This organization is the forum for cooperative transportation planning and decision-making by officials of the urban area's local governments and transportation agencies. The Transportation Steering Committee of the MPO is comprised of nine elected and ten appointed officials representing the State Delegation, the Texas Department of Transportation, the Alamo Area Council of

Governments, Bexar County, City of San Antonio, 24 local municipalities and VIA Metropolitan Transit.

The passage of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) marked a significant change in the planning and development of metropolitan transportation systems. In its Declaration of Policy, ISTEA mandates "a National Intermodal Transportation System that is economically efficient and environmentally sound...and will move people and goods in an energy efficient manner." Specifically, "the National Intermodal Transportation System shall consist of all forms of transportation in a unified, interconnected manner . . . to reduce energy consumption and air pollution while promoting economic development . . ."

On May 22, 1998, Congress passed the Transportation Equity Act for the 21st Century (TEA-21) authorizing highway, highway safety, transit and other surface transportation programs for the next six years. TEA-21 builds on the initiatives established in ISTEA. TEA-21 combines the continuation and improvement of current programs with new initiatives to meet the challenges of improving safety as traffic continues to increase at record levels, protecting and enhancing communities and the natural environment, and advancing America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.

TEA-21 PLANNING FACTORS

When Congress passed TEA-21, one of the modifications consolidated the previous sixteen planning factors into seven broad areas. These seven planning factors closely reflect the Metropolitan Transportation Plan Goals which are listed later in this section. The seven planning factors are listed below as well as their applicability to the Plan Update.

- 1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency:*

One of the MTP goals is to invest in the development of a regional transportation system that serves to increase mobility and efficiency of the movement of people and goods. Land use patterns influence transportation alternatives and strategies that, in turn, influence productivity and efficiency. Continued population growth, as the San Antonio-Bexar County region is experiencing, influences economic growth, in particular employment types and income levels.

- 2) Increase the safety and security of the transportation system for motorized and non-motorized users.*

Specific actions to increase the safety and security of non-motorized users that are recommended by the Plan include developing off-road bicycle

facilities, and for pedestrians, to consider distance from curb, signage, drainage, slope, speed limits, pedestrian crossings and signals, and education of the traveling public. For both non-motorized and motorized users, coordinating traffic operations and implementing strategies to reduce travel demand at the regional and corridor levels will increase the safety of the traveling public.

3) Increase the accessibility and mobility options available to people and for freight.

The MTP includes other transportation modes such as the rideshare program, toll road(s), high-occupancy vehicle lanes, busways, and light rail, that reduce the dependency on single occupant vehicles. Accessibility and mobility opportunities are enhanced by continuing to develop and upgrade bicycle and pedestrian facilities and other modes of transportation. Express lanes are recommended in the I-35 North corridor to enhance freight mobility in the area.

4) Protect and enhance the environment, promote energy conservation, and improve quality of life.

The Plan encourages the implementation of strategies to protect and enhance the environment and quality of life. Specific strategies include the development of multi-modal transpor-

tation modes such as improved transit service and encouraging non-motorized vehicle travel. Other efforts include conversion of fleets to alternative fuels, and specific activities that are implemented on Ozone Action Days.

5) Enhance the integration and connectivity of the transportation system:

Integration and connectivity of the transportation system is enhanced by additional sidewalk construction; designating bicycle lanes or bicycle paths; providing accessible transit service; providing adequate levels of transit service; and providing passenger amenities to facilitate a transfer between transportation modes. Real time travel information for both roadway and transit travel can also greatly improve the usability of the transportation system. These items are further described in the Plan.

6) Promote efficient system management and operation:

Through the Congestion Management Plan (see Section 7), efficient system management and operation are identified. Operational Management strategies included are the TransGuide System, Freight Management, and Corridor Management. Community campaigns include Rideshare programs, telecommuting, and trip planning. Policy

Management strategies include Growth Management, and Parking Management.

7) Emphasize the preservation of the transportation system.

Preservation of the transportation system is closely related to Planning Factor #6. Many of the strategies outlined previously are effective in promoting efficient system management and operation will therefore preserve the transportation system.

METROPOLITAN TRANSPORTATION PLAN MISSION STATEMENT

The Metropolitan Transportation Plan (MTP) is the basic framework for the San Antonio - Bexar County Metropolitan Planning Organization's continuous, comprehensive, and coordinated regional transportation planning efforts for the next 25 years. The MTP will provide for the efficient, safe and convenient transportation of people and goods in consonance with the metropolitan area's overall economic, social, energy and environmental goals. Special effort will be made to provide equal access for all citizens to a variety of transportation choices including alternatives to single occupant vehicles; provision of an effective and efficient public transit system; and the continuous involvement of the public in the transportation planning process.

In February 1998, the Transportation Steering Committee

adopted the following mission statement as part of the MTP:

The San Antonio metropolitan area is served by an environmentally friendly transportation system where everyone is able to walk, ride, drive or wheel in a safe, convenient, and affordable manner to their desired destinations.

Based on the input received through the public involvement process, the following goal statements were derived.

METROPOLITAN TRANSPORTATION PLAN GOALS

- Invest in the development of a regional transportation system that serves to increase the mobility and efficiency of the movement of persons and goods.
- Encourage the cost effective expansion of the regional transportation system to meet the growing mobility needs while ensuring air quality; enhancing the safety of the travelling public; fostering appropriate land use patterns; advancing alternative modes of transportation; and, increasing accessibility for the traditionally under served segments of the community.
- Support systematic and coordinated maintenance programs, and make available the adequate resources to preserve existing roadways and transit systems.

- Increase the efficiency of the existing transportation system and decrease traffic congestion by coordinating traffic operations and developing and implementing strategies to reduce travel demand at both the regional and corridor levels.
- Invest in a public transit system that meets the existing and projected needs of the region by developing effective routes and schedules and constructing functional and attractive passenger amenities.
- Incorporate the spirit and intent of the Americans with Disabilities Act pertaining to mobility and accessibility into all levels of the transportation system.
- Enhance the effectiveness of the regional transportation system by addressing the social, economic, energy and environmental issues of the region in all transportation planning efforts.
- Improve the opportunities for alternative means of transportation that diminish the growth in single occupancy vehicles and enhance air quality by upgrading the availability of bicycle and pedestrian facilities; promoting High Occupancy Vehicle analysis in future project planning; investigating opportunities for fixed guideway systems; and encouraging the conversion to alternative fuels.
- Promote the development of a regional transportation system that recognizes the unique characteristics of the San Antonio-Bexar County area and ensures respect for neighborhoods, historic and archeological resources, the Edwards Aquifer, and other social and environmental issues.
- Promote the development of a regional transportation system that enhances economic activity; provides for employment growth; and encourages public-private partnerships through the equitable distribution of resources.
- Facilitate the involvement and participation of individual citizens, neighborhood and other interested groups, business and community leaders, local governments, and state agencies in the transportation planning process.

An important element of the MTP is to determine how approximately \$9 billion in Federal, State, and local transportation funds should be spent over the next 25 years. One of the findings during the Plan development is that population is expected to increase 45% between 1995 and 2025, employment is expected to increase 76% between 1995 and 2025, and daily vehicle miles of travel is expected to increase 70%. Therefore, even with a \$9 billion investment in transportation infra-

structure, the congestion levels will increase at a faster rate than the available funding levels. Given that overall transportation needs far outstrip available funding resources, public input is essential to developing an acceptable list of transportation improvement projects for the community. Basically, transportation improvement projects fall into four general areas:

- (1) **Increasing roadway capacity** - increasing the number of lanes on streets, highways and freeways to carry more vehicles.
- (2) **Maintenance of existing roadways** - repairing and reconstructing (without adding lanes), and adding operational improvements to existing streets, highways and freeways.
- (3) **Public transit services** - increasing the number of buses in service and bus routes; improving passenger facilities; and building other forms of transit like light rail, high occupancy vehicle lanes, and activity center people movers.
- (4) **Other transportation improvements** - building more sidewalks; repairing existing sidewalks; designating bicycle lanes on streets; and building separate bicycle and pedestrian paths.

CONSISTENCY WITH OTHER LOCAL PLANS AND PROGRAMS

The City of San Antonio's Master Plan, the Community Revitalization Action Group Report, and VIA Metropolitan Transit's 2025 Visioning Report were specifically considered in the development of the Metropolitan Transportation Plan. Table I-1 shows the Metropolitan Transportation Plan's consistency with these locally adopted plans and programs, as well as with the City of San Antonio's Major Thoroughfare Plan, the City of San Antonio's Downtown Strategic Plan, the City of San Antonio's Downtown Transportation Plan, the draft Transportation and Land Use Project Recommendations (MPO), and the Congestion Management Plan (MPO).

This document updates the Metropolitan Transportation Plan locally adopted in December 1994 and the Transit Element adopted in December 1995. The document represents the planning efforts of numerous transportation agency staff working with technical and public involvement consultant teams, elected and appointed governmental officials, and community-based organizations and private citizens over a two-year period. The planning process has been continuing, comprehensive, coordinated and fully inclusive. The Plan is intended to be a flexible and dynamic document, and amendable as regional conditions change. It will be completely reviewed and updated every five years.

**Table I-1. San Antonio-Bexar County Metropolitan Transportation Plan:
Consistency with Other Local Plans and Programs**

	City of San Antonio Master Plan Policies	City of San Antonio Major Thoroughfare Plan	City of San Antonio Downtown Strategic Plan	City of San Antonio Downtown Transportation Plan	Community Revitalization Action Group Report	Transit 2025 Visioning Report	Transportation and Land Use Project Draft Recommendations	Congestion Management Plan
Metropolitan Transportation Plan Issues								
Public/Stakeholder Participation	X		X	X	X	X	X	X
Roadway Element								
New Roads								
Additional Capacity		X		X				X
Operational Improvements				X				X
Rehabilitation/Maintenance								
Express Lanes								X
Public Transportation Element								
Transit Incentives	X					X		X
Paratransit						X		X
Additional Bus Service	X					X		X
HOV/Busway	X					X		X
Light Rail	X		X	X		X		X
Commuter Rail				X		X		X
Improved Passenger Facilities	X		X	X		X		X
Bicycle Element								
Lanes/Trails	X			X				X
Safety	X							X
Storage	X					X		
w/Transit	X					X		X
Pedestrian Element								
Increase Width	X							
Eliminate Obstructions	X							
Improve Connectivity/Linkages	X		X			X		X
Improve Signalization								
Pursue Additional Funding	X							

**Table I-1. San Antonio-Bexar County Metropolitan Transportation Plan:
Consistency with Other Local Plans and Programs**

	City of San Antonio Master Plan Policies	City of San Antonio Major Thoroughfare Plan	City of San Antonio Downtown Strategic Plan	City of San Antonio Downtown Transportation Plan	Community Revitalization Action Group Report	Transit 2025 Visioning Report	Transportation and Land Use Project Ddraft Recommendations	Congestion Management Plan
Metropolitan Transportation Plan Issues								
Freight Element				X				X
Traffic Demand Strategies								
Intelligent Transportation Systems	X							X
Rideshare	X							X
Urban Design Element								
Neighborhood Preservation	X		X		X			
Neighborhood Revitalization	X		X		X			
Mixed Use Development	X		X		X			
Growth Management	X						X	
Access Management	X						X	
Environmental Element								
Air Quality	X						X	
Water	X							
Noise								
Implementation Plan			X	X	X	X	X	
Financial Plan				X		X		

1. DEMOGRAPHICS



BACKGROUND

The basis of any effective planning effort rests primarily on an initial determination of the area's demographics (population, households size, employment, household income, and land use) and future projections of these demographics. 1995 was used as the base year by the San Antonio-Bexar County Urban Transportation Study for this update of the Metropolitan Transportation Plan. For the out-years, various federal and state government data sources were used for the basis of population and employment control totals in five year increments to the year 2025 for the San Antonio area.

The process for forecasting future growth in population and employment is not an exact science. Multiple forecasting models exist with differing assumptions and results. What is needed for the transportation planning process is a "comfort level" with the demographic control totals used to predict future travel. The tendency is to be more comfortable with the recent trends. If the economy is doing well and jobs and housing is expanding, the tendency is to select an optimistic forecast. The tendency to select a conservative forecast usually occurs if the current or most recent trend is decreasing or flat economy. Upturns and

downturns in the economy occur in cycles that, over a 20 or 30-year time span, tend to counteract each other. That is why annualized growth rates are important indicators for long term demographic projections.

If a conservative approach is taken and selected control totals are too low then the risk is to be behind in planning for needed infrastructure. If the control totals are too optimistic, this could result in a false or premature justification for roadway and/or transit infrastructure improvements.

While area-wide demographic control totals were readily available, these figures needed to be disaggregated to forecast district level and to traffic serial zone level in the study area for use in the travel demand modeling. The forecast districts developed for the entire MPO study area, respected census geography boundaries and are illustrated in Figure 1.1. It should be noted that the allocation model used for the disaggregation process will produce an estimate of what may happen in the future. However, there is no way to predict the occurrence of unforeseeable changes that would effect the future distribution of employment and population. This, in part, necessitates

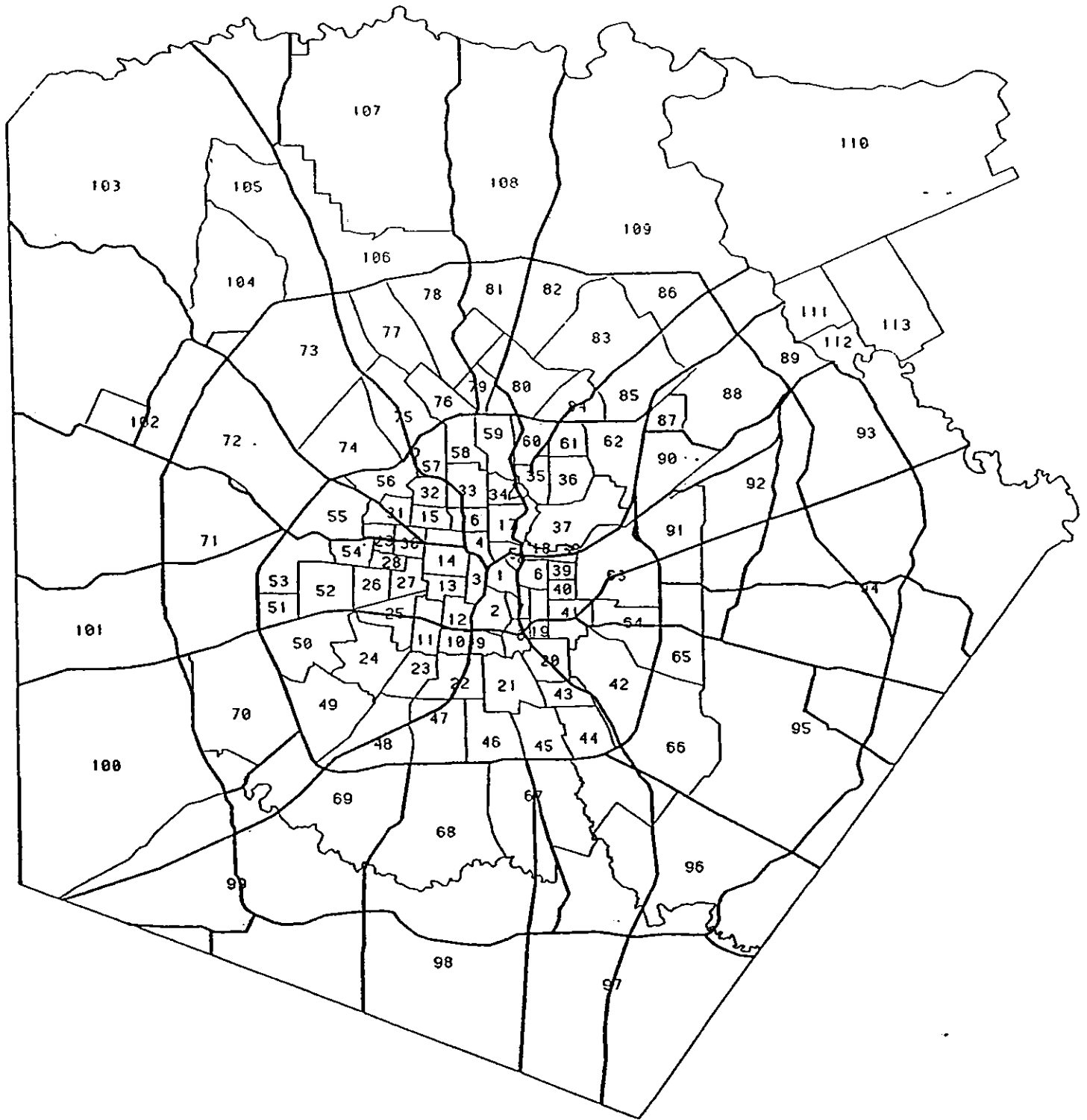


Figure 1.1 Study Area Forecast Districts

This map was prepared through funding provided by the Metropolitan Planning Organization of Bexar County



that the forecast be reviewed and updated on a regular interval.

The demographic forecasting output is the result of a joint effort by the transportation planning agencies in the study area. Concurrence by these agencies on the future demographics is necessary before additional work commences on a subsequent model run. Concurrence ensures minimizing duplication of effort in data development and maximizes local confidence in demographic estimates and forecasts.

HISTORICAL PERSPECTIVE

From 1970 to 1990 Bexar County experienced annualized growth rates in population of 2.14% and in employment of 4.73% based on census data. Historically, employment has been growing twice as fast as population. This is due to more women joining the work force, more people remaining in the work force longer, and people living in adjacent counties but working within the MPO study area.

DEMOGRAPHIC ALLOCATION MODEL

The San Antonio-Bexar County Urban Transportation Study currently uses the Integrated Transportation Land-Use Package (ITLUP) by S.H. Putman Associates as the model that would provide the most reasonable and disaggregated data for future years. The package includes two activity allocation models, DRAM (Disaggregated Resi-

dential Allocation Model) and EMPAL (Employment Allocation Model.)

The overall concept of the DRAM/EMPAL forecasting process can be stated simply: the model allocates the total growth in employment and households for an area into its sub-regional component zones. This allocation is possible by using regional trends, transportation facility descriptions, and data on the current location of employment and households. EMPAL forecasts the future location of employment by types. Using regional trends, transportation facility descriptions, and data on the current location of households, along with EMPAL's forecast of the future location of employment, the DRAM model forecasts the future location of households. Required data for the DRAM/EMPAL model runs include current population, total future population, lag year employment, current employment, total future employment, interzonal travel times, and current land use information. The forecasts are done in five-year increments with one forecast becoming input to the next five year forecast.

POPULATION 1995-2025

The initial demographic input data for DRAM/EMPAL came from the 1990 Census. Since the geography for the model requires sub-county areas, census data was aggregated to forecast districts. The total number of house-

holds were collected from the Summary Tape File 1; income and other sample data were taken from the 1990 Census, Summary Tape File 3. The approved population control totals, in five-year increments to year 2025, are from The Texas Water Development Board.

Although DRAM/EMPAL requires the number of persons in future years as a control total, it uses that number to predict the households. This is, in part, because households are the group unit where data is available for modeling the relationship between employment and people. Not everyone is employed at a given time and they are usually part of a family or housing relationship. Households are the way DRAM/EMPAL groups persons; they may not always be part of a family (as defined by the Census Bureau), but they are always part of a household.

The year 1995 population density map is shown in Figure 1.2 and the year 2025 population density map is shown in Figure 1.3. Comparing the output from the demographic forecasting model as depicted in the maps, residential development will continue northward. It appears that the western part of Bexar County, between Loop 410 and the County Line, also is expected to grow significantly as is the northeast part of the study area. Southern Bexar County is forecast to show medium gains in number of households.

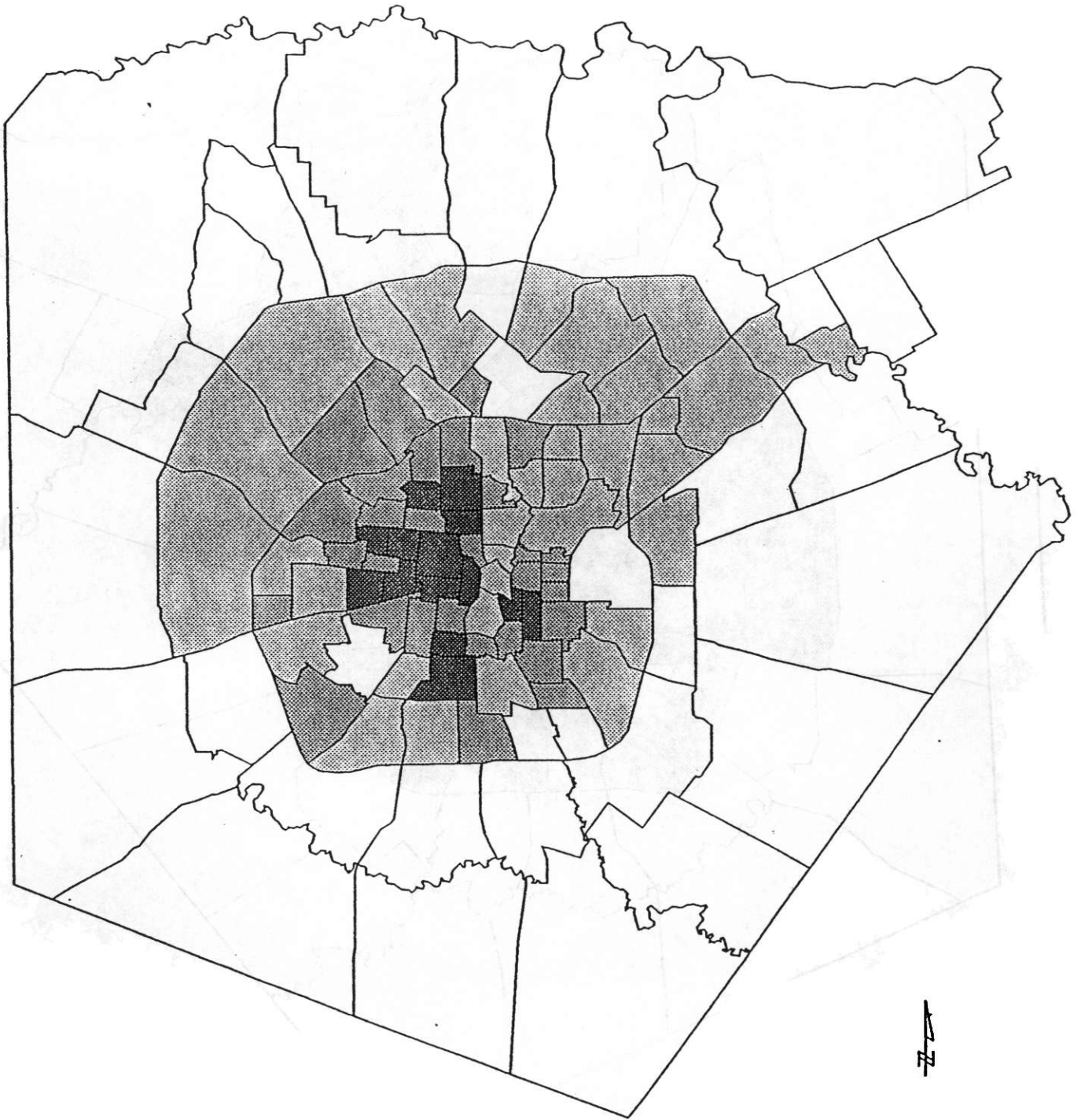
INCOME 1995-2025

As one of the model inputs, median household income for the base year was gathered from the 1990 Census. Initially, the information was used to divide households into four income groups as required for DRAM/EMPAL. The model specifies a roughly equal grouping of incomes; therefore, each of the categories roughly equate to 25% of the total number of households in the Study Area. The four income categories were:

Low	\$0 - \$12,499
Low-moderate	\$12,500 - \$24,999
High-moderate	\$25,000 - \$42,499
High	\$42,500 +

Income is also used in generating ratios of households by income and employment type. The model uses these ratios to generate forecasts of households by income group.

While future employment and households are the major output from DRAM/EMPAL, it is possible to roughly estimate changes in median household incomes in the future year. For the base year, the median household income estimates were made at the forecast zone level. In cases where a forecast zone coincided with a census tract, the 1990 census figure could be used directly. However, the usual case was that the income figure had to be interpolated using data from each zone's component tracts. In order to find the



Persons Per Acre





-  0-2
-  3-6
-  7-9
-  10-14

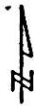
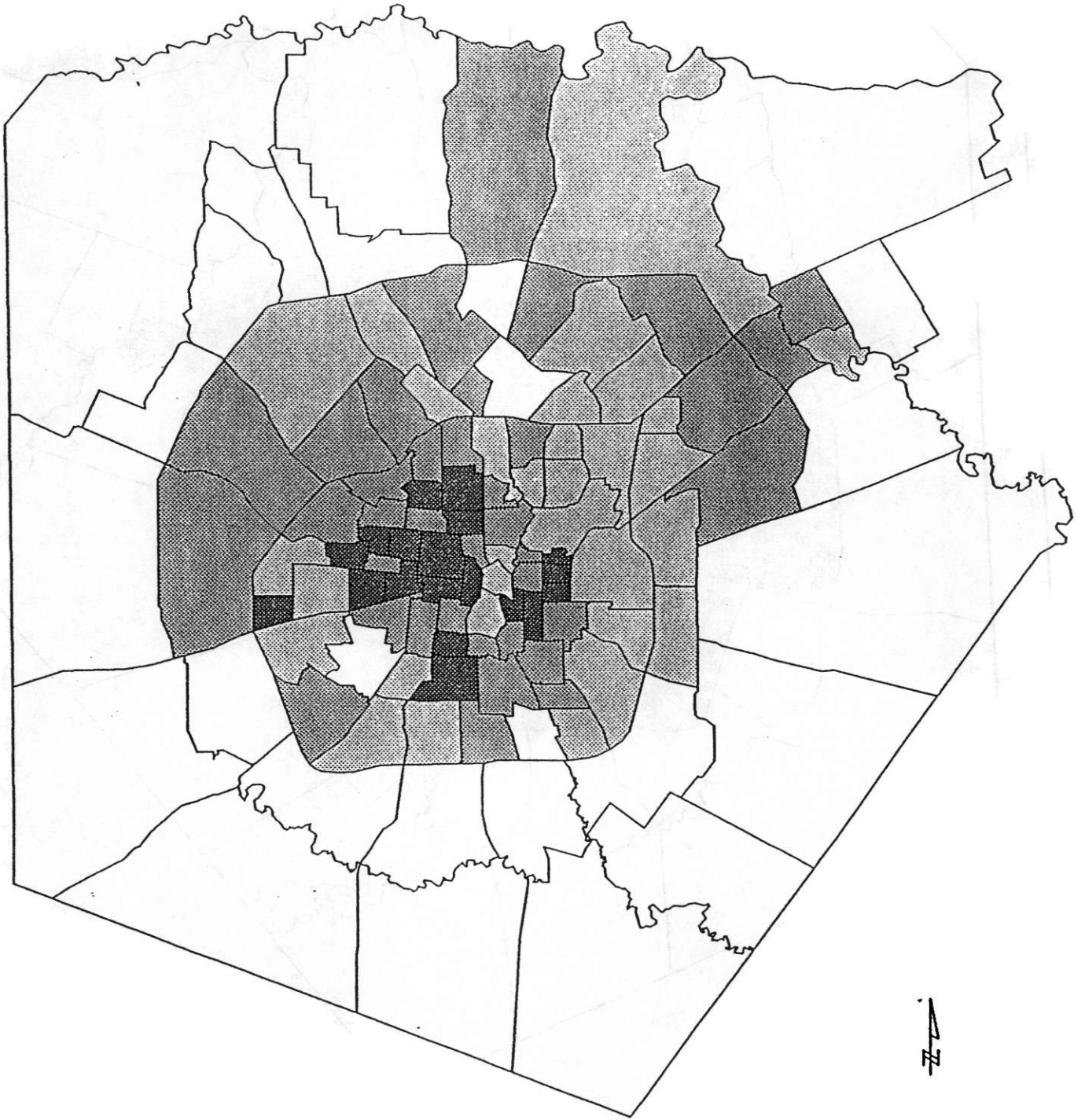
Figure 1.2 1995 Population Density



Map Creation: 10-1-99

Mapscale: 1 inch = approx. 6 mi.

Regional Data Center



Persons Per Acre





-  0-2
-  3-6
-  7-9
-  10-14

Figure 1.3 2025 Population Density



Map Creation: 10-1-99

Mapscale: 1 inch = approx. 6 mi.

2025 equivalents, the "nearest neighbor" approach was used. That is, the household type mix for 2025 in a given zone was compared to the 1990 household type mix. The closest median income equivalent in 1990 became the 2025 median income for the zone in question. The 2025 figures are therefore in 1990 dollars.

EMPLOYMENT 1995-2025

A primary source of base year (1995) employment information was the Texas Employment Commission's (TEC) files. The information was geo-coded based on the addresses provided. Where street addresses were not available (i.e. post office boxes) telephone books and telephone surveys were made to collect information from those employers. For the areas outside the Bexar County area, the Guadalupe/Comal area, telephone books, and TEC data were also used to the extent possible. In addition, an intensive windshield survey of businesses in the study area outside Bexar County was conducted, geo-coded, and formatted into a database. The approved future employment control totals, in five-year increments to year 2025, are from Dr. Ray Perryman's employment forecast published in 1997.

The DRAM/EMPAL model requires that employment be delineated into at least four and not more than eight different employment categories. The employment categories are as follows:

Category 1: agriculture, mining and construction

Category 2: wholesale and retail trade;

Category 3: communication, transportation, public utilities, finance, insurance, real estates, and public administration

Category 4: manufacturing

Category 5: services

Category 6: military

With respect to military employment in the study area, the actual number of persons in uniform, at each of the bases was collected from the San Antonio Greater Chamber of Commerce, who in turn received the information from the military bases.

The year 1995 employment density map is shown in Figure 1.4 and the year 2025 employment density map is shown in Figure 1.5. Comparing the output from the demographic forecasting model as depicted in the maps, employment development will continue northward. The trend appears to be for the bulk of the growth in employment to remain generally outside Loop 410 to the County Line. One exception to this trend is downtown San Antonio, where growth will be substantial. Continued growth in the medical center area will be a factor in the northwest.

LAND USE PROJECTIONS

One of the integral components of the DRAM/EMPAL forecasting process is

land use. This model reflects current state of the art in modeling in that it connects land use and the transportation system. In order to develop this data as input into the model, AACOG acquired a computerized land use file from the City of San Antonio. This data reflected land uses throughout Bexar County and a large portion of the study area in Guadalupe

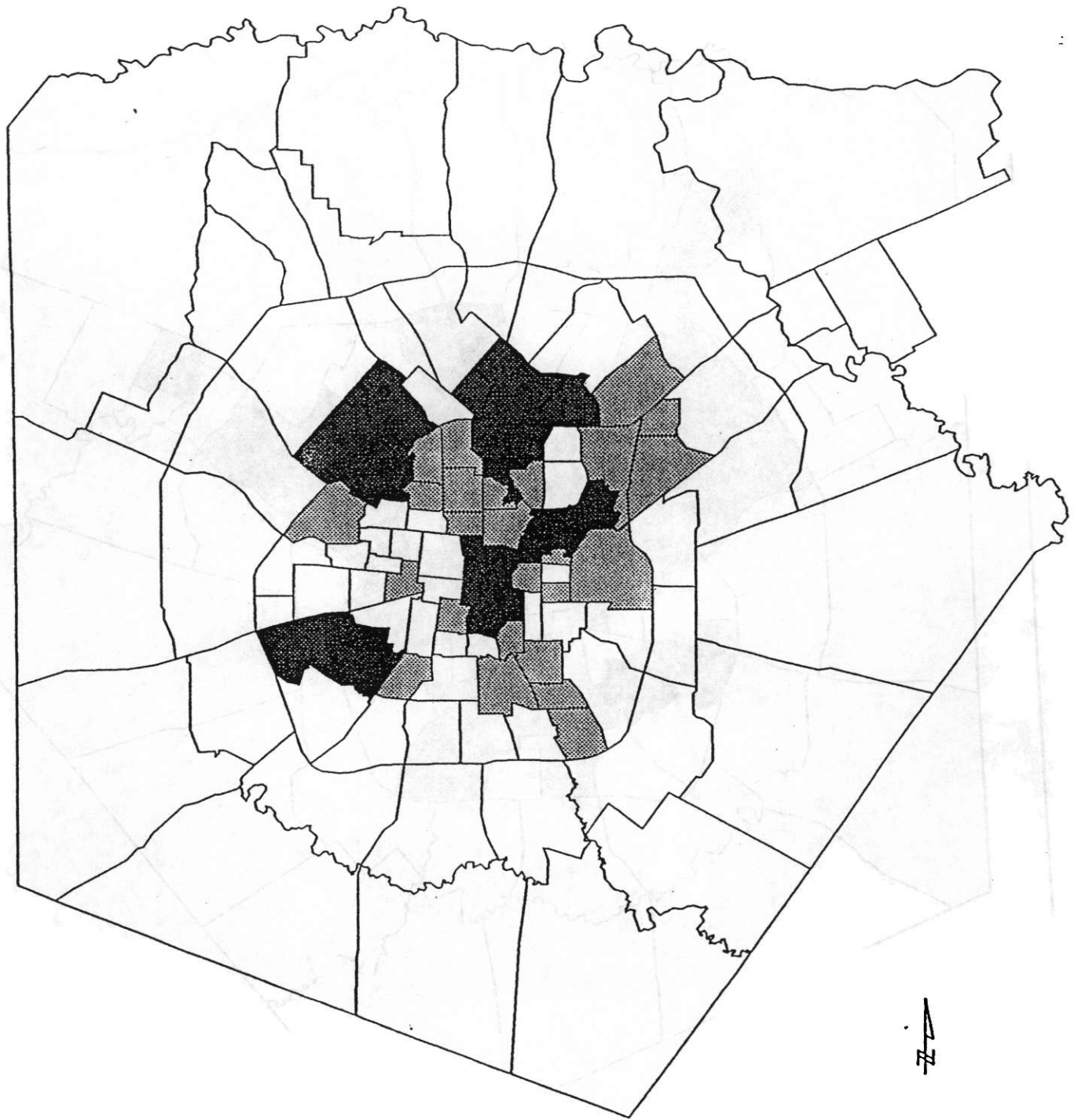
and Comal counties. The balance of the land use in the study area was generated from additional aerial photos and windshield surveys by AACOG staff. Table 1.2 shows the distribution of land uses by residential, commercial, industrial, transportation, vacant developable, vacant non-developable and military categories in the study area.

Table 1.1 Population and Employment Control Totals for the Study Area

Year	Population	Cumulative Change	Employment	Cumulative Change	Empl/Pop%
1990	1,242,600		544,460		0.44
1995	1,395,880	153,280	658,154	113,694	0.47
2000	1,505,759	263,159	732,502	188,042	0.49
2005	1,626,082	383,482	812,837	268,377	0.50
2010	1,746,402	503,802	898,323	353,863	0.51
2015	1,867,798	625,198	990,825	445,365	0.53
2020	1,989,192	746,592	1,089,465	545,005	0.55
2025	2,023,235	780,635	1,156,936	612,476	0.57

Table 1.2 Study Area Land Use Distribution

Land Use Category	Number of Acres	Percent of Total Acreage
Residential	120,359.85	13.6%
Commercial	51,528.80	5.8%
Industrial	7,909.57	1.0%
Transportation	79,034.59	8.9%
Vacant Developable	546,781.49	61.8%
Vacant Non-Developable	32,210.47	3.6%
Military	47,333.27	5.3%
Total	885,158.04	100.0%



Employment Per Acre

- 0-1.99
- 2-4.99
- 5-Over

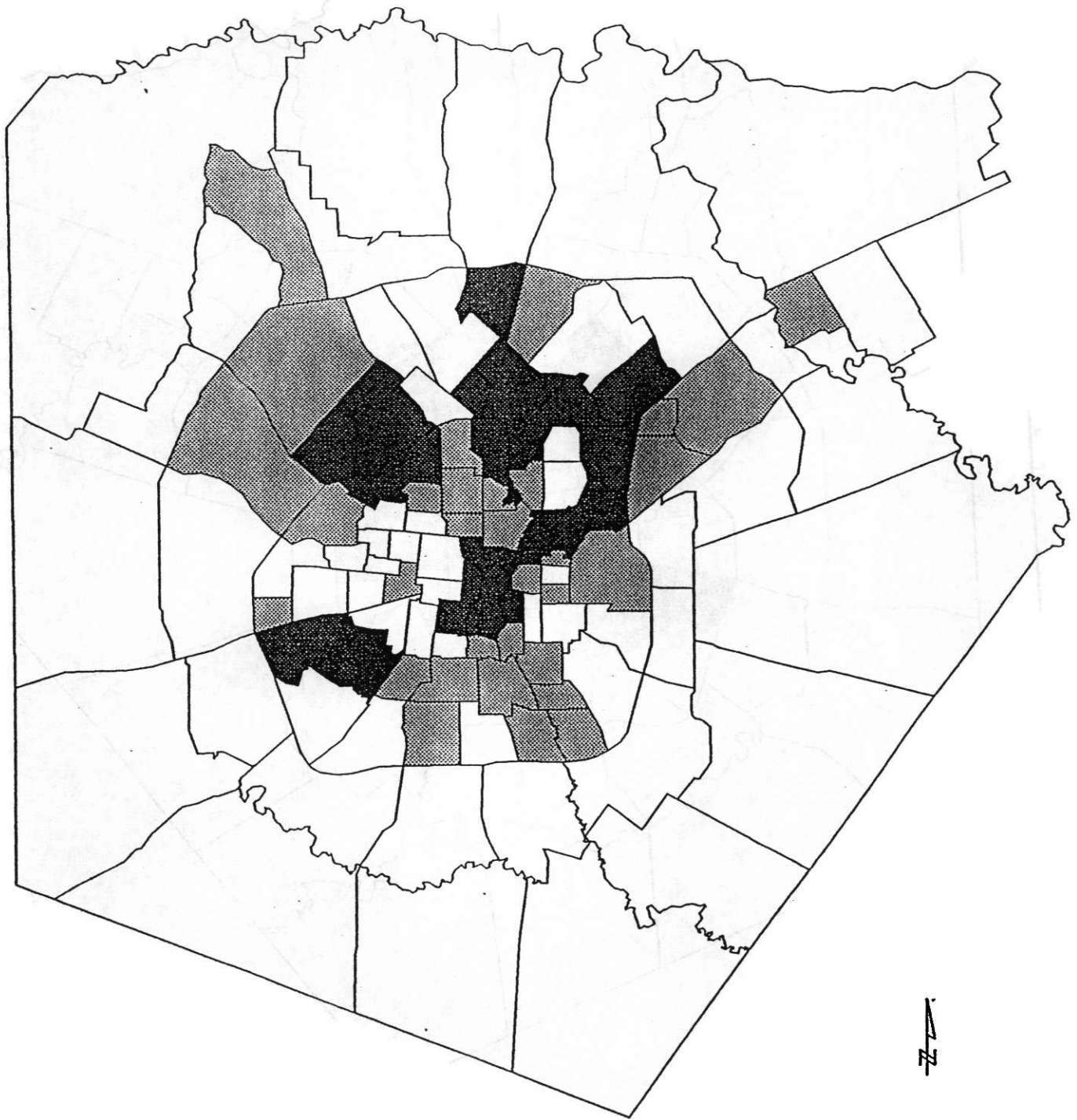
Figure 1.4 1995 Employment Density

Map Creation: 10-1-99

Mapscale: 1 inch = approx. 6 mi.



Regional Data Center



Employment Per Acre




-  0-1.99
-  2-4.99
-  5-Over

Figure 1.5 2025 Employment Density



Map Creation: 10-1-99

Mapscale: 1 inch = approx. 6 mi.

Regional Data Center

2. ROADWAY ELEMENT

INTRODUCTION

As population and employment continue to grow in the San Antonio metropolitan area, a higher burden will be placed on the roadway system. To accommodate the traffic increases on the roadway system, additional lanes will need to be added, and operational improvements will need to be made. In addition to congestion levels, factors that were considered while developing the future year roadway network included the impact of freight traffic, impacts to neighborhoods, environmental impacts, and fiscal constraints.

ROADWAY FUNCTIONAL CLASSIFICATION

The Metropolitan Transportation Plan is primarily concerned with those roadways that will be upgraded using federal funding sources. These roadways are part of the "functionally classified roadway system." A functional classified roadway system allows for urban streets to be grouped by their purpose or function. There are three main functions for urban streets: 1) movement of traffic, 2) distribution or collection of traffic, and 3) provide access to terminal points. Freeways provide maximum movement of vehicles, but allows for more limited access to the adjacent land use. Arterial streets have lower vehicular capacity and speed, but allow for direct access to surrounding land use. Collector and residential streets primarily provide

access to larger facilities, as each class of urban street serves as a collection device for the next lower class of street. The functional classification system is further defined in Table 2.1.

Functional classified roadways describe the various levels of vehicular mobility. Using functional class in the transportation planning process ensures that general land use and local development are considered in evaluation of both existing and future transportation needs. Another purpose for using the functional classification system is to help determine which roadways should be included in a regional transportation system. Figure 2.1 shows the current functionally classified roadway system.

NETWORK SUMMARY

Base Year Roadway System

The Metropolitan Transportation Plan (approved December 1994 with project updates) roadway network was assumed to be the base year network for this update. This network is shown in Figure 2.2. Table 2.2 summarizes the lane miles, vehicle miles of travel (VMT), vehicle hours of travel (VHT), volume-capacity ratios, and speeds by facility type on the base year network.

Table 2.1 Functional Classification System Description

Functional Class	Level of Mobility	System Access	Level of Accessibility
Freeway	Connects all urban subregions together; connects urban and rural service areas with metro major activity centers; connection to outside cities.	To other freeways, principal arterial, and selected arterial; no direct land access.	Long trips at high speed within and through the metro area; express transit trips.
Principal Arterial	Connects two or more subregions; provides secondary connections outside cities; complements freeways in high volume corridors.	To freeways, other principal arterial, and high volume collectors; no direct land access except major traffic generators.	Medium distance to long trips at high to moderate speeds within the urban area; express transit trips.
Arterial	Connects adjacent subregions and activity centers within subregions.	To freeways, principal arterial, other arterial, and collectors; restricted direct land access.	Medium to short trips at moderate to low speeds; local transit trips.
Collector	Connects neighborhoods within and between subregions.	To arterial, other collectors, and local streets; direct land access.	Primarily serves collection and distribution function for the arterial system at low speeds; local transit trips.
Local	Connects blocks within neighborhoods and specific activities within homogeneous land use areas.	To collectors and other local streets; direct land access.	Almost exclusively collection and distribution; short trips at low speeds.

Table 2.2 Base Year Roadway Network Summary

Facility Type	Lane Miles	% of Total	Vehicle Miles of Travel (VMT)	% of Total (w/out Centroid Connectors)	Vehicle Hours of Travel (VHT)	% of Total (w/out Centroid Connectors)	Volume (V) Capacity (C)	MPH
Radial Freeway/Expy	580	9.70%	12,333,580	25.08%	421,540	17.85%	0.95	29
Radial Parkway	390	6.52%	4,775,160	9.71%	153,510	6.50%	1.02	31
Primary Art.- Div	870	14.55%	6,328,480	12.87%	402,540	17.05%	1.04	16
Primary Art.- Undiv	860	14.38%	4,385,350	8.92%	227,140	9.62%	0.82	19
Minor Art - Div	420	7.02%	1,913,000	3.89%	146,180	6.19%	0.90	13
Minor Art - Undiv	1,100	18.39%	4,462,530	9.07%	357,790	15.16%	0.90	12
Collector - Div	160	2.68%	740,480	1.51%	81,350	3.45%	1.00	9
Collector - Undiv	1,070	17.89%	2,633,060	5.35%	260,650	11.04%	0.82	10
Frontage Roads	0	0.00%	0	0.00%	0	0%	0.00	0
Ramp	1	0.02%	9,140	0.02%	260	0.01%	0.58	35
Circum Freeway	420	7.02%	10,969,150	22.31%	288,310	12.21%	1.04	38
Circum Parkway	10	1.67%	90,640	0.18%	6,010	0.25%	1.83	15
Circum Arterial	100	0.17%	536,700	1.09%	15,490	0.66%	0.82	35
Subtotal	5,981	100.00%	49,177,270	100.00%	2,360,770	100.00%	-	21
Centroid Connectors	-	-	6,662,740	-	329,650	-	-	20
Total	5,981	100.00%	55,840,010	-	2,690,420	-	-	21

Figure 2.1 San Antonio-Bexar County Functionally Classified Roadway System

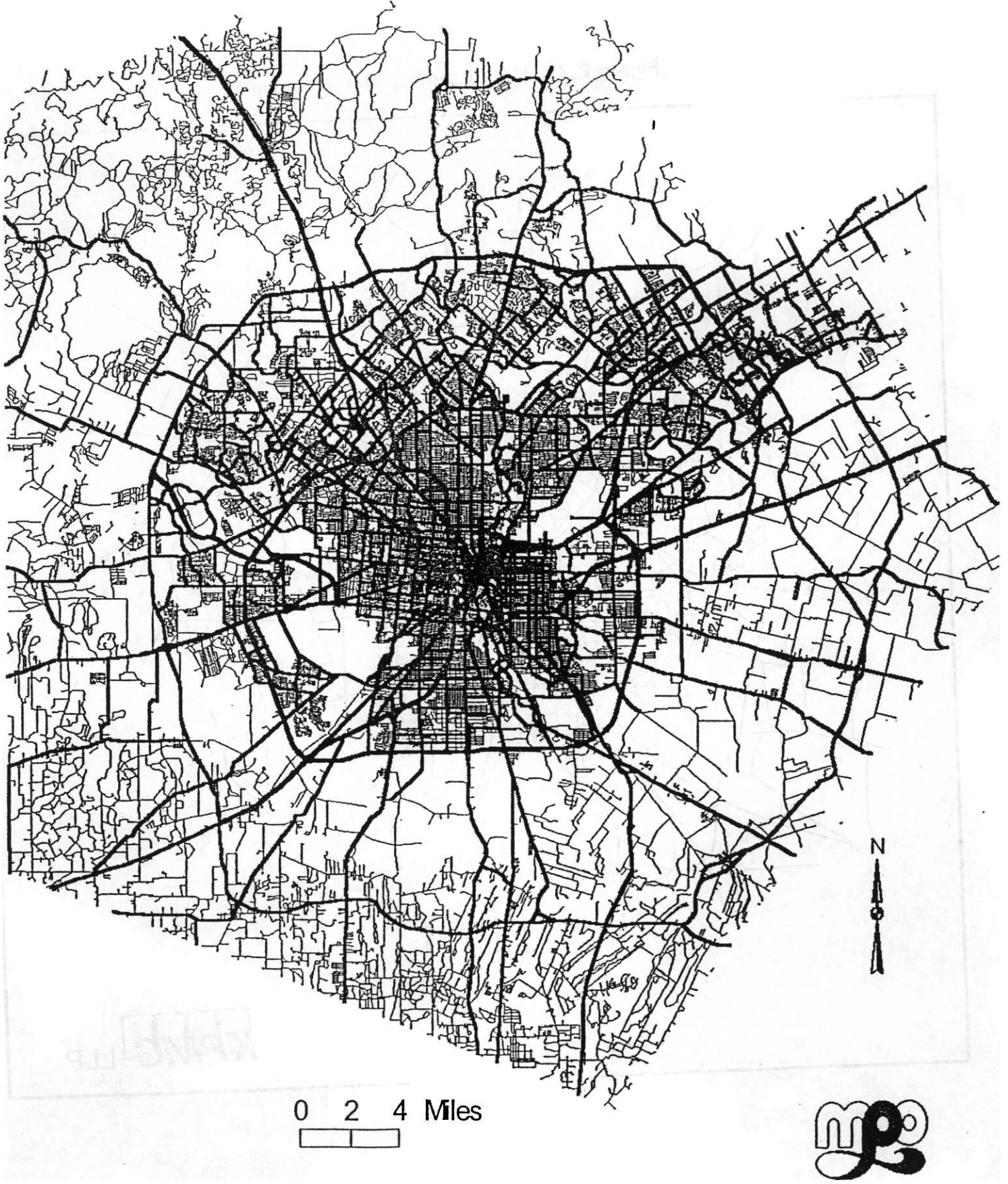
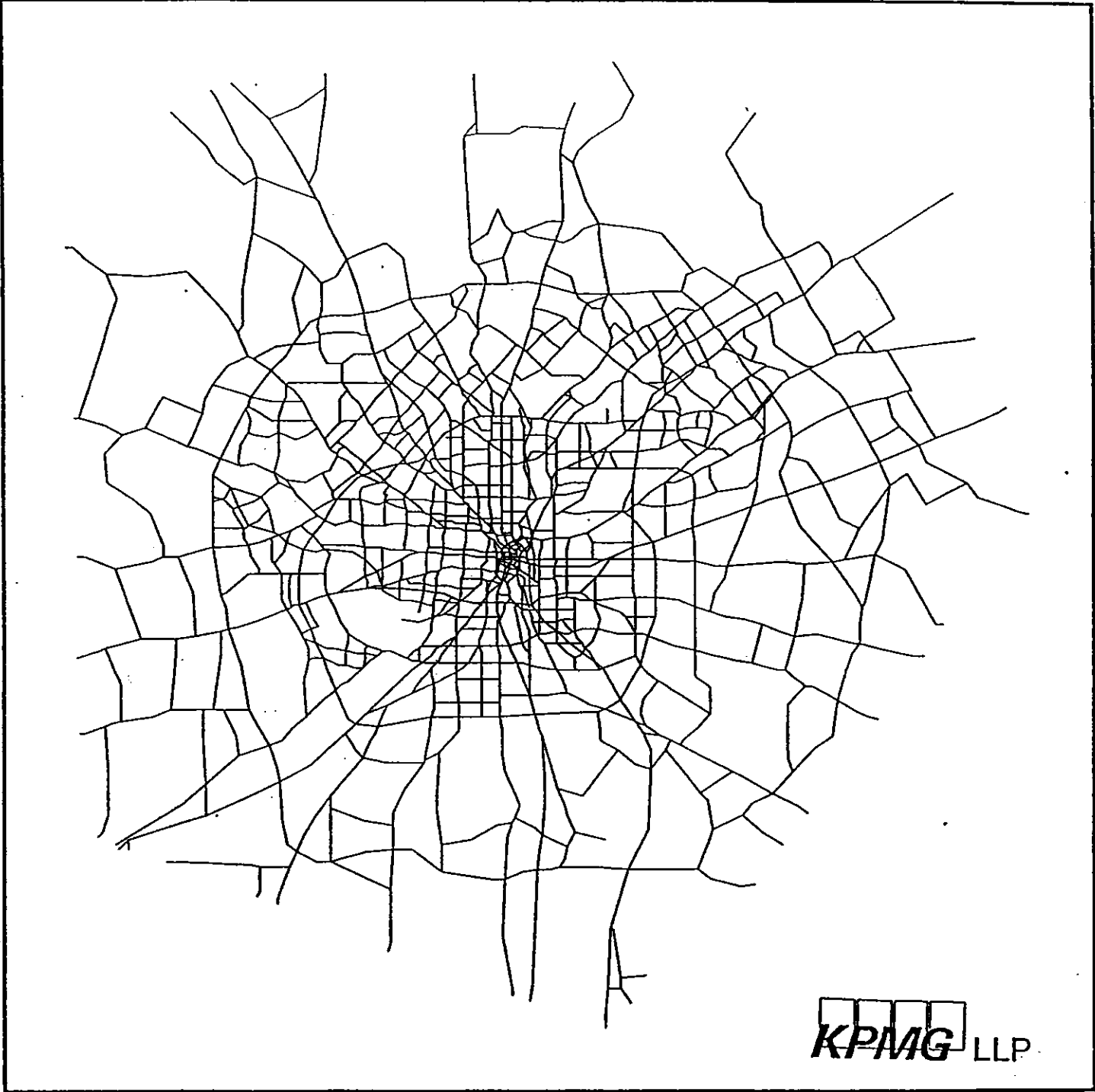


Figure 2.2 1995 Roadway Network Map



Base Year Congestion

Congestion occurs when roadways do not have sufficient carrying capacity to meet the demand for traffic loading onto the roadway. The term "capacity" refers to the ability of a street to hold traffic, which is a function of actual space on the roadway such as the number of lanes, lane width, percent slope, length of left or right turn bays, on-street parking, percent truck and bus traffic, number of pedestrians or cyclists, and signal timing and phasing. For travel demand modeling purposes, capacity was defined in terms of the number of lanes, functional classification and area type. Congestion for the San Antonio metropolitan area was defined as the volume over capacity ratio greater than 1.0 and based on the output from the travel demand model. Using this definition, Figure 2.3 shows the year 1990 congested roadways and Figure 2.4 shows all roadway segments identified as congested for the year 2025, if no roadway improvements were made other than what was approved in the previous Metropolitan Transportation Plan (year 2015).

Year 2025 Roadway System

The future year (2025) roadway system was developed using an extensive public involvement process (see Chapter 9 Public Involvement) and technical analysis. Again, using the functionally classified system as an overall framework, a

network of the future year highway and street system was developed. Freeways, arterials, and selected collector and local streets in the study area comprise the future year roadway network. Table 2.3 summarizes the lane miles, vehicle miles of travel (VMT), vehicle hours of travel (VHT), volume-capacity ratios, and speeds by facility type for the year 2025 network. Figure 2.5 shows the future year roadway system and Table 2.4 shows the difference in lane miles, VMT, and VHT between the base year and future year roadway networks.

Future Year Congestion

Figure 2.6 shows all roadway segments identified as congested for year 2025, based on the travel demand modeling results for the adopted Plan and using the volume over capacity ratio of 1.0 or greater as defining congestion. Even with an investment of nearly \$9 billion over the next twenty-five years in transportation infrastructure, the local traffic congestion is expected to increase. Transportation demand management strategies will become increasingly important and, when implemented, can have an effect on growth, land use, travel patterns and travel behavior.

TRANSPORTATION STEERING COMMITTEE ACTION

The San Antonio-Bexar County Metropolitan Transportation Plan was adopted by the Metropolitan Planning Organization Transportation Steering Committee on December 6, 1999. The plan adoption was divided into eight separate actions for consideration.

Motion #1 Roadway Component

The first motion under consideration was the adoption of the roadway component of the Plan. After a brief presentation by the mayor of the City of Leon Valley, the motion was made to remove the phrase "with flyovers" in the SH 16 (Bandera Road) project descriptions in the project list and to

adopt the roadway component of the Metropolitan Transportation Plan. The motion carried unanimously.

Motion #4 Toll Road Component

The motion was made and seconded to adopt the toll road component of the Metropolitan Transportation Plan as an option for further consideration, but not as an endorsement of the project. There was no discussion. The motion carried unanimously.

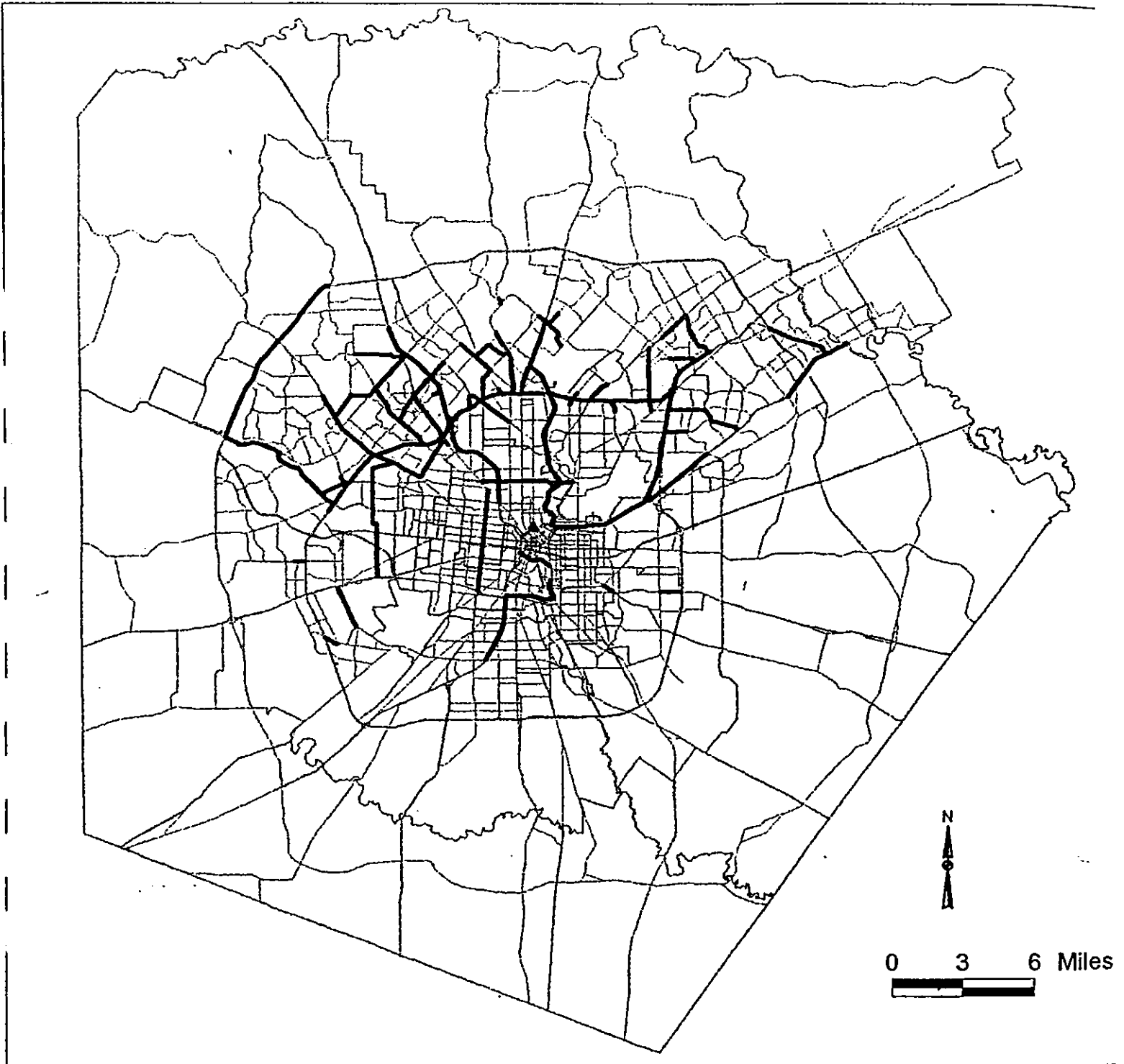



Figure 2.3 1990 Congested Roadways

Legend

 Volume Over Capacity > 1.0



Map Creation 8-4-99

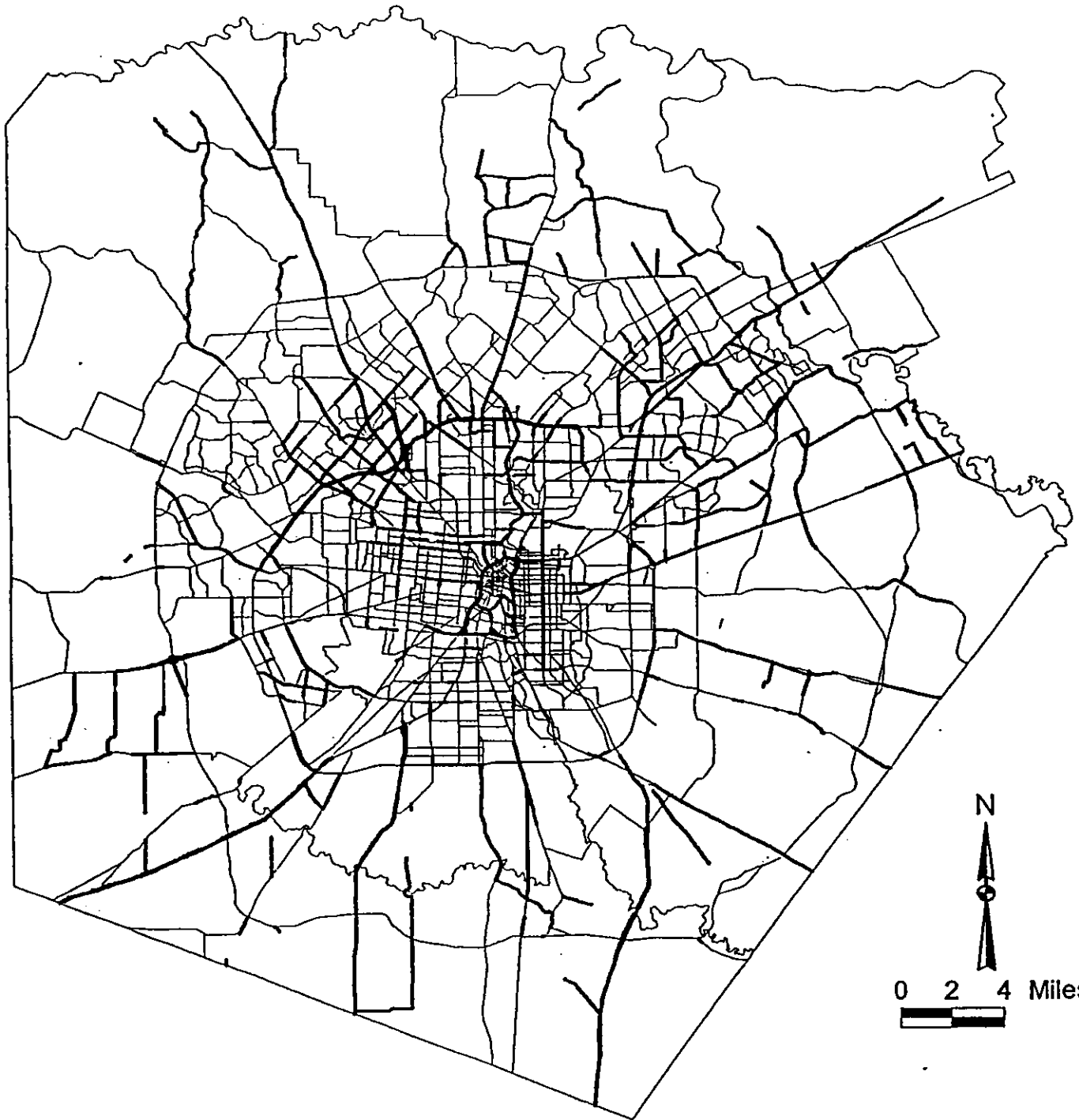


Figure 2.4 2025 Congested Roadways

Legend



Volume Over Capacity > 1.0



Figure 2.5 2025 Roadway Network Map

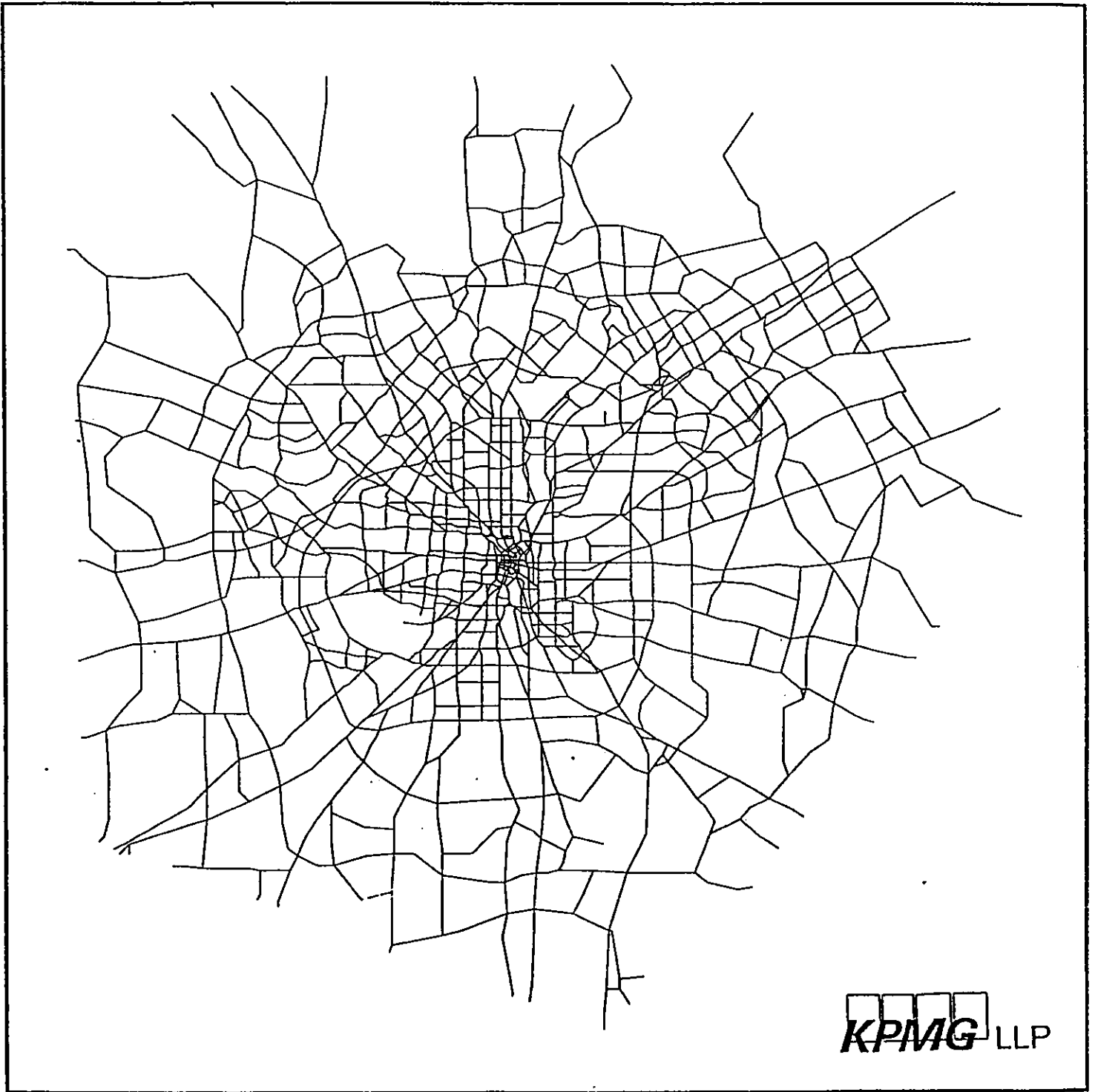


Table 2.3 Future Year (2025) Roadway Network Summary

Facility Type	Lane Miles	% of Total	Vehicle Miles of Travel (VMT)	% of Total (w/out Centroid Connectors)	Vehicle Hours of Travel (VHT)	% of Total (w/out Centroid Connectors)	Volume (V) Capacity (C)	MPH
Radial Freeway/Expy	1,020	15.07%	13,719,990	27.81%	399,430	19.84%	0.77	34
Radial Parkway	330	4.87%	4,764,820	9.66%	143,060	7.11%	0.94	33
Primary Art.- Div	880	13.00%	5,201,450	10.54%	272,190	13.52%	0.87	19
Primary Art.- Undiv	890	13.00%	4,255,880	8.63%	228,600	11.36%	0.78	19
Minor Art - Div	490	7.24%	1,826,070	3.70%	113,350	5.63%	0.79	16
Minor Art - Undiv	1,190	17.58%	4,050,930	8.21%	292,960	14.55%	0.80	14
Collector - Div	160	2.36%	543,650	1.10%	37,860	1.88%	0.74	14
Collector - Undiv	1,000	14.77%	2,115,970	4.29%	205,360	10.20%	0.68	10
Frontage Roads	0	0.00%	0	0.00%	0	0%	0.00	0
Ramp	1	0.01%	11,790	0.02%	340	0.02%	0.75	35
Circum Freeway	520	7.68%	12,012,700	24.35%	301,130	14.96%	0.93	40
Circum Parkway	80	1.18%	145,520	0.29%	2,910	0.14%	0.10	50
Circum Arterial	200	2.95%	667,050	1.35%	15,320	0.76%	0.51	44
Arterial HOV	20	0.30%	17,570	0.23%	500	0.02%	0.00	31
Subtotal	6,750	100.00%	49,333,390	100.00%	2,013,010	100.00%	-	25
Centroid Connectors	-	-	6,619,610	-	327,900	-	-	20
Totals	6,750	100.00%	55,953,000	-	2,340,910	-	-	24

Table 2.4 Base to Future Roadway Network Change Summary

Facility Type	Δ Lane Miles	% Change Lane Miles	Δ Vehicle Miles of Travel (VMT)	% VMT Change	Δ Vehicle Hours of Travel (VHT)	% VHT Change	Δ MPH	% MPH Change
Radial Freeway/Expy	440	75.9%	1,386,410	11.2%	-22,110	-5.2%	5	17.4%
Radial Parkway	-60	-15.4%	-10,340	-0.2%	-10,450	-6.8%	2	7.1%
Primary Art.- Div	10	1.1%	-1,127,030	-17.8%	-130,350	-32.4%	3	21.6%
Primary Art.- Undiv	30	3.5%	-129,470	-3.0%	1,460	-0.6%	-1	-3.6%
Minor Art - Div	70	16.7%	-86,930	-4.5%	-32,830	-22.5%	3	23.1%
Minor Art - Undiv	90	8.2%	-411,600	-9.2%	-64,830	-18.1%	1	10.9%
Collector - Div	0	0.0%	-196,830	-26.6%	-43,490	-53.5%	5	57.8%
Collector - Undiv	-70	-6.5%	-517,090	-19.6%	-55,290	-21.2%	0	2.0%
Frontage Roads	0	0.0%	0	0.0%	0	0%	0	0.0%
Ramp	0	0.0%	2,650	29.0%	80	30.8%	2	-1.4%
Circum Freeway	100	23.8%	1,043,550	9.5%	12,820	4.4%	2	4.9%
Circum Parkway	70	700.0%	54,880	60.5%	-3,100	-51.6%	35	231.6%
Circum Arterial	100	100.0%	130,350	24.3%	-170	-1.1%	9	25.7%
Arterial HOV	20	N/A	17,570	N/A	500	N/A	29	N/A
Subtotal	800	13.4%	156,120	0.3%	-347,760	-14.7%	4	17.6%
Centroid Connectors	-	-	-43,130	-0.6%	-1,750	-0.5%	0	-0.1%
Totals	800	13.4%	-112,990	0.2%	-349,510	-13.0%	3	15.2%

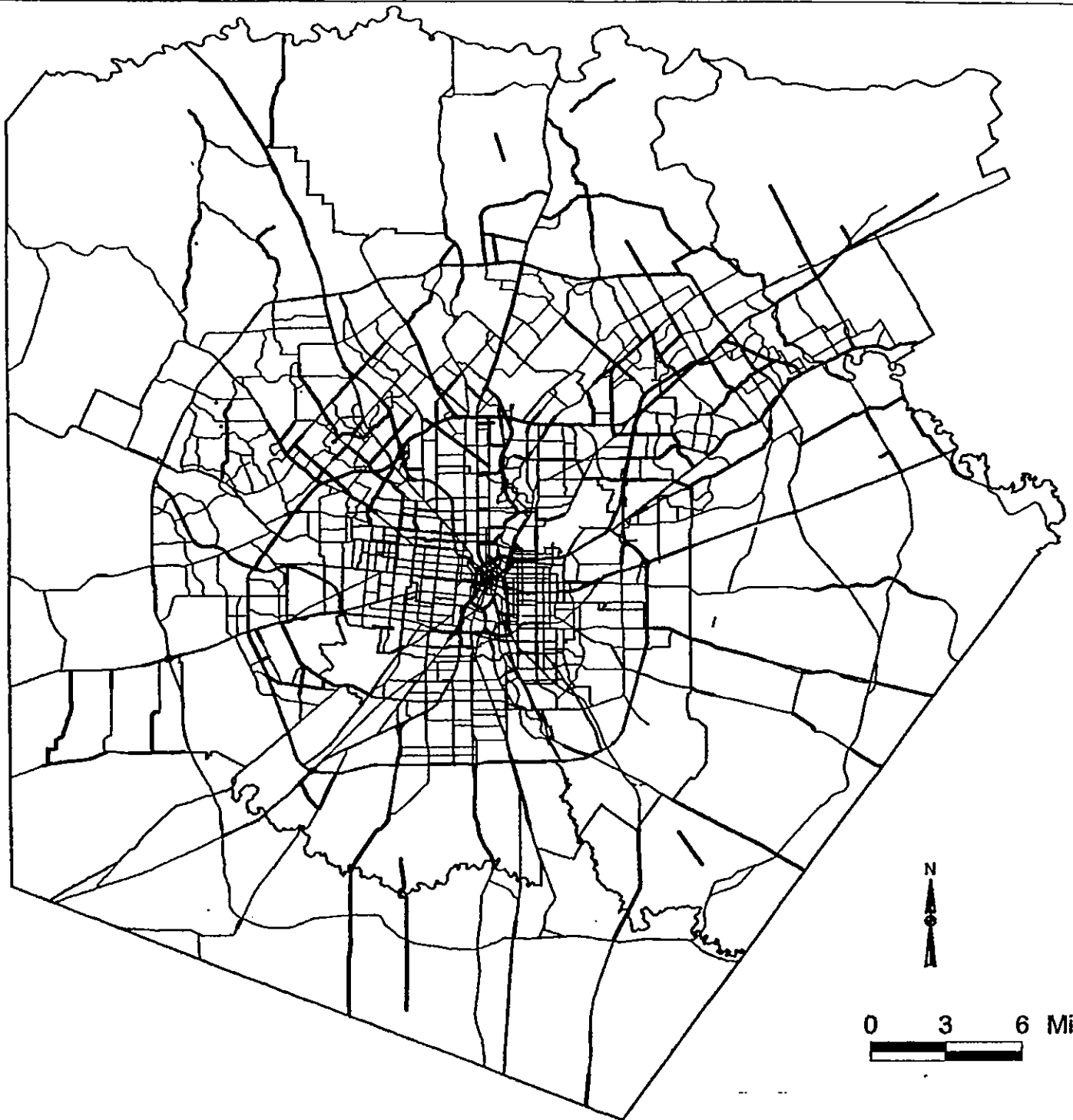



Figure 2.6 Congested Roadway System (with Improvements)

Legend

 Volume Over Capacity > 1.0



Map Creation 12/21/99

3. PUBLIC TRANSPORTATION ELEMENT



BACKGROUND

VIA Metropolitan Transit (VIA) is a political subdivision of the State of Texas, authorized by State Enabling Legislation to receive locally-generated sales tax income at a rate not to exceed one percent and subject to approval by voters within the VIA service area. VIA currently collects sales tax income at a rate of one-half percent as approved in the November 1977 referendum that established VIA. VIA is also supported by fare box revenue, Federal Transit Administration (FTA) funding, advertising revenue, and interest income.

The VIA service area is 1,232 square miles, which is 99% of Bexar County, and currently includes the City of San Antonio, plus sixteen suburban cities and all of the unincorporated areas of Bexar County as shown in Figure 3.1. Suburban cities located within the service area are Alamo Heights, Balcones Heights, Castle Hills, China Grove, Converse, Elmendorf, Fair Oaks Ranch, Grey Forest, Helotes, Hollywood Park, Kirby, Leon Valley, Olmos Park, St. Hedwig, Shavano Park, Terrell Hills, and portions of Cibolo, Schertz, and Selma. Cities all or partially located within Bexar County but are not part of the VIA service area are Hill Country Village, Live

Oak, Lytle, Somerset, Universal City, and Windcrest.

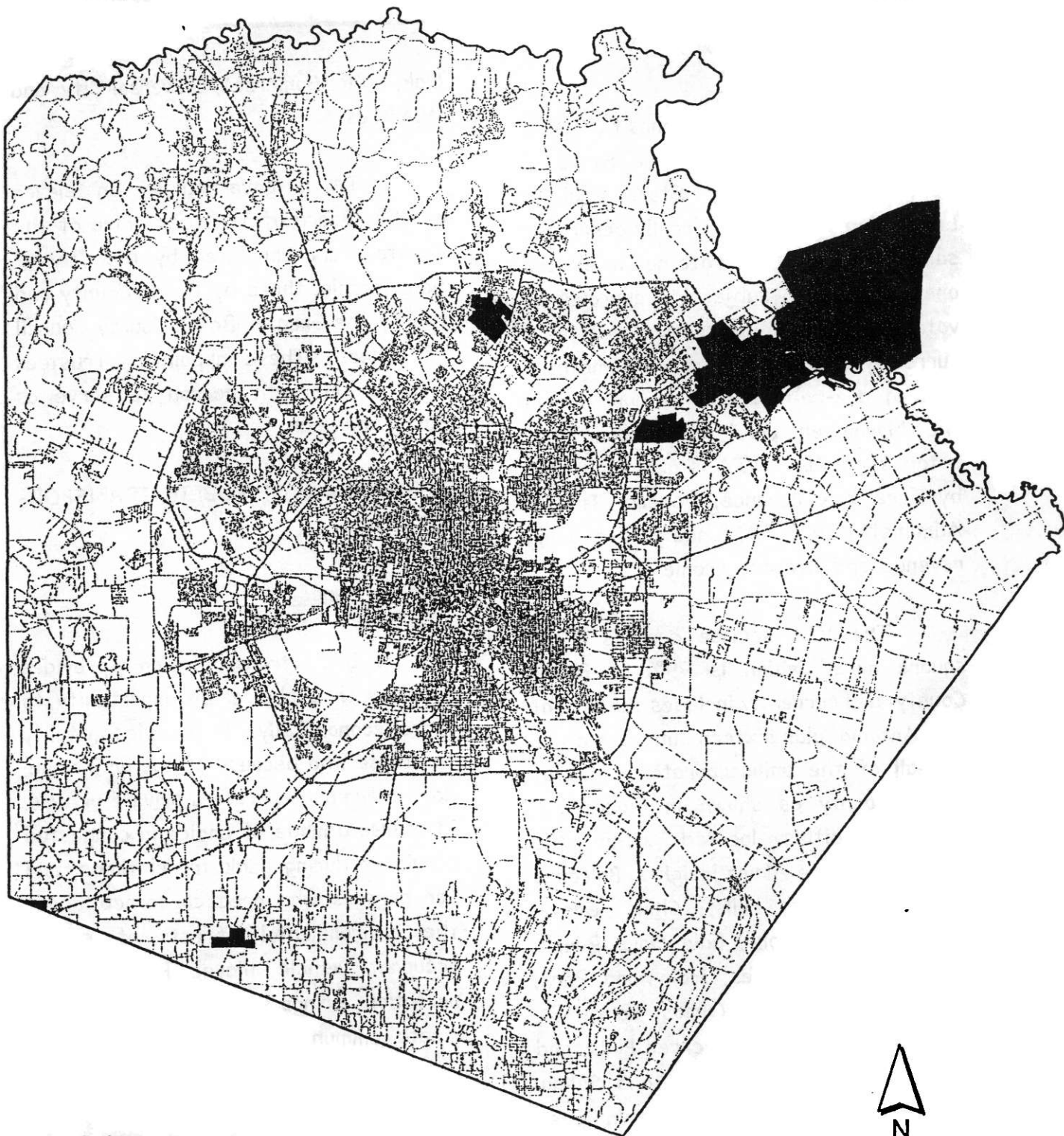
VIA is governed by an eleven member Board of Trustees. Five of the Trustees are appointed by the City of San Antonio, three by Bexar County and two by the Greater Bexar County Council of Cities. These appointed Trustees elect an eleventh person to serve as Board Chairman

IMPORTANCE OF PUBLIC TRANSPORTATION

Mobility Aspects

Public transportation provides people with a choice: an opportunity to travel economically. It provides mobility for those who because of age or income, do not own and operate a private vehicle. It is also a mode of choice in congested corridors during peak travel times, and for persons who are concerned about the environmental effects of single-occupant vehicle travel. Public transportation brings people together and meets community needs.

Figure 3.1 VIA Metropolitan Transit Service Area



■ Indicates those areas that are part of the San Antonio - Bexar County Metropolitan Planning Organization Study Area but are not part of the VIA service area



0 5 10 Miles



Slightly over 10% of Bexar County area households do not own an automobile and, therefore, must rely on some other form of transportation. In addition, in 37.6% of Bexar County households, the number of adults (Age 16 and over) exceeds the number of vehicles owned by the household. In Bexar County, three out of every four households with an annual income of less than \$10,000 do not own an automobile.

About 20% of Bexar County's population is below poverty level. In the 1990 Census, nearly 8.4% of Bexar County's households received public assistance. Welfare reform has heightened the importance of public transportation as a means for low income persons to get to work or job training. One-half (50.3%) of bus riders have an annual household income of less than \$10,000.

Nearly 2.6% of Bexar County's population age 16 to 64 years has a physical or mental condition which limits their ability to travel independently. However, 18% of those citizens 65 years of age and older have such a disability according to the 1990 Census. The proportion of the population with mobility limitations increases to 31% for those 75 years of age and older. A total of 38,879 individuals with mobility difficulties were tabulated in Bexar County in the 1990 Census.

About 26% of Bexar County's population is too young to drive. Without public transportation, young people miss opportunities to personally develop or participate in a community's activities. Often they must rely on their parents for transportation.

The aging of the population is a recognized trend with 9.8% of the Bexar County population 65 years or older. While today's senior citizens are more active than ever before, aging creates an increasing dependence on public transportation.

Social Aspects

It has been estimated that every \$1.00 invested in low-cost transportation reduces the cost of four major federal programs (Medicare, Medicaid, Food Stamps and Unemployment Compensation) by an average of \$0.60. In other words, public investment in the provision of affordable transportation saves taxpayers' money on other social programs.

VIA operators and service personnel are an "extra set of eyes" in the community, ready to report suspicious or criminal activities to law enforcement officials through the radio communications capability on every VIA vehicle. The public safety dimension of VIA will increase with the full deployment of the Intelligent

Transportation Systems headquartered at TransGuide.

Environmental Aspects

Ground transportation vehicles of all types emit various types of pollutants into the air. According to an inventory of three key pollutant emissions conducted by the Alamo Area Council of Governments (AACOG), there are 259.05 tons of volatile organic compounds (VOCs), 91.9 tons of nitrous oxides (NO_x) and 1307.16 tons of carbon monoxide (CO) emitted into the air in Bexar County from all sources. "On-road: transportation sources account for 32%, 45% and 55%, respectively, of the total emissions of these pollutants. This amounts to a total of 550 pounds of just these three pollutants per Bexar County resident per year. Additionally, an estimated 9.4 tons per day of VOCs are emitted in Bexar County for vehicle refueling according to the AACOG report.

Concentrations of ground-level ozone, which is formed under a chemical reaction under sunlight from NO_x and VOCs, is of concern to local officials since the San Antonio-Bexar County area just passes current federal air quality standards. The AACOG estimates that emissions from transportation sources are increasing at about 5% per year at this time. An increase in shared ride trips and a reduction in vehicle cold starts will help the region maintain its current air quality standards.

BASE YEAR TRANSIT SERVICE

Bus Service

In 1995, VIA operated 99 bus routes with 1,470,418 vehicle hours and 21,079,099 vehicle miles traveled, to accommodate 42,019,672 passenger trips. Bus service was provided to eight park and ride lots, providing service for 13,235 daily passenger trips. In 1995, the City of Windcrest was part of the VIA service area but has since voted out of the transit service area.

Based on VIA's 1995 On-board Transit Origin/Destination Survey, major transit activity centers included the Central Business District, San Antonio College, North Star Mall, and the South Texas Medical Center. Residential areas generating the most ridership include those areas near Lanier, Edgewood, Edison and Jefferson High Schools.

VIAtrans Service

VIA also operates an advance reservation paratransit service for persons, who, because of a disability, are prevented from using VIA's fixed route bus service for some or all trips. This service is called "VIAtrans". Established in 1979 in response to Federal accessibility requirements, the VIAtrans service is consistent with VIA's mission to provide transit service which enhances the quality of life in the San Antonio community. VIAtrans currently requires

a fleet of nearly 200 directly-operated and contract vehicles to provide approximately 3,500 person-trips on an average weekday.

Some portion of the current demand for VIAtrans service is attributable to the relative inaccessibility of VIA's fixed-route bus system. All transit vehicles purchased by VIA in the future will be equipped with lifts or ramps to accommodate persons in wheelchairs and other customers who cannot negotiate steps. VIA expects to have its bus fleet entirely accessible by 2008. It is anticipated that many intersections and pedestrian pathways will be improved by state and local agencies in the years ahead. Nonetheless, there will be a continuing need for the VIAtrans service; even with accessible fixed route transit vehicles and pedestrian pathway improvements, some persons with disabilities will still be unable to independently use the VIA bus system.

VISIONING PROCESS

At a strategic work session of the VIA Board of Trustees and Management Team in the Fall of 1996, VIA Metropolitan Transit identified the need for a vision to guide the long term development of public transit in the San Antonio-Bexar County region. This "Transit 2025" vision was to be formulated by a community-wide effort

to determine the transit needs of the study area in the year 2025.

During 1997, a specific strategy to produce the Transit 2025 vision was developed after reviewing similar visioning processes in other parts of the United States. A key element of the strategy was the establishment of independent citizens' task force to formulate the vision. The task force was named the Transit 2025 Task Force.

VIA selected a Task Force Chairman and the Chairman recruited a diverse membership of 22 individuals for a Task Force which represented varied interests in the community. With the assistance of a representative from the MPO, TxDOT, City of San Antonio and Bexar County, VIA hired a consultant team to support the Transit 2025 Task Force visioning process.

Two rounds of public meetings were held in various locations in the County. Over 100 citizens and agency staff participated in meetings or submitted comments by telephone or in writing. The Task Force delivered its final report to the VIA Board of Trustees in July 1998.

The Transit 2025 Task Force report contains more than 300 recommendations of either a short or long-term nature. One of the long-term recommendations is to increase the transit sales tax by one-quarter cent for

fixed guideway transit, such as busways or light rail. In the opinion of the Transit 2025 Task Force, expanded bus service alone would not provide the required additional transit capacity by the year 2025, nor would it reduce the expected degradation of the environment of Bexar County.

The Task Force found that given the locally adopted demographics described in Section 1, transit capacity would need to be increased by approximately 50%. The Task Force also recommended an expansion of the bus fleet to include a mixture of ADA-accessible vehicles that would use environmentally cleaner fuels and propulsion technologies. The Task Force also recommended the continued implementation of intelligent transportation system (ITS) technologies.

VIA Trustees carefully reviewed the report and in October 1998, the VIA Board directed VIA staff to implement the Transit 2025 Vision. In January 1999, VIA's General Manager proposed a strategy and schedule for implementing the vision. The Board of Trustees adopted this implementation strategy.

To implement the vision, work immediately began on State legislation that would allow an increase of one-quarter cent in transit sales tax as recommended by the Transit 2025 Task Force. While current State law allows for a Metropolitan Transit Authority

(MTA) to collect up to a 1¢ sales-tax, the City of Balcones Heights, a member of the VIA transit district, had voted to increase its sales tax to the maximum allowed by State law for law enforcement purposes. Since VIA cannot charge different sales tax rates in different cities, the Balcones Heights vote effectively prohibited an increase in the transit sales tax throughout the remainder of the VIA service area.

A bill to allow a one-quarter cent sales tax strictly for "advanced transportation systems" was submitted to the Texas Legislature. This bill was signed into law on May 21, 1999 by the State Governor. Local referenda in each jurisdiction would be called at the option of each local government to determine whether the jurisdiction would be in the "advanced transportation district." Jurisdictions could be part of VIA's existing bus and paratransit service area without being in the "advanced transportation district."

In March 1999, the VIA Board of Trustees approved a recommendation by VIA staff to hire a consulting team to turn the Transit 2025 Vision into a long-range transit plan. The work is expected to be completed in April 2000. In order to keep the schedule proposed by the Transit 2025 Task Force, a referendum to increase the current transit sales tax level would need to be held by February 2001.

FUTURE YEAR TRANSIT PLAN

Transit 2025 Task Force - Fixed Guideway System

As stated earlier, one of the long-term recommendations from the Transit 2025 Task Force Report is to increase the transit sales tax by one-quarter cent for fixed guideway transit, such as busways or light rail. Using the locally adopted demographics, the Transit 2025 Task Force reviewed growth trends and future likely major activity centers. The Task Force identified the following future major activity centers: Downtown (Central Business District), Palo Alto/Texas A&M campus, Brooks AFB/Stinson Field area, Kelly Industrial Center, Westover Hills, South Texas Medical Center, San Antonio International Airport, IH 35 North/IH 410 area, Rolling Oaks/Loop 1604 area, US 281/Loop 1604 area, UTSA/Fiesta Texas area, and the Bandera Road/Loop 1604 area

Once the future activity centers were selected, the Task Force members considered the type of fixed guideway (light rail, busway, or an elevated system) should serve and/or connect the activity centers. Then a starter system consisting of fixed guideway alternatives was designed. Figure 3.2 shows the components of the proposed starter system in the 2025 Vision report. The fixed guideway starter system shows fixed guideway neighborhood links to the

near-west and near-east sides of downtown, and a fixed guideway express line from UTSA (North Campus) to Brooks AFB. Express lanes and High Occupancy Vehicle (HOV) lanes are shown in the IH 35 corridor to the north. The proposed San Antonio-Austin commuter rail line is also shown in the starter system.

The Transit 2025 Task Force Report also contained an illustrative scenario, as shown in Figure 3.3, showing a fixed guideway system beyond the initial investment of the starter system. This out-year possibility is an extensive fixed guideway system of neighborhood links and express routes, connecting current and expected activity centers, while providing redevelopment opportunities for existing neighborhoods in side Loop 410. This out-year possibility is in excess of 90 miles of fixed guideway service and is beyond the funding scope of this Plan.



Figure 3.2 VIA Visioning - Starter System

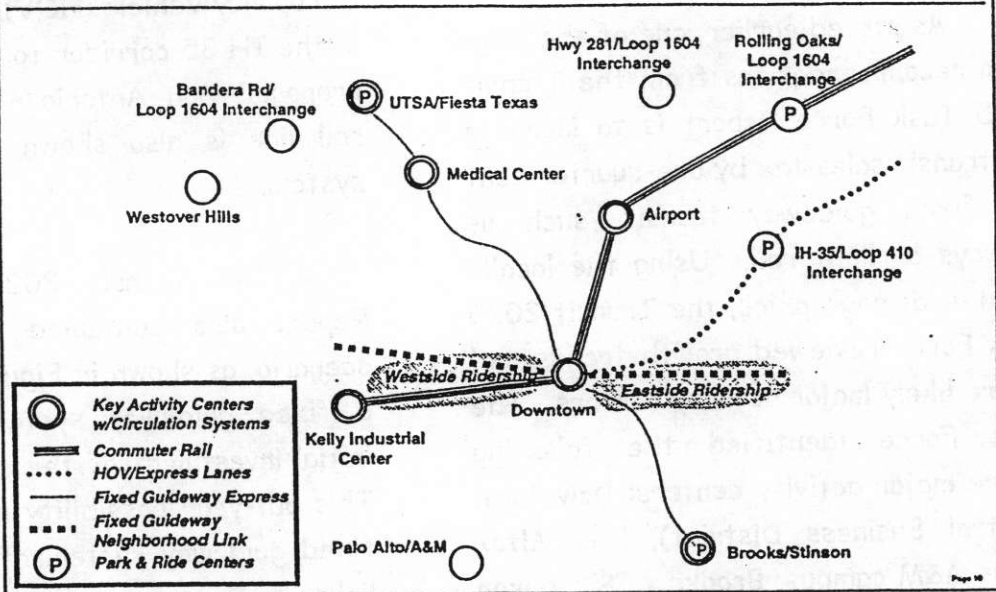
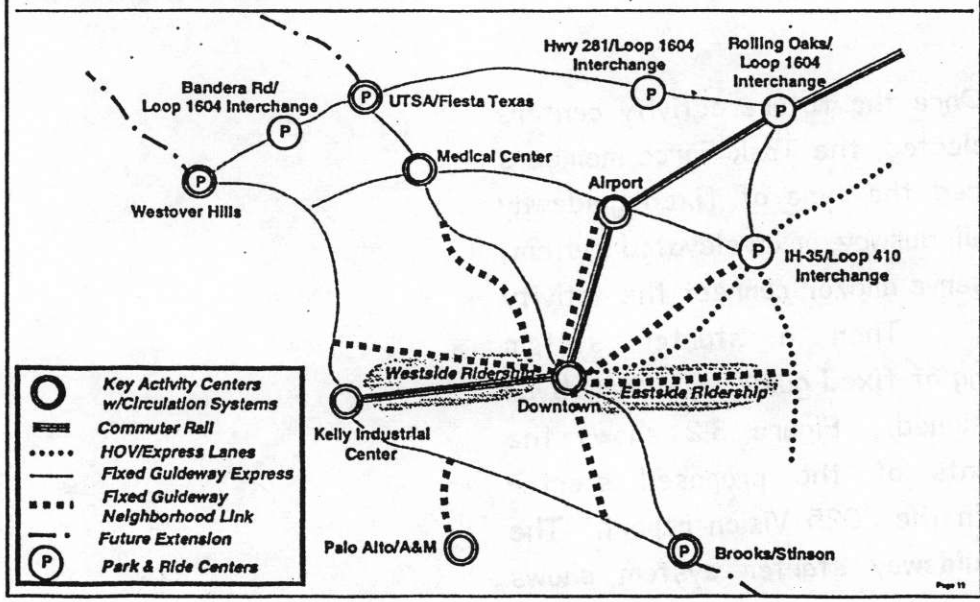


Figure 3.3 VIA Visioning - Out-year Possibilities



Bus Service Improvements

With or without fixed guideway transit service, additional bus service is being planned for the future. VIA staff conducted an analysis of growth patterns, future household (population) and employment densities, household income distribution, and other indicators of transit usage. Population, employment and income distribution are the three factors that most greatly affect the design and operation of the transit system.

The year 2025 Expanded Bus Service Network represents an orderly expansion of the base year (1995) bus system. Initially (year 2001-2015), bus service and service frequencies will increase in response to population and employment growth trends. During the 2016-2020 period, many bus routes may be reconfigured to connect with a proposed light rail and/or HOV lane/Busway (fixed guideway) system in major corridors. For the remaining Plan years (2021-2025), the reconfigured bus network will be expanded as warranted by ridership demand.

Between 2001 and 2025, the Bus-Only Network is proposed to add eight new bus routes to the 100 routes VIA currently operates. The analysis indicated additional service would need to be increased (headways reduced) on nearly all of the existing bus routes. New bus routes proposed to be added

include an express route on IH 10 East; crosstown routes on Loop 1604, Huebner Road, and Jones-Maltsberger; and circulator routes serving the Seguin Road area, the Converse/Schertz area, and the Thousand Oaks/Encino Park area. The expanded bus network is shown in Figure 3.4 and the revised peak, off-peak, and new route headways are shown in Table 3.1.

Annual bus ridership is projected to increase from an estimated 42,452,718 passengers in year 2000 to 58,245,440 passengers in year 2025. To serve this anticipated growth, annual bus miles are projected to increase from an estimated 22,354,245 in year 2000 to 29,092,081 in year 2025. The bus fleet is expected to grow to an estimated 602 buses during this 25-year time period. Other comparisons between 1995 and 2025 transit service are shown in Tables 3.2 to 3.4. VIAtrans, paratransit service for persons with disabilities, is expecting a slight increase in the level of directly operated service and a greater increase in the level of purchased (contract) service. VIA forecasts a 43% increase in total VIAtrans miles and passengers by the year 2025.

Table 3.5 summarizes the anticipated revenues (primarily fares, federal grants and local sales tax income) and capital and operating expenses associated with the 2025 Expanded Bus Service

Figure 3.4 Proposed Expanded Bus Network (2025)



-  2025 Expanded Bus Routes
-  Bus Transfer Stations
-  1999 Park & Rides
-  1999 Bus Routes
-  Roads



Table 3.1 Base Year and 2025 Peak and Off-Peak Recommended Headways by Route

Rte	Name	Headways				Rte	Name	Headways			
		Peak		Off-Peak				Peak		Off-Peak	
		Base	2025	Base	2025			Base	2025	Base	2025
1	North Flores Local	26	26	36	36	86	Ingram / Woodlawn	17	17	26	21
2	Blanco / Parliament	24	20	38	38	87	Bandera Limited / Helotes	10	10	60	30
2	Blanco / Airport	60	30	60	45	88	Bandera PNR Local	24	24	55	46
2	Blanco / Hidden Forest	30	30	45	45	88	Bandera Local via Wurzbach	43	43	55	44
3	San Pedro Limited	15	15	24	18	88	Bandera Local via Huebner	53	38	53	38
4	San Pedro Local	12	15	18	18	89	Donaldson Local	30	14	41	41
5	McCullough Local	20	20	28	28	90	Babcock Local	24	15	30	22
8	St. Mary's / Zoo	24	24	30	30	91	Fredericksburg Ltd / Woodway	40	40	42	42
9	Broadway McArthur	24	24	30	60	91	Fredericksburg Ltd / Babcock	60	60	90	90
9	Broadway / 1410 Cutback	24	24	30	30	92	Fredericksburg Local/ Crossrds	13	13	17	17
10	Naco Pass Limited	-	30	-	60	92	Fredericksburg Local/STMC	14	14	50	50
11	Nacogdoches Local	30	30	35	35	93	UTSA / Downtown Express	18	15	90	30
14	Perrin Beitel / Thous. Oaks	30	30	35	35	94	Downtown / Fiesta TX Exp.	-	18	-	36
14	Perrin Beitel / Roll. Oaks	30	23	45	42	96	Vance Jackson Local	24	24	30	24
15	Fort Sam / Baptist Branch	30	30	40	40	97	West Avenue / Castle Hills	40	30	50	30
17	Randolph PNR Express	15	10	25	20	97	West Avenue / Shavano Park	25	25	80	80
19	IH 10 East Express	-	10	-	20	97	West Avenue /University Oaks	60	30	90	30
21	Kirby / Converse Inbound	40	30	60	30	502	Thousand Oaks Crosstown	30	15	35	35
21	Kirby / Converse Outbound	40	30	60	30	503	Rolling Oaks / IH10E PNR	-	15	-	30
21	Kirby Cutback	40	18	50	18	505	Basse Road Crosstown EB	40	22	60	60
22	Nolan / Hays Local	17	17	25	25	505	Basse Road Crosstown WB	40	22	60	60
24	East Houston Local	17	17	22	20	508	Walters Crosstown	40	40	50	50
24	E. Houston / Wheatley	50	25	40	25	509	Hildebrand Crosstown	40	40	45	45
25	E. Commerce / Honey	30	18	30	18	512	New Braunfels Crosstown	30	14	40	40
25	E. Commerce / Huntley	30	18	40	18	515	Southcross Crosstown	20	20	45	45
26	MLK / Eastwood	30	30	36	30	516	Hackberry Crosstown	30	16	45	45
26	MLK / Dellcrest	30	30	38	30	520	Zarzamora Crosstown	20	20	23	20
28	Porter Street	17	17	20	20	522	Cupples Road Crosstown	30	16	50	50
30	Rigsby Local	20	20	25	22	524	General McMullen Crosstown	30	20	43	43
31	Rigsby Limited	30	30	90	40	528	36 th Street / Babcock Xtown	30	30	50	50
31	Rigsby Limited Cutback	30	30	90	40	530	36 th Street Crosstown	20	20	40	40
32	Steves Avenue Local	15	15	20	15	534	Wurzbach Crosstown	30	16	35	33
34	S. St. Mary's / SASH	17	17	26	17	537	Huebner Crosstown	-	20	-	40
36	Presa / SASH Military	24	24	26	26	545	Jones-Maltsberger Crosstown	-	15	-	30
36	Presa / SASH Hot Wells	44	44	44	44	550	Loop 410 Crosstown	30	10	36	20
38	McCreless PNR Express	30	30	90	60	552	Loop 410 Express	30	10	82	20
38	McCreless PNR / Elmendorf	90	90	90	90	554	Loop 1604 Crosstown	-	10	-	20
40	Alamo / Missions	24	-	40	40	555	Wurzbach Pkwy Express	-	10	-	20
42	Roosevelt / Villa Coronado	44	24	28	28	602	Bitters / STMC Circulator	30	15	42	42
42	Roosevelt / Losoya Ext.	20	20	90	60	603	UTSA / STMC Circulator	30	15	40	40
44	Flores / Bellaire Branch	20	20	25	20	604	University Oaks / STMC Circ.	60	27	60	60
44	Flores / Pleasanton Branch	20	20	25	20	605	Ingram Park / STMC Circ.	40	40	50	44
46	Commercial Local	30	16	28	8	606	Ingram Park / New Territories	40	40	55	55
48	South Park Exp. / Palo Alto	30	30	56	56	607	Crossroads PNR / STMC Circ.	30	15	60	30
51	Nogalitos / Columbia Hgts.	30	25	40	25	608	Colonies North / Crossroads	30	15	60	30
51	Nogalitos / S. San Inbound	30	22	45	22	609	Ingram Park / Braun Station	50	50	60	60
51	Nogalitos / S. San Outbound	30	22	45	22	610	Ingram Park / NW Crossing	40	40	50	50
52	Nogalitos Limited	90	30	35	35	611	Valley Hi / Kel-Lac PNR	60	60	60	60
52	Nogalitos / Kings Point Ext.	30	30	90	40	612	Westlakes Mall / Kel-Lac PNR	60	60	60	60
54	South Main Local	20	20	45	23	613	NW Heritage / Kel-Lac PNR	60	60	60	60
62	Kelly AFB Local	-	20	28	28	614	Indian Creek / Kel-Lac PNR	40	40	50	40
63	Sea World Express Inbound	-	-	60	60	615	Heritage Park / Kel-Lac PNR	60	60	60	60
63	Sea World Express Outbound	-	-	60	60	616	Sky Harbour / Kel-Lac PNR	60	60	60	60
64	Kel-Lac PNR Express Inb.	15	15	32	32	617	Rainbow Hills / Kel-Lac PNR	60	60	60	60
64	Kel-Lac PNR Express Outb.	15	15	32	32	618	Westlakes Mall / Ingram Mall	40	40	50	40
66	West Ceralvo Local	15	15	20	15	622	Braun Station / UTSA	-	60	-	60
67	Laredo Street Local	40	40	38	40	624	Braun Station / Helotes	-	60	-	60
68	Guadalupe / Las Palmas	15	15	22	15	630	Windsor Park/ IH10E PNR	30	12	45	30
68	Guadalupe /Cassiano Homes	17	17	25	17	632	Sunrise Circulator	18	18	42	39
70	West Durango Local	24	24	30	30	632	Sunrise Circulator Cutback	30	18	90	30
74	W. Commerce / Acme Park	24	12	25	24	637	Seguin Road Circulator	-	20	-	50
74	W. Commerce / Edgewood	20	12	26	26	639	Converse Circulator WB	40	40	50	50
76	Old Highway 90 Limited	15	15	20	20	639	Converse Circulator EB	40	40	50	50
77	West Martin Local	17	17	24	24	640	Selma / Randolph PNR	40	40	45	45
79	Ruiz / Western Park	30	15	45	60	641	Rolling Oaks Circulator	40	40	50	50
79	Ruiz / 28 th Street Cutback	30	15	30	30	645	Converse / Schertz Circulator	-	30	-	60
81	Culebra / Ingram Limited	-	30	-	30	648	Hollywood Park / North Star	40	25	40	30
82	Culebra / Ingram Park	14	14	30	30	648	San Pedro Square/ North Star	25	25	40	30
82	Culebra / Alamo Downs	18	10	90	30	650	Thousand Oaks / Encino Park	-	30	-	60
84	Cincinnati Local	34	17	43	43						

Table 3.2 1995 Bus Transit Network: Daily Vehicle and Passenger Statistics by Mode

	Radial	Express	Circulator	Crosstown	Light Rail	Total
Peak Service						
Route Miles	1,078	728	418	294	N/A	2,518
Vehicle Mi	14,082	8,809	3,524	3,208	N/A	29,623
Vehicle Hrs	1,245	523	303	297	N/A	2,368
Ridership	46,847	6,363	3,470	6,041	N/A	62,721
Passenger Mi	155,782	41,832	9,006	17,189	N/A	223,809
Passenger Hrs	9,945	1,955	565	1,214	N/A	13,679
Off-Peak Serv						
Route Miles	893	453	418	294	N/A	2,058
Vehicle Mi	20,592	7,843	7,099	5,989	N/A	41,523
Vehicle Hrs	1,859	497	610	525	N/A	3,491
Ridership	48,510	5,405	6,083	8,835	N/A	68,833
Passenger Mi	126,928	30,177	13,584	22,358	N/A	193,047
Passenger Hrs	8,222	1,346	791	1,513	N/A	11,872

Table 3.3 2025 Bus Transit Network: Daily Vehicle and Passenger Statistics by Mode

	Radial	Express	Circulator	Crosstown	Light Rail	Total
Peak Service						
Route Miles	840	464	467	416	N/A	2,187
Vehicle Mi	13,576	10,355	5,970	8,201	N/A	38,102
Vehicle Hrs	1,162	572	528	644	N/A	2,906
Ridership	43,545	7,400	11,826	11,751	N/A	74,522
Passenger Mi	117,216	46,735	27,859	31,908	N/A	223,718
Passenger Hrs	7,375	2,189	1,967	2,194	N/A	13,725
Off-Peak Serv						
Route Miles	857	464	452	416	N/A	2,189
Vehicle Mi	27,612	15,074	8,638	10,892	N/A	62,216
Vehicle Hrs	2,411	850	752	780	N/A	4,793
Ridership	78,771	14,750	11,158	9,308	N/A	113,987
Passenger Mi	188,695	79,193	23,659	19,210	N/A	310,757
Passenger Hrs	11,600	3,399	1,402	1,272	N/A	17,673

Table 3.4 Changes in Daily Vehicle and Passenger Statistics by Mode

	Radial	Express	Circulator	Crosstown	Light Rail	Total
Peak Service						
Route Miles	-238	-264	49	122	N/A	-331
Vehicle Mi	-506	1,546	2,446	4,993	N/A	8,479
Vehicle Hrs	-83	49	225	347	N/A	538
Ridership	-3,302	1,037	8,356	5,710	N/A	11,801
Passenger Mi	-38,566	4,903	18,853	14,719	N/A	-91
Passenger Hrs	-2,570	234	1,402	980	N/A	46
Off-Peak Serv						
Route Miles	-36	11	34	122	N/A	131
Vehicle Mi	7,020	7,231	1,539	4,903	N/A	20,693
Vehicle Hrs	552	353	142	255	N/A	1,302
Ridership	30,261	9,345	5,075	473	N/A	45,154
Passenger Mi	61,767	49,016	10,075	-3,148	N/A	117
Passenger Hrs	3,378	2,053	611	-241	N/A	5,801

Table 3.5 VIA Metropolitan Transit - Projected Revenue Sources and Expenditures

ACTIVITY	FY 1996 - FY 2000	FY 2001 - FY 2005	FY 2006 - FY 2010	FY 2011 - FY 2015	FY 2016 - FY 2020	FY 2021 - FY 2025	TOTAL
SOURCES (in millions)							
Operating Revenue	\$ 93.714	\$ 106.123	\$ 121.539	\$ 136.955	\$ 152.371	\$ 167.786	\$ 778.489
Investment Income	28.847	25.127	21.676	18.226	14.776	11.326	119.978
Sales Tax	288.139	368.428	448.718	529.007	609.297	689.586	2,933.176
Grants							
Capital Reimbursements	12.043	15.092	17.569	20.046	22.522	24.999	112.271
Section 5307	61.035	77.674	91.021	104.369	117.717	131.064	582.880
Total Grants	73.078	92.766	108.590	124.415	140.239	156.063	695.151
Other	0.487	(0.296)	(0.477)	(0.658)	(0.839)	(1.020)	(2.803)
TOTAL SOURCES	\$ 484.266	\$ 592.148	\$ 700.046	\$ 807.945	\$ 915.844	\$ 1,023.742	\$ 4,523.991
USES (in millions)							
Vehicle Acquisition							
Revenue Vehicles	\$ 9.817	\$ 59.583	\$ 43.288	\$ 40.620	\$ 51.860	\$ 70.624	\$ 275.792
Non-revenue Vehicles	1.004	1.885	0.384	0.403	0.423	0.445	4.543
Total Vehicles	10.821	61.467	43.672	41.023	52.283	71.069	280.335
Bldgs./Structures/Equipment	33.170	28.301	11.310	6.500	6.824	7.166	93.270
Operating Expenses							
Line Service	308.961	369.595	430.447	488.685	548.143	609.240	2,755.072
VIATrans	86.480	108.760	133.497	156.782	180.073	203.364	868.957
Other	9.657	9.443	10.808	12.159	13.510	14.861	70.438
Total	405.099	487.799	574.752	657.626	741.726	827.465	3,694.467
Depreciation (Non Federal Share)	13.620	31.811	47.297	63.685	80.072	96.460	332.945
Non-operating expenses	3.740	19.635	21.546	23.425	25.304	27.183	120.833
TOTAL USES	\$ 466.450	\$ 629.013	\$ 698.577	\$ 792.258	\$ 906.210	\$ 1,029.342	\$ 4,521.850
GAIN/<LOSS>	\$ 17.816	\$ (36.865)	\$ 1.469	\$ 15.687	\$ 9.634	\$ (5.600)	\$ 2.141

Note:

Fiscal Year 1996-1998 based on actual

Fiscal Year 1999 projected

Fiscal Year 2000-2004 based on 5 year plan

Fiscal Year 2005-2025 projected

5 year plan and projected numbers exclude 2.4% inflation

Network. This financial forecast indicates that future revenues will keep pace with future costs but does not include major new revenue sources or expenses associated with the construction of a fixed guideway system.

Capital Requirements

Capital projects, including new and replacement vehicles, passenger amenities, facilities and equipment, associated with the 2025 Expanded Bus Service Network are described below in five-year increments.

2001-2005

During this time period, VIA will continue a series of initiatives that began in years 1999 and 2000 involving a bus fleet replacement program, facilities improvements, new passenger amenities, and a communications system upgrade.

Vehicles

A majority of the buses in VIA's fleet were purchased in the 1970s and 1980s. VIA will continue an aggressive fleet replacement program, and will expand or rehabilitate other elements of the overall fleet as needed. In support of these initiatives:

- 23 new buses will be added
- 21 new VIAtrans vans will be added

- 167 buses, purchased in 1980 and 1984 will be replaced
- 111 vans, purchased in 1994, will be replaced (in general, the replacement schedule for buses is every 20 years and every five years for vans)
- 11 downtown streetcars, purchased in 1983, will be replaced
- approximately 50 support (non-revenue) vehicles will be added or replaced
- existing buses will be retrofitted with improved electronic destination signs

Facilities

VIA has been overdue for additional office space and an expanded maintenance capacity:

- renovation and expansion of the VIA headquarters and maintenance facilities will be completed
- additional maintenance tools and equipment, required for new buses, will be purchased
- a portion of the bus yard pavement will be replaced

Passenger Amenities

Passenger amenities are an important element of transit service. In support of the 2025 Expanded Bus Service Network:

- improvements to existing passenger facilities at Ellis Alley, McCreless,

and Randolph park & rides will be completed

- relocation and reconstruction of Kel-Lac Park & Ride will be completed
- a downtown central transfer facility will be constructed
- the Westside Multi-Modal Terminal will be constructed
- various downtown area improvements will be undertaken as a TEA-21 initiative
- ADA compliance projects - primarily bus stop improvements will be completed

Communications and Technology

Recent scientific advances will facilitate a great improvement in communications between vehicles and supervisory personnel, and will assist in providing more options for VIA passengers as well by:

- completing the installation and testing of an automated vehicle locator (AVL) system on all buses and vans
- installing interactive customer trip planning software
- installing new fare collection equipment on all buses

2006-2010

During this period, VIA will largely complete the upgrade of its older bus fleet and begin to add vehicles to serve new routes and new customers as a result

of population and employment growth in the service area. With a larger and more diverse bus and van fleet, VIA must obtain additional vehicle maintenance and storage capacity. Specific projects during this time include:

- purchase of 104 replacement buses and 19 buses for expanded service
- purchase of 6 replacement streetcars
- purchase of 133 replacement VIAtrans and 5 vans for expanded service
- construction of satellite bus storage and routine maintenance facilities in the northcentral and northwest sectors
- completed construction of a central transfer facility for VIAtrans riders
- completion of the ADA bus stop compliance modifications program (by 2008, all VIA buses are expected to be accessible to persons with disabilities)
- development of new bus transfer facilities in suburban sectors (specific locations will be determined at a later date)

2011-2015

By this time, and perhaps sooner, VIA will outgrow its central maintenance facility. Increased VIAtrans service demand will likely require additional VIAtrans transfer facilities. The expansion of the bus and van fleet and the orderly replacement of old vehicles will continue

through the implementation of these projects:

- design and construction a second full-service maintenance facility
- development of VIAtrans transfer centers in the NE, NW, SE, and SE sectors
- replace 30 full-size buses
- replace 66 small buses
- add 30 new buses for service expansion
- replace 147 VIAtrans vans and add two vans for service expansion
- continue to provide additional bus shelters as warranted

2016-2020

Capital projects during this period will focus on the continuing expansion and upgrade of the VIA bus fleet:

- replace 143 buses
- replace 149 VIAtrans vans
- replace 5 streetcars
- add 32 buses and two vans for service expansion

Other than these routine purchases of buses and vans for replacement and service expansion purposes, forecast data does not suggest the need for major capital projects and initiatives to support the Expanded Bus Service Network. However, additional projects and initiatives may emerge as a

result of subsequent Plan updates and refinements.

2020-2025

Continuing the routine purchase of buses and vans for replacement and service expansion purposes, forecast data indicates the following requirements:

- replace 183 buses, 151 vans and 11 streetcars
- add 34 buses and two vans for service expansion

As stated earlier, additional projects and initiatives may emerge as a result of subsequent Plan updates and refinements.

Non-Capital Initiatives

In addition to the projects described above, VIA will pursue at least two major service initiatives: neighborhood feeder service and rail feeder service.

The neighborhood feeder service strategy recognizes that many people travel for relatively short distances, especially for non-work trip purposes. This strategy would capture some of these trips by designing bus (or van) routes which serve specific neighborhoods and other limited geographic areas. Feeder routes are proposed to converge on neighborhood activity centers, and

these centers would be connected by "traditional" local and express bus routes on major streets and highways. The rail feeder service concept is similar - but instead of transporting persons to and from neighborhood activity centers, these routes would be focused on light rail system stations in identified corridors. The neighborhood and rail feeder service initiatives will increase the efficiency of the overall VIA transit system and provide more direct, and therefore faster, trips for transit customers.

VIAtrans Service Improvements

As stated earlier, all future transit vehicles purchased by VIA will be equipped with lifts or ramps to accommodate persons in wheelchairs and other customers who cannot negotiate steps. VIA expects to have its bus fleet entirely accessible by 2008. It is anticipated that many intersections and pedestrian pathways will be improved by state and local agencies in the years ahead. Nonetheless, some persons with severe physical and/or cognitive impairments will continue to need VIAtrans service.

Persons with disabilities in the San Antonio area presently have few affordable options for travel. While it is hoped that accessible taxis, other public paratransit services and additional human service agency transportation resources

will be available in future years, the specific scope and magnitude of new accessible travel options cannot be predicted at this time.

TRANSPORTATION STEERING COMMITTEE ACTION

The San Antonio-Bexar County Metropolitan Transportation Plan was adopted by the Metropolitan Planning Organization Transportation Steering Committee on December 6, 1999. The Plan adoption was divided into eight separate actions for consideration. The proposed actions related to public transportation are described below.

Motion #2 Funded Transit Component

Councilwoman Debra Guerrero questioned Mr. John Milam, General Manager, VIA Metropolitan Transit, on two items 1) VIAtrans service improvements and 2) increasing the dollar amount contribution for infrastructure to the City of San Antonio. The planned communications improvements for the VIAtrans system were briefly described by Mr. Milam. These Automated Vehicle Location (AVL) improvements will enable VIAtrans dispatch staff to know the location of the VIAtrans vans at all times in order to manage the fleet more effectively. This system is expected to be in place early next calendar year. Mr. Milam also stated that VIA and the City of San Antonio were beginning

discussions regarding VIA's contributions to the City of San Antonio for street improvements. The motion was made to include the VIAtrans AVL description and VIA's contribution to street maintenance in the Plan text. Mr. Michael Martin asked that Bexar County and the suburban cities be included in the infrastructure discussions with VIA. The motion carried unanimously.

Motion #5 San Antonio-Austin Commuter Rail Component

The motion was made and seconded to adopt the San Antonio-Austin Commuter Rail component of the Metropolitan Transportation Plan as an option for further consideration, but not as an endorsement of the project. The Commuter Rail project will be listed on an illustrative list of projects in the Plan as there is currently not an identified funding source. The motion carried unanimously.

Motion #6 High Occupancy Vehicle Lane/ Busway Component

The motion was made and seconded to adopt the High Occupancy Vehicle Lane/Busway component of the Metropolitan Transportation Plan as an option for further consideration. These projects will be listed on an illustrative list of projects in the Plan as there is currently not an identified funding source. The motion carried unanimously.

Motion #7 Light Rail Component

Mr. Bill Barker, Director of Planning at VIA Metropolitan Transit, made a presentation on VIA's System Plan. After much discussion, the motion was made and seconded to adopt the Advanced Transportation component, including a fixed guideway component. This motion does not constitute any endorsement. The motion carried unanimously. These light rail projects will be listed on an illustrative list of projects in the Plan as there is currently not an identified funding source.



4. BICYCLE ELEMENT

BACKGROUND

Bicycling is a cost effective, energy efficient, clean, and healthy way, to travel. With the growing concerns of congestion, air quality and the public interest in promoting alternative transportation modes, the adoption of policies that encourage alternate transportation modes will aid in reducing congestion and air pollution. The principle of an efficient travel network is to develop a system of complementary transportation modes that support the safe and viable movement of people, goods, and services. The City of San Antonio's adopted Master Plan supports this objective. It encourages transportation options, which emphasize convenience, safety, environmental quality and efficiency. The focus is to expand the overall capacity of the movement of people by including bicycling as an alternate transportation mode in the design of the city's new infrastructure, and retrofitting the existing network.

In 1994, the San Antonio-Bexar County Metropolitan Planning Organization (MPO) initiated a study to develop a mobility plan for bicycles as a mode of transportation. The study addressed long-range bicycle needs in the San Antonio-Bexar County study area. This

Bicycle Mobility Plan represents the means by which the San Antonio-Bexar County MPO can effectively include bicycling as an alternate transportation mode in the study area's new infrastructure, and, where appropriate, in retrofitting the existing network.

The Bicycle Mobility Plan was the first step in the development and implementation of a network of bicycle travel routes, facilities, and other bicycling needs in the San Antonio-Bexar County area. The Bicycle Mobility Plan provided a guide to bicycle travel network development to citizen advocates of improved bicycle travel, area government officials, and transportation planners.

BICYCLE VISION

An early activity in the development of the San Antonio—Bexar County Bicycle Mobility Plan was the creation of a vision for bicycling in the region. In public meetings and meetings with agency staff and user groups, participants were asked to describe their vision for the San Antonio—Bexar County study area 25 years from now. Also, surveys of both government agencies

(City of San Antonio and Bexar County) and San Antonio and Bexar County citizens were distributed to solicit comments on existing bicycle travel conditions and suggestions for improvements.

During the public involvement process a wide range of comments were generated. Among the strongest sentiments were the desire for a greater sense of community in the San Antonio-Bexar County study area, a transportation system that offers people the choice or option to bicycle, and development that builds on the strengths of the study area, particularly tourism. The following vision statement was developed in the Bicycle Mobility Plan:

The San Antonio-Bexar County study area can be one where residents and visitors will choose to bicycle.

Bicycling will be a pleasant, safe transportation alternative for trips of all kinds and for all segments of the population.

BICYCLE GOAL DEVELOPMENT

A wide range of societal, environmental and infrastructure changes is necessary before this vision can become a reality. Many of these changes have been identified in the development of the Bicycle Mobility Plan, and are also linked to goals in the San Antonio Master

Plan. Among the suggestions made in public meetings were:

- Provide safe and direct access for bicyclist travel to work, school, and other primary destinations and generators.
- Provide safe and accessible network of designated facilities and quiet streets suitable for bicycling throughout the Bicycle Mobility Plan study area.
- Integrate bicycles into the existing transportation system.
- Improve public awareness of the benefits of bicycling.
- Improve the education of bicyclists and motorists in the Bicycle Mobility Plan study area.

Based on these suggestions, guidance from the Plan Oversight Committee and a review of existing activities by public agencies in the study area, the Bicycle Mobility Plan identified a series of goals and objectives for the study area. These goals are described below.

Bicycle Mobility Plan Goals

- G-1 To double the percentage of trips made by bicycle in the Bicycle Mobility Plan study area**

and continue to increase bicycle trips through the 25-year life of the mobility plan.

G-2 To reduce the number of bicycle-related traffic accidents by 10 percent by 2005 and continue to reduce bicycle accidents through the 25-year life of the plan.

G-3 To increase awareness of bicycling as a viable transportation alternative both in the planning community and among the general public.

Bicycle Mobility Plan Objectives

The Bicycle Mobility Plan adopted a dual strategy to achieve these goals. First, the plan identified how future transportation investments in the study area can include appropriate facilities to promote bicycling and the safety of bicyclists. Second, the plan identified how the existing infrastructure can be modified to improve opportunities for bicycling and make cycling safer.

O-1 All new transportation facilities in the study area will, at a minimum, accommodate experienced cyclists.

O-2 In key bicycle corridors, transportation facilities will accommodate travel by bicycle for all types of cyclist.

O-3 Identifies strategies for accommodating bicyclists of all abilities in key corridors in the study area.

O-4 Identifies strategies for overcoming major barriers to bicycle travel in the study area.

O-5 Identifies an appropriate leadership role for local government agencies in implementing the plan. This will include recommendations for assisting local agencies, neighborhood groups and user groups in developing future neighborhood and corridor plans for bicycling.

ASSESSMENT OF CONDITIONS AND NEEDS

Past Conditions and Needs

Prior to the initiation and documentation of the Bicycle Mobility Plan, there was limited information about bicycling activity in the San Antonio-Bexar County study area. According to the 1990 Census, 0.16 percent of journey to work trips in the study area were made by bicycle, about half the national average for large metropolitan areas. A 1991 survey of San Antonio travel patterns revealed similar numbers for commuting trips and higher levels of trip making by bicycle for school and other

types of journeys such as community libraries, parks, recreation facilities, etc.

Over the last ten years, approximately 2,571 bicyclists were reportedly killed or injured in collisions with motor vehicles in San Antonio-Bexar County study area, based on police accident records. The majority of victims were under 17 years of age, with elementary school students making up the greatest proportion.

These figures are indicators of bicycling activity in the San Antonio-Bexar County study area, but in themselves do not reflect the overall cycling activity. Also, they do not address the potential that exists in the study area for increasing levels of cycling and improving safety for bicyclists.

The amount of bicycling in the Bicycle Mobility Plan study area was relatively low. Participants in public meetings and respondents to a general survey about bicycling in the study area identified six key problem areas. It is these problem areas that may help explain the reason for the relatively low levels of bicycle trips.

1. **No safe places to ride.**
2. **Poor street conditions.**
3. **Low status of bicyclists.**
4. **Lack of support facilities.**
5. **Land use and development.**
6. **Institutional neglect.**

Current Conditions and Needs

Following the development of the Bicycle Mobility Plan many of the issues for bicycling opportunities have been identified. The Bicycle Mobility Planning approach defined such issues as:

⇒ **Identifying and understanding different types of bicyclists**

- Type A - Skilled Adult Riders
- Type B - Basic Adult Riders
- Type C - Unskilled Riders

⇒ **Identifying and understanding Bicycle Facility Options**

- Wide Curb Lanes
- Bicycle Lanes
- Paved Shoulders
- Bicycle Boulevards
- Bicycle Trails
- Exclusive Bicycle/Pedestrian Connectors
- General Improvements such as potholes, unlevelled riding surfaces, etc.

⇒ **Identifying key study area bicycle travel corridors based on select criteria**

- Safety to bicyclists and motorists alike who must share the travel corridors
- Destinations and attractions accessible from the potential travel corridors
- Connectivity to other bicycle travel corridors or modes of transportation

- Use of corridors that take advantage of existing roadway features, rail, transit lines, or water ways and creeks .

⇒ **Selecting bicycle travel corridor design treatments**

- Location
- Existing Roadway Characteristics
- Attractions
- Daily traffic counts
- Potential barriers

Although the Bicycle Mobility Plan provides a methodology for developing a network of bicycle routes in the San Antonio-Bexar County study area, the Plan recognizes that the implementation of a network of facilities and routes over the next 25 years will depend upon the actions of the City of San Antonio, Bexar County, the Texas Department of Transportation, a number of smaller suburban cities, the development community, and citizen involvement.

Several specific actions were recommended in the Plan. Those actions and their current status are described below.

A-1. Establish a standing Bicycle Mobility Task Force to oversee and coordinate implementation of the Bicycle Mobility Plan.

On November 28, 1994, the Transportation Steering Com-

mittee (TSC) adopted the recommendation of the Bicycle Mobility Plan Oversight Committee for establishing a Bicycle Mobility Task Force (BMTF). The BMTF's first meeting was held on April 26, 1995 and it has been active to the present day.

A-2. Identify a minimum level of funding for bicycle improvements to the existing roadway system.

The Intermodal Surface Transportation Efficiency Act (ISTEA) reauthorized as the Transportation Equity Act for the 21st (TEA-21) provide program funds to State and local jurisdictions to construct facilities and to develop programs and materials for promoting bicycling. The BMTF and the various local agencies have been actively pursuing the use of these funds along with other local contributions for the development of bicycle facilities. The previous Metropolitan Transportation Plan set a target funding goal of 3.2% of STP-MM funding for bicycle projects. A target funding goal of 5% of STP-MM funding is recommended in this Plan update.

A-3. Encourage the development of bicycle facilities in conjunction with roadway construction, reconstruction and improvement

projects through the Transportation Improvement Program process.

With the establishment of the BMTF and the development of the Bicycle Mobility Plan, local agencies have been actively pursuing bicycle facilities in the roadway construction and reconstruction projects submitted through the Transportation Improvement Program (TIP) process in addition to stand alone bike projects.

- A-4. Promote uniform, state-of-the-practice facility design and implementation throughout the San Antonio-Bexar County study area.**

The Bicycle Mobility Plan recommended and established the use of the American Association of State Highway and Transportation Officials (AASHTO) guidelines for uniform facility design and implementation that most agency engineers use for roadways, and other facility amenities such as bicycling.

- A-5. Develop planning tools to prioritize bicycle facility development.**

The BMTF established a Bike Route Selection Subcommittee to

strategize and identify viable routes for the development of a Bike Route Network. This subcommittee has recommended giving projects priorities that address an adopted strategy for a north-south corridor/east-west corridor route network. Use of Geographic Information Systems has also aided in prioritizing bicycle facility development.

- A-6. The City of San Antonio and/or Bexar County should appoint or hire a full-time bicycle coordinator to coordinate and implement the development of a bicycle travel network.**

With the establishment of the Bicycle Mobility Task Force each agency (The City of San Antonio, Bexar County, Texas Department of Transportation and VIA Metropolitan Transit) has assigned bicycle coordination duties to specified staff members to assist in the development and implementation of the bicycle travel network. These coordinators sit on the BMTF committee as voting members.

- A-7. The City of San Antonio, suburban municipalities, and Bexar County should adopt policies similar to those of the Texas Department of**

Transportation in which design of all roadway improvements and reconstruction, or new construction, includes consideration of inclusion of bicycle facilities.

A review of the most recently adopted Transportation Improvement program illustrates that most of the transportation agencies have included bicycle facilities in roadway projects where feasible.

- A-8. The City of San Antonio and Bexar County should institute a "Bicycle Spot Improvement" program to make low-cost safety improvements to the existing roadway system.

This activity has not been implemented.

- A-9. The City of San Antonio and other incorporated municipalities should review and recommend changes to the Unified Development Code (UDC) to ensure that streets and roadways built by developers incorporate adequate facilities and space for safe and efficient bicycle travel.

The city of San Antonio's adopted Master Plan supports this action under its Urban Design Goals with

Goal 5 stating "Develop policies for various transportation modes that will increase access to employment centers, community services, and cultural, recreational, educational and commercial facilities; and decrease the reliance on single occupancy vehicles."

With the support of the City's Master Plan it is expected that the inclusion of Bicycle facility issues will be reflective in the proposed re-write of the Unified Development Code as mentioned previously.

- A-10 The City of San Antonio, other incorporated municipalities, and Bexar County should review and recommend changes to local parking ordinances to ensure that a minimum level of bicycle parking is provided in all new developments.

While local parking ordinances have not been changed, the purchase of 100 bicycle racks were recently funded with STP-MM funds. These bicycle racks will be located at activity centers throughout the City of San Antonio. The upcoming rewrite to the Unified Development Code may include bicycle parking requirements

A-11.The City of San Antonio should consider implementation of bicycle facility projects of the type recommended for the Woodlawn and Museums Bicycle Travel Corridors (see pages 23 and 28, respectively in the Bicycle Mobility Plan), and should proceed with development of the Missions Trail.

The Mission Trails project has been partially funded and partially constructed using Enhancement Funding. Projects similar to that recommended for Woodlawn are currently funded and under development.

A-12.The Texas Department of Transportation (TXDOT) should implement the recommendations for inclusion of bicycle facilities of the type proposed for the Wurzbach Parkway alignment.

Since the development of the Bicycle Mobility Plan, TXDOT has recommended and included bicycle facilities where feasible in the construction of the Wurzbach Parkway.

A-13.The City of San Antonio and Bexar County should actively support promotional and safety events in the study area.

The National Bike Week event has become an annual local celebrated event actively supporting bicycle safety issues as well as other bicycling issues. Local biking clubs and organizations have been actively promoting bicycling issues within the study area through other types of bicycling events.

A-14.VIA Transit should work with the bicycling community to establish a program to better integrate bicycling with the transit system.

In 1997, VIA Metropolitan Transit installed 15 bike racks on bus routes serving routes 17, 93 and 91 as a pilot project. These routes serve several shopping malls, the University of Texas at San Antonio, San Antonio College, the South Texas Medical Center, and several other activity centers. The purchase of 460 bicycle racks for buses were recently funded with STP-MM funds. Installation of these bike racks will equip the entire bus fleet with bicycle racks.

A-15.Each of the agencies involved in the implementation of the Bicycle Mobility Plan should themselves become model

employers for those wishing to commute by bicycle.

This activity has not been implemented.

With this update of the Metropolitan Transportation Plan, the BMTF has added another action item:

A-16. The MPO should conduct a survey of bicyclists in the study area, providing a benchmark in determining bicycle commuting patterns and collecting other information that may be useful in developing the local bicycle network and determining bicyclists' needs.

BICYCLE NETWORK DEVELOPMENT

After the inception of the BMTF, committee members suggested identifying a subcommittee that would adequately address a host of issues. Those issues included setting priorities for projects that would develop a bicycling network in accordance with the Bicycle Mobility Plan. The subcommittee would hold work sessions in between the monthly BMTF meetings and report back to the BMTF. The structure of the subcommittee would include various agencies' bicycle coordinators, bicyclists, BMTF members, and citizens with bicycling interest. Ensuing the Bicycle Mobility Plan's documented approach to

develop planning tools that prioritize bicycle facilities and networks, the BMTF established the Bicycle Route Selection Committee (BSC).

The BSC identified strategies to implement a bicycle route network within the Bicycle Mobility Plan's bicycle corridor plan. Included in the identified strategies, BSC developed scoring criteria for prioritizing bicycle projects.

Upon examination of existing bike facilities and funded bike projects existing within the Bicycle Mobility Plan corridor plan, the committee recognized the development of a north-south, east-west bicycle routes. The BSC committee suggested setting priorities on projects that would continue the development of the north-south, east-west route network. This completion of this network will provide access to four major quadrants in the study area.

The BSC developed recommendations to amend the Bicycle Mobility Plan corridor plan to set priorities on projects submitted that would close those gaps and complete the north-south, east-west bicycle route network.

FUTURE ISSUES

Today the San Antonio-Bexar County urbanized area is an attainment area, i.e., is in compliance with National Ambient Air Quality Standards set forth

by the Clean Air Act. However, federal funding of transportation activities in non-attainment areas is dependent on local implementation of various Transportation Control Measures (TCMs) specified in the Clean Air Act. Bicycling and walking improvements, both construction and non-construction, are approved TCMs for reducing emissions to help bring ozone and carbon monoxide non-attainment areas into air quality compliance. The Congestion Mitigation and Air Quality (CMAQ) Improvement Program provides additional resources for transportation projects and programs. The projects and programs listed as TCMs in the Clean Air Act are included in the SIP (State Air Quality Implementation Plan). This list of projects will have air quality benefits or be likely to contribute toward attainment of a national ambient air quality standard.

TRANSPORTATION STEERING COMMITTEE ACTION

The San Antonio-Bexar County Metropolitan Transportation Plan was adopted by the Metropolitan Planning Organization Transportation Steering Committee on December 6, 1999. The Plan adoption was divided into eight separate actions for consideration. The motion was made and seconded to adopt the bicycle, pedestrian, and rideshare components of the Metropolitan Transportation Plan. There was no discussion. The motion carried unanimously.



5. PEDESTRIAN ELEMENT

BACKGROUND

Pedestrian travel is the most basic form of transportation. Although it has diminished as a preferred way to get from one place to another over the past century (as other modes of travel have emerged), approximately 7% of all trips within the San Antonio - Bexar County Urban Transportation Study Area in 1990 were pedestrian trips (1990 San Antonio Travel Study). In Bexar County, 4% of work trips were pedestrian trips (1990 Census).

Roadway transportation networks and the resulting land use development have impacted pedestrian travel. Typically, access to employment, goods, services, and recreational activities are more convenient using automobiles. Regardless of the selected method of travel (car, bus, rail), we must rely on pedestrian mobility for at least some part of each trip. Pedestrian facilities must be an integral part of the transportation system, as they are necessary to safely and efficiently accommodate pedestrian mobility for necessary trips and provide access to other modes of travel.

EXISTING PEDESTRIAN SYSTEM

A comprehensive inventory of existing pedestrian facilities along functionally classified roadways was conducted in the Study Area. Location and condition of sidewalks, curb ramps, and

other pedestrian related facilities were identified. The findings were not unexpected, as citizens have continually expressed pedestrian-related concerns through the Public Involvement Process over the past several years: the existing pedestrian facilities are incomplete, inadequate, and inaccessible. Furthermore, the existing system does not adequately link neighborhoods with public transit or activity centers. Sidewalks are too narrow, are discontinuous, are in poor condition, have obstacles (utility poles, mail boxes, etc.), and a general lack of curb ramps. As discouraging as this may appear, there is reason for optimism.

The encouraging news is that there is a growing awareness and momentum toward improving these conditions. Public officials are responding to the need to improve pedestrian facilities. Utility agencies are aware of the sidewalk/utility pole conflict, and are making efforts to prevent these conflicts in future construction projects. In each of the past three years, the Transportation Improvement Program (TIP) has included an amount of \$500,000 or greater designated exclusively for pedestrian facilities projects in addition to a significant number of roadway construction projects that include pedestrian facilities. This momentum should continue and be extended in order to develop a workable pedestrian facilities system to accommodate pedestrian mobility.

PEDESTRIAN NEEDS

An incomplete and inaccessible system presents a multitude of problems for pedestrians. There is an extensive need to connect existing pedestrian facilities into an integrated transportation system: linking neighborhoods with activity centers and linking neighborhoods and activity centers with transportation modes. Condition of existing facilities must also be considered, as navigability and safety are jeopardized on a facility with rough or broken surface. The greatest needs are safety, connectivity, and access to transit stops.

In a study conducted by the Environmental Working Group/Surface Transportation Policy Project using information compiled from the National Highway Traffic Safety Administration and U.S. Census Data, approximately 6,000 pedestrians are killed each year by automobiles, and another 110,000 are injured. The San Antonio Metropolitan Statistical Area averages 37 pedestrian fatalities each year (20% of all automobile related fatalities). Providing safe pedestrian facilities off the road and at safe distances from the roadway will help prevent or reduce accidents. Equally important in preventing or reducing accidents is providing safe pedestrian crossings.

Improved pedestrian access to transit stops also serves mobility-impaired pedestrians. As lift-equipped or low-floor

buses are put into service, access to transit stops must be improved to allow pedestrians using wheelchairs or other mobility assistance equipment to access the transit stops. This translates to providing sidewalks and curb ramps leading up to and along transit routes.

Although safety, connectivity, and access to transit stops are paramount needs, there are also needs in improved design of pedestrian facilities, particularly with regard to ADA (Americans with Disabilities Act) standards. An attractive and convenient system will contribute to increased usage of pedestrian facilities. Pedestrian confidence will increase on facilities that appear safe, secure, and well maintained.

GOALS AND OBJECTIVES

In order to provide an accessible pedestrian facilities system that is safe, continuous, convenient, attractive, and affordable, the following goals and objectives have been developed.

Safety: Provide pedestrian facilities that are safe for general pedestrian travel and for extraordinary travel circumstances.

Prevention: Build and maintain dedicated pedestrian facilities separate from roadways at safe distances from curbs and improve existing facilities to enhance safety.

Security: Establish and promote a high level of pedestrian confidence by furnishing security amenities such as visibility and lighting.

Railroad Crossings: Insure safe pedestrian crossings over railroad tracks by providing accessible, well designed and constructed walkways with adequate warning systems; allowing pedestrians ample time to cross.

Connectivity: Unite parts of the pedestrian facilities system into a continuous system by completing system gaps, providing linkages to activity centers, and connecting with other modes of travel.

Location: Provide new facilities to complete system gaps in areas of intermittent or incomplete linkages.

Condition: Improve substandard or deteriorated linkages through replacement.

Extension: Promote continuation of pedestrian facilities along local roadways to connect neighborhoods with activity centers.

Activity Centers: Encourage commercial centers and other activity centers to provide dedicated, safe walkways across parking lots and open areas; connecting with the public walkway system.

Intermodal Facilities: Increase pedestrian access to, and around, intermodal facilities by providing new linkages and improving existing connections.

Transit Passenger Facilities: Provide adequate pedestrian linkages to serve intermodal terminals, transfer facilities, and transit stops.

Parking Facilities: Encourage operators of public and commercial parking facilities to provide dedicated, safe sidewalks as internal parking facility traffic management elements; connecting with the public walkway system.

Design: Employ fully accessible (barrier-free), state-of-the-art design for all new and replacement pedestrian facilities.

Function: Consider function as the fundamental guideline in designing pedestrian facilities.

Capacity: Acquire sufficient right-of-way clear of utility conflict, and design pedestrian facilities with adequate capacity to accommodate anticipated traffic.

Aesthetics: Blend pedestrian facility design with area type and natural environment as part of overall facility design.

Expenditures: Effectively utilize available resources to provide for basic pedestrian mobility and accessibility needs.

Investment: Develop regional strategies and guidelines for expenditure of resources on capital improvements to optimize available funding.

Maintenance: Encourage area governments to adopt effective preventive maintenance programs in extending the life of existing pedestrian facilities.

Financing: Explore public-private partnership possibilities in financing new and replacement pedestrian facilities.

PEDESTRIAN AMENITY ISSUES

Circulation

- The fundamental issue in building a pedestrian facilities system is to accommodate pedestrian flow; mobility and accessibility.
- Pedestrian flow necessitates facilities that are navigable in terms of location, continuity, condition, design and maintenance, ingress and egress, and free of obstacles.

Safety

- The key to pedestrian safety is prevention of accidents: providing dedicated pedestrian facilities off of roadways and at a safe distances from curblines, and making preventive improvements to existing facilities.
- Safety considerations include: distance from curb, signage, drainage, slope, curb ramp location and condition, speed limits, pedestrian crossings and signals, maintenance, security, and education of the traveling public.

Connectivity

- Refers to connecting parts of the pedestrian facilities system into a whole, workable system by providing linkages to other modes of travel and to activity centers, and completing gaps along the system.
- Location and condition of existing pedestrian facilities are factors to consider in improving an existing linkage with a replacement facility.

Intermodal Facilities

- Providing facilities to serve transit stops and other transportation modes.

Design

- Fundamental design considerations should be based on essentials: providing functional, barrier-free (fully accessible) pedestrian facilities.
- Providing adequate capacity for pedestrian facilities necessitates acquiring sufficient right-of-way clear of utility conflict.
- Other design considerations include: providing a safe distance from roadway, curb ramps, aesthetically blending with area type and natural environment once basics are furnished.

Expenditures

- Capital should be spent for basics before providing enhancements. Private funding should be considered for providing certain enhancements.
- Fiscal considerations include: providing new facilities, replacing existing facilities, maintaining existing facilities, optimum utilization of limited resources, and public-private responsibilities.

Other Considerations

- Determining responsibility (for building and maintaining pedestrian facilities, liability and accountability), authority (to carry out responsibility, including jurisdiction, administrative, and legal aspects [safety, property rights, etc.]).
- Emerging issues include: potential conflict with other possible users of pedestrian facilities (bicycles, rollerblades, etc.), and opportunities for multiple use facilities (pedestrian/bicycle facilities).

PEDESTRIAN AMENITY STRATEGIES

A series of strategies have been developed to guide the Study Area to achieving an accessible pedestrian facilities system that is safe, continuous, convenient, attractive, and affordable. These strategies are described below.

Pedestrian Mobility Task Force

Sustain the Pedestrian Mobility Task Force to monitor, evaluate, and make recommendations to the Transportation Steering Committee and Technical Advisory Committee on matters applicable to pedestrian mobility and accessibility. This group shall have the opportunity to initiate pedestrian facilities projects and submit requests to the appropriate entities to be considered as candidate projects for the Transportation Improvement Program (TIP) on an annual basis. The Task Force should continue to be chaired by a member of the Transportation Steering Committee, and should comprise representatives from neighborhood and community organizations (with equitable geographic distribution), special interest groups, appropriate public agencies, and other representatives as deemed necessary or beneficial.

The Pedestrian Mobility Task Force should have the flexibility to assume new functions to address other surface transportation accessibility issues. As a move toward efficiency, consideration should be given to the eventual integration of the Pedestrian Mobility Task Force and the Bicycle Mobility Task Force for the purpose of addressing alternative transportation issues.

Pedestrian Coordinators

Encourage each public agency (Texas Department of Transportation, Bexar County, City of San Antonio, VIA

Metropolitan Transit, Alamo Area Council of Governments, suburban cities, and other appropriate entities) within the MPO Study Area to designate a staff member as the agency's Pedestrian Coordinator. All designated Pedestrian Coordinators should establish communications with the Pedestrian Mobility Task Force.

Improvements

Designate 5% of all project funding available to the Metropolitan Planning Organization for the Transportation Improvement Program (TIP) per fiscal year as the standard for exclusive pedestrian facility projects. In addition, require that roadway TIP construction projects (all capacity improvement projects and major rehabilitation projects) within the Urbanized Area include pedestrian facilities, where appropriate.

Standards

Encourage government agencies to periodically review and update directives pertaining to pedestrian facilities, to consider incorporating performance criteria compatible with the Pedestrian Amenities Plan, and to enforce requirements and standards for building pedestrian facilities.

Coordination

Through the Pedestrian Mobility Task Force and the Pedestrian Coordinators, maintain active communication and

coordination with governmental and other agencies in the MPO Study Area on matters pertaining to pedestrian facilities.

Establish and maintain active communication with utility agencies and companies with the aim of finding solutions toward eliminating or reducing pedestrian facility / utility conflict, particularly within areas of limited right-of-way.

Continuing Planning

Right-of-Way: Consider new right-of-way standards that would allow more flexibility in locating pedestrian facilities and utilities to help prevent space utilization conflicts.

Barriers: Investigate ways and means to eliminate or reduce barriers and obstacles on, or adjacent to, existing pedestrian facilities, and develop a systematic program for improving access on obstructed facilities.

Pedestrian Travel: Establish a system for monitoring pedestrian travel and pedestrian related accidents to help determine areas with high pedestrian volumes and high risk locations.

Investment Opportunities: Explore public/private investment and interagency possibilities and opportunities for building better pedestrian facilities, and develop an incentives program to encourage private sector contributions toward providing new or replacement facilities.

Review and Evaluation: Develop and maintain a process of internal examination and assessment of the effectiveness of pedestrian mobility planning, and make periodic recommendations for improvements to the planning process. Continually review and evaluate areawide planning efforts relating to pedestrian circulation for compatibility with MPO Planning efforts.

SYSTEM DEVELOPMENT

System Development pertains to performance criteria established to guide the design and development of the pedestrian facilities system:

IDEALS: Under the best of circumstances

BASICS: Bottom line realities; doing the best with what we have

OPTIONS: Alternative criteria for exceptional circumstances

Americans with Disabilities Act (ADA) standard referred to in these criteria pertain to the highest of federal, state or local standards.

These performance standards are further defined in Tables 5.1 through 5.5.

Table 5.1 Recommended Walkway Standards

Factor	Ideals	Basics	Options
Width	Five feet and greater (at high volume pedestrian traffic areas, adjacent to high density commercial and residential areas, and at high risk locations) where adequate right-of-way is available.	Four feet and greater (in concentrated areas), with enlarged passing areas each two hundred feet or as determined by ADA standards.	Six feet or greater (in concentrated areas) when adjacent to curblines (as right-of-way will allow). In areas with limited right-of-way, walkways of four feet may be allowed adjacent to curblines, with provisions for passing areas and circumvention of obstacles. Meandering walkways (five feet or greater) should be encouraged (in certain circumstances to circumvent trees or obstacles, space permitting)
Location	Both sides of roadways.	Both sides of roadways (where possible).	Both sides of roadways (where possible).
Condition	Good.	Good to fair.	Good to fair.
Safe Zone	Four feet from curbline.	Two feet from curbline, or at least six feet pavement width if adjacent to curbline.	Included as part of additional width. In areas with limited right-of-way, on-street parking or bicycle lanes can provide buffers, thus adding to, or substituting for, safe zones.
Access	Full accessibility (free of obstacles, such as utility poles, mail boxes, advertising benches, etc.), exceeding ADA standards.	Full accessibility (free of obstacles), meeting all ADA standards.	Full accessibility (free of obstacles), meeting all ADA standards (exceptions only as allowed by ADA directives).
Extension	Linking pedestrian facilities with transit stops, and connecting neighborhoods with activity centers (schools, libraries, retail centers, other community centers).	Linking pedestrian facilities with transit stops, and connecting neighborhoods with activity centers.	Linking pedestrian facilities with transit stops, and connecting neighborhoods with activity centers.
Attributes	Adequate visibility and lighting, landscaping in the safe zones, other amenities contributing to pedestrian confidence, system attractiveness.	Provide for addition of security and landscaping amenities.	Provide for addition and landscaping amenities as space allows.

Table 5.2 Recommended Curb Ramp Standards

Factor	Ideals	Basics	Options
Width	Exceeding ADA standards.	Meeting ADA standards.	Meeting ADA standards, with exceptions allowed only in accordance with ADA provisions where unique circumstances warrant.
Location	Two curb ramps at each corner of each intersection (where possible), connecting to walkway facilities, transit stops, and crosswalks, exceeding state-of-the art ADA design standards. Curb ramps/cuts also at medians and traffic islands.	At least one curb ramps at each corner of each intersection, connecting to walkway facilities, transit stops, and crosswalks, meeting state-of-the art ADA design standards. Curb ramps/cuts also at medians and traffic islands.	Meeting ADA standards, with exceptions allowed only in accordance with ADA provisions where unique circumstances warrant.
Condition	Exceeding ADA standards.	Meeting ADA standards.	Meeting ADA standards except as allowed by ADA provisions.
Safety	Exceeding ADA standards.	Meeting ADA standards.	Meeting ADA standards except as allowed by ADA provisions.
Access	Full accessibility (free of obstacles), exceeding ADA standards.	Full accessibility (free of obstacles), meeting ADA standards.	Full accessibility (free of obstacles), meeting ADA standards except as allowed by ADA provisions.
Attributes	Adequate visibility and lighting, landscaping (where beneficial), other amenities contributing to pedestrian confidence, system attractiveness.	Provide for addition of security and landscaping amenities.	Provide for addition of security and landscaping amenities as space allows.

Table 5.3 Recommended Crosswalk Standards

Factor	Ideals	Basics	Options
Location	Prominently marked crosswalks at all intersection locations and other locations where crossings are allowed along functionally classified roadways, exceeding ADA standards.	Prominently marked crosswalks at selected intersections and other major locations where pedestrian crossings are allowed, particularly to serve school zones, transit stops, and other centers with significant volumes of pedestrian traffic or extraordinary circumstances, meeting ADA standards.	Prominently marked crosswalks at designated crossings at selected intersections and other major locations where pedestrian crossings are allowed, with emphasis near school zones, transit stops, and high risk locations. Meets ADA standards, exceptions as allowed by ADA provisions.
Indicators	Pedestrian signals installed at all crosswalks, with crossing restricted signs indicating where pedestrian crossings are prohibited.	Pedestrian signals or crossing signs as indicators of designated crossing locations, with crossing-restricted signs indicating where pedestrian crossings are prohibited.	Pedestrian crossing signs as indicators of designated crossing locations, with crossing-restricted signs indication where crossings are prohibited.

Table 5.4 Recommended Signal Standards

Factor	Ideals	Basics	Options
Location	Pedestrian signals at all crosswalks along functionally classified roadways, exceeding ADA standards.	Pedestrian signals at crosswalks along functionally classified roadways (where traffic signals are located) and at high risk sites, meeting ADA standards.	Pedestrian signals at high risk sites and other sites as warranted, supplemented with pedestrian crossing signs at designated crosswalks and crossing-restricted signs (where crossings are prohibited) in areas where signals are not practical, meeting ADA standards with exceptions only as allowed by ADA provisions.
Features	Audible pedestrian signals provided in extraordinary circumstances to assist pedestrians with visual impairments. Additional signals provided at school crossings.	Additional signals provided at school crossings and other locations as warranted.	Pedestrian signals provided at school crossings, with exceptions only in unique situations. Other special locations as warranted.

Table 5.5 Recommended Pedestrian Enhancements

Factors	Ideals	Basics	Options
General	An effectively landscaped, high visibility, well-illuminated pedestrian facility system along functionally classified roadways, with fully accessible pedestrian bridges, railings, and street furniture in appropriate locations, exceeding ADA standards.	An attractive pedestrian facilities system along functionally classified roadways, with accent landscaping, visibility, adequate lighting, and accessible pedestrian bridges and/or railings as necessary, meeting ADA standards.	Design and build pedestrian facilities along functionally classified roadways, allowing for the eventual addition of landscaping and other attractions (street furniture, etc.) as affordable, meeting ADA standards (with exceptions only as allowed by ADA provisions).

PROJECT SELECTION

Eligibility

Minimum eligibility requirements for a pedestrian facilities project to be considered as a candidate project for the Transportation Improvement Program (TIP) are: 1) the project must be located along a functionally classified roadway, 2) the project must comply with the Pedestrian Amenities Plan System Development Performance Criteria and all ADA (Americans with Disabilities Act) standards, and 3) the project must be submitted by a sponsoring agency and meet all additional eligibility criteria of the annual TIP process.

Guidelines

Project selection guidelines for Transportation Improvement Program (TIP) pedestrian facilities projects are intended for use by the Technical Advisory Committee in the technical review of candidate projects to be recommended to the Transportation Steering Committee. The Pedestrian Facilities Management System is the information base for evaluating the technical merits of each eligible project.

Based on the Goals and Objectives, Strategies, and System Development Performance Criteria, the Project Selection Criteria table serves as the general priority setting guidelines for Transportation Improvement Program

pedestrian facilities projects. More specific evaluation criteria (e.g., a breakdown of points in each factor to correspond with ranges of information) may be developed as part of the annual Transportation Improvement Program process without amending this plan, as long as the weighting for each factor is not changed. The Technical Advisory Committee (TAC) will be responsible for further delineating point ranges for technical evaluation, but may delegate authority to the Pedestrian Mobility Task Force to perform the technical review.

The Project Selection Criteria shown in Table 5.6 are based on the System Development Performance Criteria, with intended use for evaluating technical merits of candidate pedestrian facilities projects for the Transportation Improvement Program (TIP).

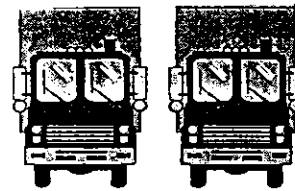
TRANSPORTATION STEERING COMMITTEE ACTION

The San Antonio-Bexar County Metropolitan Transportation Plan was adopted by the Metropolitan Planning Organization Transportation Steering Committee on December 6, 1999. The Plan adoption was divided into eight separate actions for consideration. The motion was made and seconded to adopt the bicycle, pedestrian, and rideshare components of the Metropolitan Transportation Plan. There was no discussion. The motion carried unanimously.

**Table 5.6 Project Selection Criteria
Transportation Improvement Program**

Factor	Weight (Points)	Considerations
Safety	250	Does proposed project eliminate pedestrian/vehicle conflict? Does it provide a safe zone in addition to reducing or eliminating conflict? Does it function as a school route? Does it eliminate or reduce a high risk situation? What is the posted speed limit of the roadway? What is the accident rate? School bus route?
Connectivity	200	Does project complete a gap? Does it provide linkage or extension to pedestrian facilities along non-functionally classified roadways? Does it connect schools, residential areas, commercial establishments, and community centers?
Intermodal	200	Does project provide linkage to intermodal facility (transit stop, terminal)? If so, what is the transit usage?
Condition	200	What is the condition of the existing facility proposed for replacement or improvement? What is the area type?
Cost	100	What is the cost of the project per vehicle miles traveled along roadway?
Volume - 2025	50	What is the projected Year 2025 traffic volume on roadway?
Total	1000	

6. FREIGHT ELEMENT



BACKGROUND

In 1994, the San Antonio-Bexar County Metropolitan Planning Organization conducted a Freight Movement Study for the metropolitan area. The study documented patterns of freight movement, local generators or recipients of freight, specific points or segments of traffic congestion within the metropolitan area, the likely degree of freight growth within and through the region and potential mitigating measures that can be undertaken to accommodate the impending changes in traffic volumes.

LOCAL FREIGHT CONDITIONS

The availability of trucking surveys and truck travel demand forecasting is limited in extent. Rarely have truck data collection and forecasting been treated as distinct issues. The collection of this type of data is typically treated as ancillary to similar data collections that focus on passenger vehicle modeling efforts. However, the movement of goods by truck is a vital link in trade, and, therefore, is an essential component of the economic strength of an area. Trucks transport between local supply sources (warehouses) to points of consumption (retail stores or homes) and connect elements (seaports, airports, and rail and freight terminals) of the transportation system.

The signing of the North American Free Trade Agreement (NAFTA), as well as the creation of the maquiladoras plants which predate NAFTA, have helped fuel the yearly increase in truck crossings from Mexico into the United States. These crossings, through Texas border cities alone, have increased on average by 16.5% for the 1992 through 1997. With the dramatic increase in goods movement across the United States/Mexico border, an accompanying increase in truck traffic in the San Antonio region, especially along IH 35, becomes predictable and knowledge of local truck traffic becomes vital.

As Figure 6.1 indicates, traffic flow between Texas and Mexico has increased 42% between 1995 and 1997. This increase in only two years has had a notable impact on the San Antonio region because San Antonio is located on a major truck-travel route to Mexico. Although imports from Mexico and Canada to Texas are not as substantial as the exports, as shown in Figure 6.2, the value of imports from Mexico increased 22% in two years.

San Antonio is about two hundred miles west of Houston, the world's sixth largest port by total tonnage. 1995 figures show "the port's public and regional private marine terminals generate \$5.5 billion in business revenues annually compared to \$3 billion reported in the last study completed in 1987" in this port alone. These growth

figures may be significant to justify new regional truck travel studies. As an aid to general metropolitan traffic planning efforts, truck travel data could be used to quantify truck travel for better estimating truck pollution emissions, truck route restriction analysis, and development of dangerous goods movement regulations.

In 1991, Phoenix, Arizona conducted truck travel data collection. Some of their findings indicate generally, truck trips seem to occur in the middle of the day; the two lightest truck types were responsible for 96.6% of the commercial trips; and per day vehicle miles traveled in heavy trucks are greater than in light trucks. It is likely, though, that trucking conditions vary greatly from area to area.

At this time there exists very little data on truck movement in the San Antonio region. The City of San Antonio and the Texas Department of Transportation conduct truck traffic counts in San Antonio. The City collects truck traffic data when citizens complain of heavy traffic and want to verify the traffic count. In addition, the City collects truck traffic counts when fresh asphalt is going to be poured over a section of roadway and the truck travel rates are necessary to gauge the specifications of the new surface. The counts distinguish between axle counts for bicycles, cars, buses, single-unit trucks, single-trailer trucks and multi-trailer trucks. These truck traffic counts are usually tallied over one 24-hour

period and often do not include weekend or weekday differences.

The Texas Department of Transportation collects 24-hour unadjusted truck traffic data taken on a Tuesday, Wednesday, or Thursday. This represents an hourly-summed count of the vehicles traveling one section of a major roadway during one day. The Vehicle counts taken at these sites are distributed into thirteen different size categories, ranging from passenger cars to multi-trailer trucks with seven or more axles.

While the data provides detailed information on different types of vehicles on a selected roadway, the data does not provide a comparison between weekday and weekend, between other weekdays, or on a seasonal basis. These differences in truck traffic between days and seasons can be a valuable source of data for transportation and air quality modeling. Unfortunately, it is expensive to collect more in-depth truck traffic data.

The breakdown by truck type categories is shown in Figure 6.3. Single-trailer five axle truck traffic was the most common truck type at 48.5%, followed by single unit two axle trucks at 34.3%.

Comparing truck traffic for each individual counter, Figure 6.4 illustrates that the total truck traffic on IH 35 north of San Antonio is over 80% higher than the truck traffic on the next heaviest-traveled

highway. This high amount of truck traffic on IH 35 is due to the increase of truck traffic moving through San Antonio due to trade with Mexico and to freight commerce with Austin and Dallas. The two sites with the second highest and third highest truck traffic are IH 10 just east of IH 410, and IH 410 east of San Antonio. The highways with the least amount of truck traffic are US 181 southeast of San Antonio, Loop 1604 northwest of San Antonio, and IH 410 southwest of San Antonio.

LOCAL FREIGHT WORKSHOP

On January 21, 1998, local transportation planners met with representatives of the freight movement industry in a day-long workshop sponsored by the MPO. The workshop provided the participants the opportunity to review current and proposed road improvements with the San Antonio-Bexar County area as well as provide information and recommendations directly to transportation planners at the city, county, state, and federal levels.

The freight representatives were asked these questions:

- Does your company currently have or planning to have a terminal in San Antonio/Bexar County? What is the location?

- What size of vehicle is your company currently utilizing? (i.e. 48' or 53' trailers, 48' straight trucks, vans, etc.)
- What are the primary delivery area(s) for your company in San Antonio?
- What major intersection(s) within the city is causing your trucks problems during turning and are any considered major safety problems?
- What is the current number of trucks your company has traveling through or in and out of San Antonio each day traveling East - West on IH 10 and North-South on IH 35?
- What is your company's projected number of trucks traveling through or in and out of San Antonio each day in the year 2000 traveling East - West on IH 10 and North - South on IH 35?
- What specific issues must the MPO address to assist your trucking operations within the San Antonio/Bexar County area both near-term and long-term?

Traffic and transportation problems areas identified in the workshop include:

- IH 410/Rittiman Road to Loop 410/ Fratt Interchange - congestion and weaving problem

- IH 410/I 10 interchange in the southeast - the IH 410 South to I 10 East movement presents a safety issue
- Ackerman/I 10 - the close proximity of entrance and exit ramps to the IH 410/I 10 interchange creates a weaving problem
- Foster Road at I 10 - bridge needs to be widened
- Bandera/IH 410 - congestion relief
- Loop 1604/US 281 - needs interchange
- IH 410/US 281/Airport - needs interchange
- South Flores - Durango to Military Drive needs to be reconstructed
- Probandt - too narrow and needs to be reconstructed
- Downtown - on-street parking and loading
- Businesses and residences need addresses placed on them (enforce ordinance)
- Street signs need block numbers printed on them
- Construction detours are usually inadequate
- Poor directional signage - especially on IH 10
- Longer transition lanes are needed on exiting and entering expressways

CONCLUSIONS

NAFTA related trade continues to impact the San Antonio metropolitan area and will continue to do so, growing at a faster rate than what was earlier anticipated. The growth in freight movement and the growth in local population and employment will maximize the level of service on local freeways.

Other noted problems and/or recommendations included:

- Overhanging tree limbs are an obstruction
- Wires (utility) in commercial areas are an obstruction

Figure 6.1: Value of Exports by Trucks to Mexico and Canada from Texas, 1995-1997.
Source: Bureau of Transportation Statistics, 1998, online

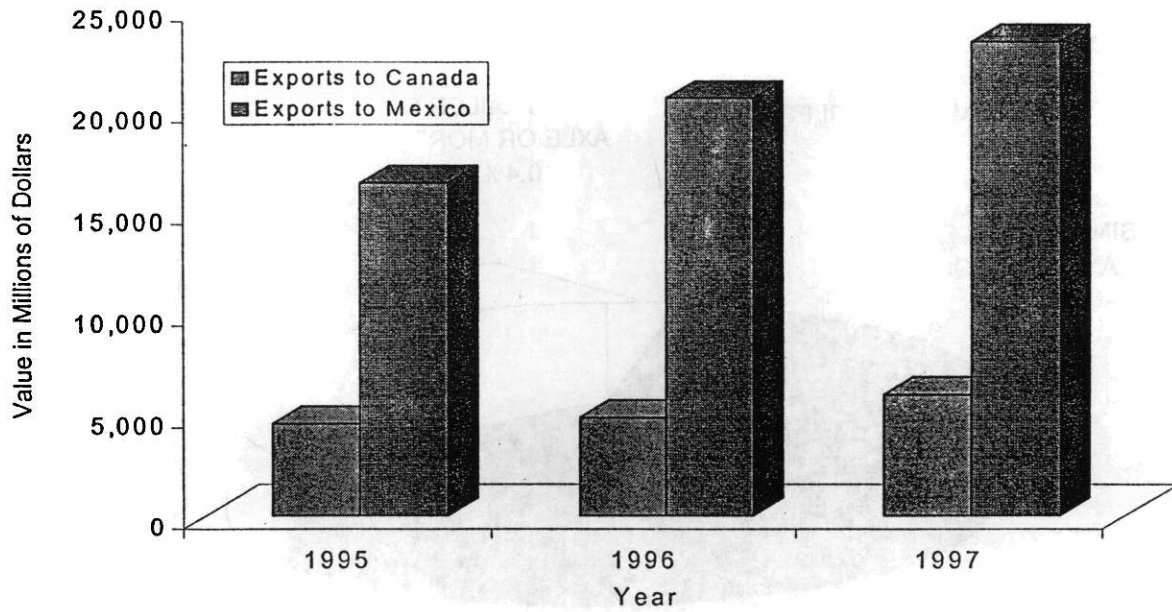


Figure 6.2 Value of Imports from Mexico and Canada to Texas (1995-1997)
Source: Bureau of Transportation Statistics, 1998, online

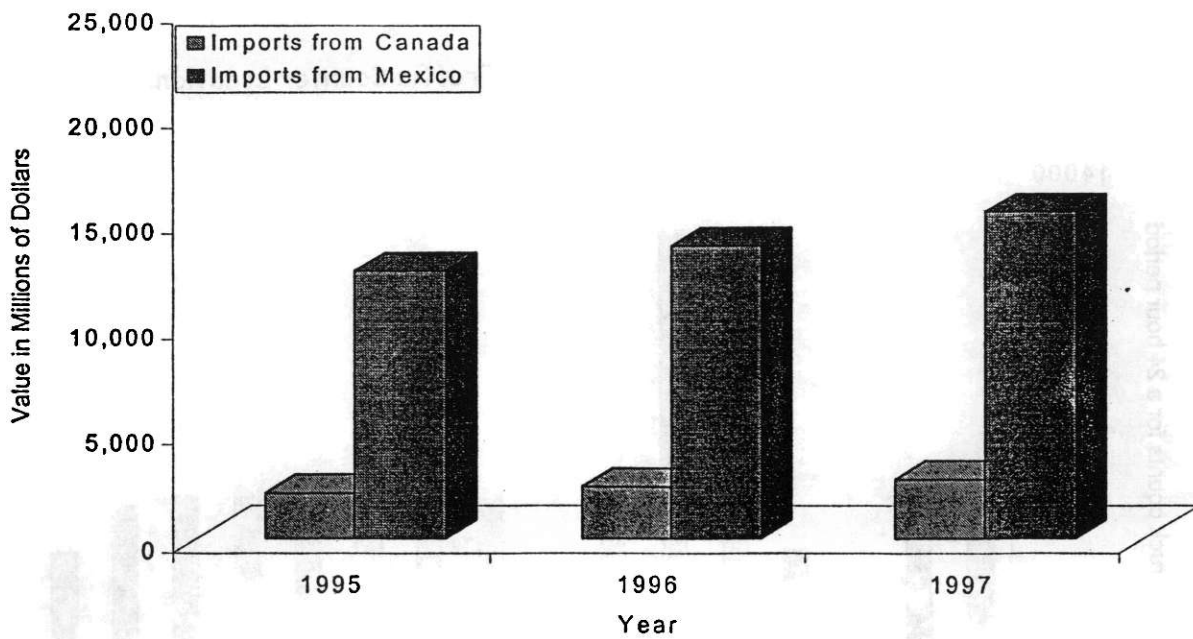


Figure 6.3 Breakdown of Truck Traffic at TxDOT Truck Traffic Counter Locations, 1996
 Source: Texas Department of Transportation, Nov. 1997

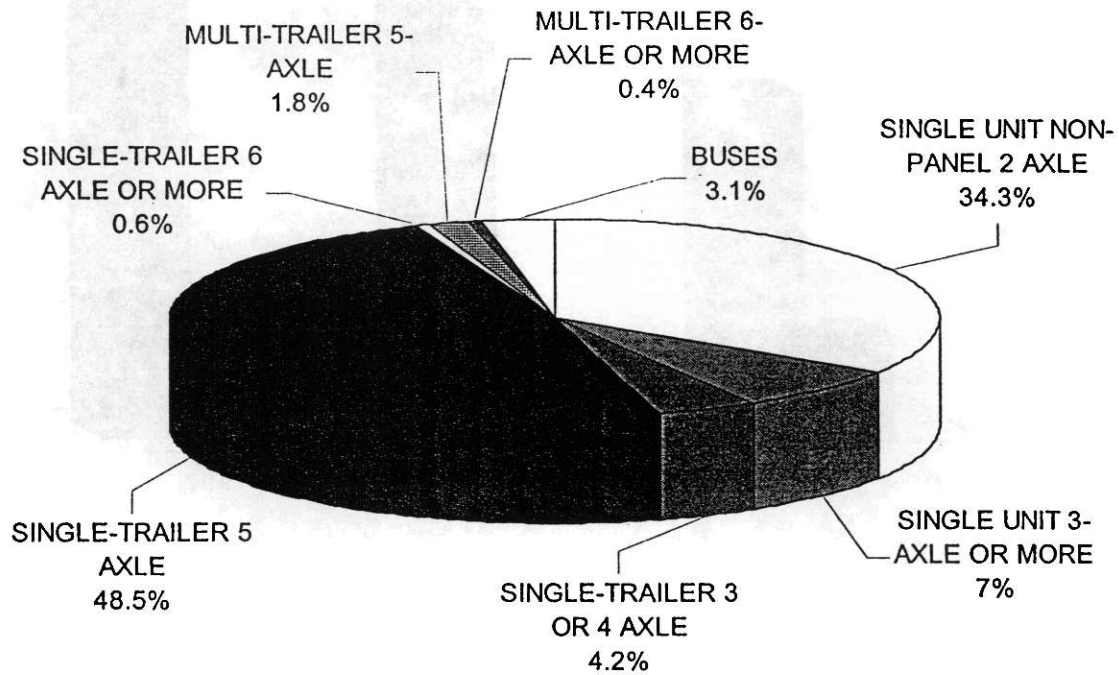
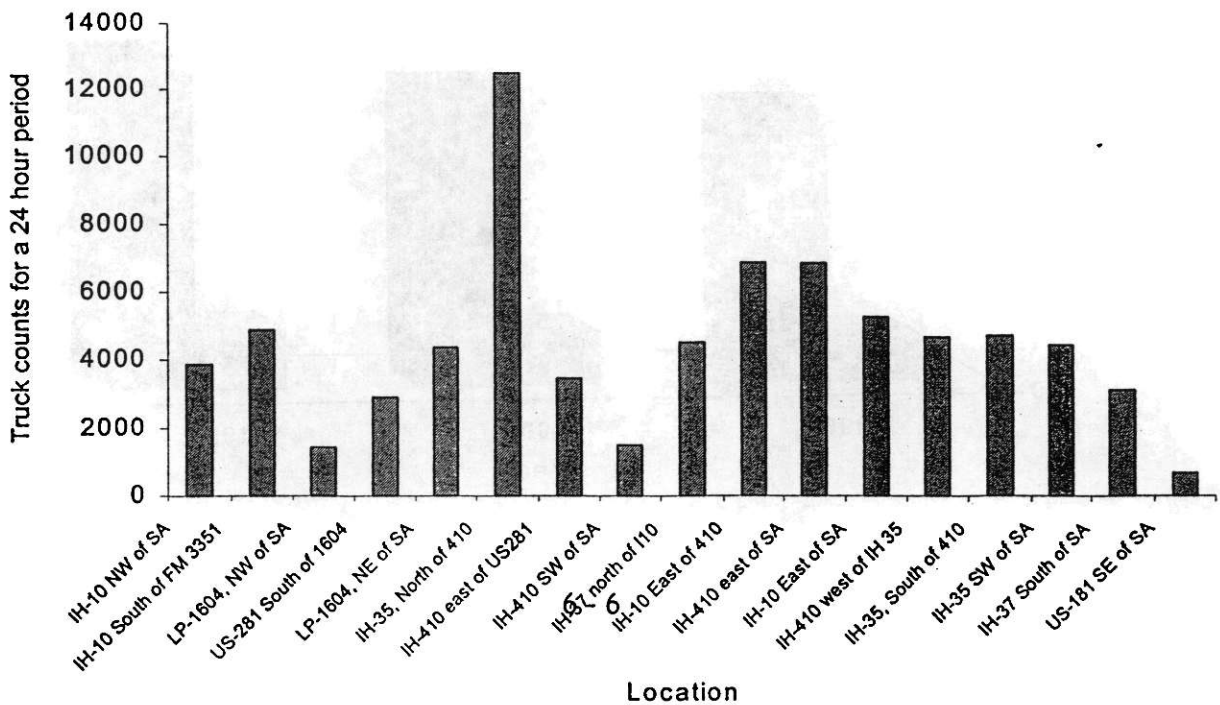
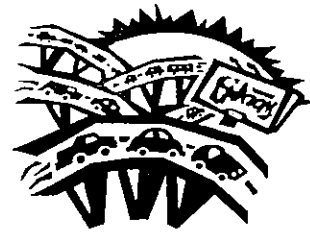


Figure 6.4 Total Truck Traffic at TxDOT Truck Traffic Counter Locations, 1996.
 Source: Texas Department of Transportation, 1997.





7. CONGESTION MANAGEMENT ELEMENT

BACKGROUND

Traffic congestion in the San Antonio metropolitan area did not occur instantaneously. Traffic congestion is the cumulative effect of many factors that have developed over a period of time. Similarly, implementation of selected strategies and control measures will also have a cumulative effect on relieving, reducing, or stabilizing levels of traffic congestion over a period of time. Travel demand, urban growth, land use, and type and size of transportation facilities are all factors that can contribute to congestion. As noted in the federal guidelines, "congestion means the level at which transportation system performance is no longer acceptable due to traffic interference."

As an area grows, additional traffic is generated. The San Antonio - Bexar County Urban Transportation Study Area is approximately the size of the State of Rhode Island, in area. In terms of population, Bexar County has grown from 830,460 in 1970 to an estimated 1,342,934 in 1998. Similarly, San Antonio has grown from 654,153 in 1970 to an estimated 1,144,800 in 1998, while the San Antonio Metropolitan Statistical Area (MSA) has grown from 864,014 in 1970 to an estimated 1,490,111 in 1996. By all indications, this trend is likely to continue.

The San Antonio Metropolitan Statistical Area (MSA) is the largest MSA in the United States that is in attainment of air quality standards. Compared to other major American Cities, San Antonio ranks among the least congested cities. San Antonio (in a tie with Indianapolis) is ranked as the seventh least congested city among fifty US cities studied (Texas A&M University's Texas Transportation Institute). As commendable as this may seem, it is not time to celebrate. There are locations in the area which experience traffic delays, and locally, are perceived as congested. There are congestion issues and problems which must be addressed.

Findings of the Air Quality Planning Project Final Report entitled *Development of Control Strategies for Reduction of Air Quality Emissions for Mobile Sources* (UPWP 5.6, August 1997, AACOG) include:

"The 1994 emissions inventory for the San Antonio - Bexar County Metropolitan Planning Organization (MPO) area identified on-road mobile vehicles as a major source of volatile organic compounds (VOCs), nitrogen oxides (NOx) and carbon monoxide (CO). This is especially important given that VOCs and NOx are precursors to urban ozone. Identifying and implementing strategies to reduce on-road vehicle emissions are an important part of San

Antonio's efforts to control urban ozone levels."

Although the San Antonio area may rank among the least congested cities compared to other major American Cities, there are locations in the area which experience traffic delays, and locally, are perceived as congested. These congested areas are major contributors to the air quality concerns and to the overall efficiency of the areawide transportation system. With non-attainment of air quality standards rapidly becoming a real possibility for this area, congestion management strategies and transportation control measures must be applied effectively toward relieving a substantial portion of these concerns.

Goals of the Congestion Management System are to:

- increase the efficiency of the existing transportation system and decrease traffic congestion through coordination of traffic operations
- develop strategies to reduce travel demand at both the regional and corridor levels and diminish the growth in single occupancy vehicle
- enhance air quality by improving the opportunities for alternative means of transportation.

DEFINITION OF CONGESTION

As noted in the federal guidelines, "congestion means the level at which transportation system performance is no

longer acceptable due to traffic interference. The level of system performance deemed acceptable by State and local officials may vary by type of transportation facility, geographic location (metropolitan area or subarea, rural area), and/or time of day." This section provides the definition of congestion that is appropriate for the San Antonio - Bexar County Urban Transportation Study Area. Existing congested areas and facilities projected to be congested by the year 2025 are identified based on the local definition.

Existing traffic congestion within the study area has been locally defined as any functionally classified roadway that has a volume over capacity ratio (v/c) of greater than 1.0.

A congested corridor is defined as an area one fourth of a mile wide on each side of an identified congested facility for the length of that facility. This one-half mile wide corridor can be considered as the area of influence along a particular congested roadway in terms of intersecting streets.

CONGESTION ISSUES

There are several major travel pattern issues and problems impacting congestion which must be monitored as essential components of the Congestion Management System: 1) Travel Demand, 2) Level of Service, 3) Travel Time, 4) Vehicle Occupancy, and 5) Land Use.

Travel Demand: Factors to consider in monitoring travel demand include: 1) Trip Purpose, 2) Origin/Destination, and 3) Modal Choice.

Level of Service: As a result of the combination of traffic volumes, roadway capacity, number of lanes, operational conditions, speed and travel time, freedom to maneuver, traffic interruptions, comfort convenience, and safety, service levels include: A) Free Flow, B) Stable Flow, with noticeable presence of other users, C) Stable Flow, significantly affected by presence of other users, D) Approaching Unstable Flow, E) Unstable Flow, near or at capacity, and F) Forced Flow.

Travel Time: The amount of time required to travel from one point to another is a measure of network efficiency and level of service. Factors to consider in data collection and travel time monitoring include: 1) Travel Rate, 2) Time of Day, and 3) Delays.

Vehicle Occupancy: Considerations in reducing single occupancy vehicle usage include: 1) Trip Planning (reduction in number of trips), 2) Modal Choice, and 3) Ridesharing.

Land Use: Travel patterns are greatly influenced by growth and development patterns, particularly the use of the land adjacent to major travel corridors. Factors to consider in monitoring land use include: 1) Growth and Development Policies, 2) Traffic Generation Potential, 3)

Traffic Circulation (Internal/External), and 4) Access Points (Ingress/Egress).

CONGESTION MANAGEMENT STRATEGIES

Major travel pattern issues and problems impacting congestion which must be monitored as essential components of the Congestion Management System include: 1) Travel Demand, 2) Level of Service, 3) Travel Time, 4) Vehicle Occupancy, and 5) Land Use. Congestion management strategies selected for systemwide or corridor applications within the Study Area are in response to these issues in attempting to relieve, reduce, or stabilize levels of traffic congestion.

Transportation Control Measures (TCM) are elements of a transportation program or project that assist in the reduction traffic congestion. The term "Transportation Control Measure" encompasses elements of both Transportation Systems Management (TSM) and Transportation Demand Management (TDM). Transportation systems management includes strategies that are designed to reduce the level of congestion. This is accomplished by encouraging a more efficient use of the existing transportation network. TSM strategies generally refer to the use of short term low capital cost transportation improvements to increase the efficiency of transportation facilities and services. Transportation Demand Management generally refers to policies, programs, and

actions that are directed towards decreasing single occupant vehicle travel.

Control measures are classified as Transportation System Management Strategies and Transportation System Investment Strategies. Transportation System Management Strategies are grouped as: 1) Operational Management, 2) Community Campaigns, and 3) Policy Management. Transportation System Investment Strategies are grouped as: 1) Corridor Improvements, 2) Public Transportation Improvements, and 3) Advanced Transportation Systems.

Table 7.1 delineates selected congestion management strategies by category. A brief description of each strategy (by category) is found in Tables 7.3 through 7.8.

Table 7.1 Congestion Management Strategies

	GROUP	STRATEGY
SYSTEM MANAGEMENT	OPERATIONAL MANAGEMENT	TRANSGUIDE
		ACCESS MANAGEMENT
		FREIGHT MANAGEMENT
		CORRIDOR MANAGEMENT
	COMMUNITY CAMPAIGNS	RIDESHARE PROGRAM
		WORK SCHEDULE COORDINATION
		TELECOMMUTING
		TRIP PLANNING
	POLICY MANAGEMENT	GROWTH MANAGEMENT
		PARKING MANAGEMENT
		VEHICLE USE LIMITATIONS
		CONGESTION PRICING
SYSTEM INVESTMENTS	CORRIDOR IMPROVEMENTS	CAPACITY IMPROVEMENTS
		PRESERVATION IMPROVEMENTS
		BICYCLE FACILITIES
		PEDESTRIAN FACILITIES
	PUBLIC TRANSPORTATION IMPROVEMENTS	TRANSIT SERVICE ENHANCEMENTS
		TRANSIT FACILITIES
		RIDERSHIP INCENTIVES
	ADVANCED TRANSPORTATION SYSTEMS	COMMUTER RAIL
		LIGHT RAIL
		BUSWAYS
		EXPRESS LANES
		HIGH OCCUPANCY VEHICLE LANES
TOLLWAYS		

Operational Management

These Transportation Systems Management strategies include: 1) TransGuide, 2) Access Management, 3) Freight Management, and 4) Corridor Management.

TransGuide: an Intelligent Transportation System (ITS) that began operations in July 1995 initially as a Freeway Traffic Management System along twenty-six miles of highways within the San Antonio - Bexar County Area. TransGuide will eventually be extended to monitor one hundred ninety-one miles of freeways. The Model Deployment Initiative includes several programs: 1) Emergency Medical Services Management System, 2) In-Vehicle Navigation Units, 3) Automatic Vehicle Identification System, 4) Real-time Areawide Travel Database (Smart Kiosks), and 5) Railroad Grade Crossing Safety System.

Access Management: the development, implementation, and enforcement of standards for controlling the number, location, spacing, and design of access points (driveways) to property from major roadways, placement of pavement marking or raised medians and median openings, traffic flow improvements, and related design and management considerations for eliminating, reducing, or stabilizing frictional factors and conflict points along major roadways. Traffic flow improvements are methods and techniques which will improve the efficiency of an existing roadway or roadway segment without

adding additional through travel lanes, including traffic signalization (signal progression, signal timing optimization), traffic operations (traffic directional operations, traffic channelization, turn movement controls), ramp metering (on freeways), changeable message signs, and enforcement. An effective access management program should contribute significantly to reducing congestion and improving safety.

Freight Management: includes monitoring established freight movement travel patterns, designating hazardous cargo routes, identifying preferred (or mandatory) truck routes, and, if necessary, establishing restricted routes (zones or corridors) concurrently with exclusive (or dedicated) freight routes. The daily peaks for truck freight movements in the San Antonio region are, as in other metropolitan areas, just after and just before peak travel times for passenger vehicles.

Corridor Management: the management of events and situations along major transportation corridors and adjacent subareas (e.g. Central Business District). Major events frequently warrant extraordinary attention to manage traffic before, after, and sometimes during the event, depending upon the event, location, time and duration, and circumstances. Effective event management necessitates advanced planning in order to anticipate the size of crowds, estimate traffic volumes, approximate pedestrian traffic, survey parking accommodations, assess the impact on adjacent neighborhoods, evaluate the

possible conflict with regular traffic, coordinate public transportation arrangements, select suitable routes, provide adequate traffic control, arrange for appropriate signage, provide necessary traffic control devices, and promote public awareness. An effectively managed event should minimize any negative impact on the existing network, particularly near the event site. Corridor management also refers to the continuous management of incidents, emergencies, detours and temporary delays, and weather related circumstances. Situational management is applied on freeways, arterials, and collector streets on a routine basis. Closing of freeway lanes to manage an accident or delay may also impact adjacent arterials to the point of gridlock if no measures have been taken to manage the increase in traffic on these streets.

Community Campaigns

The following strategies are intended to reduce the vehicle miles of travel (VMT) in very congested areas, while encouraging alternative modes of transportation for employees to get to and from work. These programs and initiatives are typically more successful with cooperation from employers and employees.

These traditional strategies were selected because the potential effectiveness as systemwide applications that could be promoted to area employers, and include: 1) Rideshare Program, 2) Work Schedule Changes, 3) Telecommuting, and 4) Trip Planning.

Rideshare Programs: includes carpool and

vanpool programs. Typically, rideshare programs are initiated by governmental agencies and target major employers or employment centers. Ridesharing can provide incentives and benefits: preferred parking, environmental preservation, less expensive trips, companionship, and less wear and tear on the automobile.

Work Schedule Coordination: includes: 1) staggered work schedules, 2) flexible work hours, and 3) compressed work weeks. Travel-related impacts include: 1) reductions in peak period congestion, 2) reductions in commute trips, and 3) modal shifts in commute trips made possible by flexible work hours; reducing areawide emissions.

Telecommuting: involves working full or part-time at home or in a satellite neighborhood work center. People with disabilities, people with child rearing responsibilities, and rural and suburban residents benefit from telecommuting. Preliminary studies indicate that persons choosing to telecommute can reduce their vehicle miles traveled by 10 to 20 percent. Teleconferencing is accomplished by audio, video, and/or computer connections among sites which reduces the need for business trips to meetings and subsequent congestion. Telecommuting and teleconferencing reduces overall vehicle trips which significantly reduces emissions and VMT.

Trip Planning: an educational program to encourage families and individuals to schedule personal trips, as well as work

trips, more efficiently. The intent of this program is to reduce the number and frequency of these trips by combining trip purposes and selection of routes to accomplish necessary stops and discretionary outings either through combined trips or selection of alternative transportation modes. The trip planning program could be administered as an extension of the rideshare program.

Policy Management

Policy Management includes: 1) Growth Management, 2) Parking Management, 3) Vehicle Use Limitations, and 4) Congestion Pricing.

Growth Management: the monitoring, evaluation, planning, and control of urban growth and land development patterns. Controlling urban sprawl is of particular importance to managing congestion, as travel patterns relate significantly to the use of land. Performance standards for growth and development can effectively assist in the deterrence of additional traffic congestion. Strict land development controls may eventually be necessary to manage growth if more conservative measures fail. The impact of land use on the transportation system can be positive if approached cooperatively; alleviating the need for more stringent, unwanted controls.

Parking Management: includes parking policies for both public and private parking facilities (parking garages, lots, meters), and should include both the public and

private sectors in determination of effective, but equitable, measures. As nonattainment is approached, more stringent control measures will be necessary. Parking management includes: 1) establishing, promoting, and maintaining a program of incentives to encourage high occupancy vehicle use and discourage single occupancy vehicle use, 2) establishing disincentives for single occupancy vehicle parking opportunities, such as high occupancy vehicles only locations or higher prices for single occupancy vehicles, and 3) establishing restrictions and penalties for single occupancy vehicle parking opportunities, such as high occupancy vehicles only zones.

Vehicle Use Limitations: refers to auto restricted zones, no-drive days, and control of truck movements. Auto Restricted Zones are normally located in downtown areas or districts, and include pedestrian malls, parking controls, parking permits, turning restrictions, exclusive bus lanes, and delivery truck restrictions. No-drive days are measures that restrict the use of vehicles on specific days, (such as ozone action days). Vehicle use limitations can be voluntary or may be implemented in part (such as exclusive lanes for buses and right-turns-only).

Congestion Pricing: establishing and collecting tolls on selected congested roadways during peak hours. Toll booths are installed, and operated only during specified hours when traffic is heavy, but allowing free access during non-peak hours. This strategy may effectively reduce

vehicle trips, but may also cause hardships on people living in communities with low economic bases. Selection of potential roadways for congestion pricing should be studied before being considered for implementation.

Corridor Improvements

Roadway improvements pertain to Transportation Improvement Program (TIP) projects and selection criteria as approved by the Metropolitan Planning Organization Transportation Steering Committee, and include: 1) Capacity Improvements, 2) Preservation Improvements, 3) Bicycle Facilities, and 4) Pedestrian Facilities.

Capacity Improvements: apply to selection of roadway projects which involve adding through travel lanes to facilities. Selection criteria are established before each TIP annual cycle begins. The emphasis of these criteria may change each cycle as necessary. Capacity improvement criteria includes a weighted congestion factor which could receive higher weighting as the need dictates.

Preservation Improvements: include operational and rehabilitation improvements. Operational improvement strategies apply to selection of roadway projects which improve the operational capacity of a facility (without adding through lanes), including adding turn lanes (right, left, or center), adding or improving intersection signalization, and making geometric improvements. A weighted congestion factor also applies to these improvements.

Rehabilitation improvements are intended to improve conditions along existing trafficways to enhance traffic flow and safety.

Bicycle Facilities: Physical improvements to bicycle lanes, provision of bicycle storage facilities (racks or enclosed bins), bike racks on buses, and promotional incentives which make bicycling safer and more convenient can encourage more people to use bicycling for short trips during mild weather. Bicycle lanes can be separate from roadways and walkways, part of existing roadways segregated by markings, or a combination of both. Since bicycles provide the same kind of demand-responsiveness as private motor vehicles, they are especially suited as a substitute for short trips.

Pedestrian Facilities: Pedestrian travel is another alternative mode of transportation, particularly for relatively short trips. Pedestrian facilities are an integral part of the transportation system, as they are necessary to safely and efficiently accommodate pedestrian mobility for necessary trips and provide access to other modes of travel.

Public Transportation Improvements

The public transportation operator for the Study Area is VIA Metropolitan Transit, which serves participating municipalities and rural areas within Bexar County. VIA is directed by a Board of Trustees representing participating governments. Public Transportation

Improvements include: 1) Transit Service Enhancements, 2) Transit Facilities, and 3) Ridership Incentives.

Transit Service Enhancements: Transit service enhancements to the existing public transportation system may include: 1) Regular Service, 2) Paratransit Service, 3) Express Service, and 4) Expanded Service Area. Regular service extension pertains to establishing new transit routes, increasing existing service, and improving passenger amenities. Paratransit enhancements may include increased coordination between ADA paratransit service and other modes, and may include a new "general-market" system to supplement fixed-route bus service when and where it is not provided. Express service enhancements may include more frequent service, service to new corridors, and service to large attractions outside of the central business district. Expanded service area enhancements encompass extending service beyond VIA's current service area. This type of service enhancement would require the participation of communities not currently involved in the public transportation system.

Transit Facilities: may include: 1) Park-and-Ride Lots, 2) Transfer Stations, 3) Major Bus Terminals, and 4) Multimodal Terminals. Additional park-and-ride facilities may increase ridership on express commuter and special event services. Additional transfer stations may improve passenger travel times and overall convenience. Major bus terminals in high activity areas may improve passenger travel

times, convenience, and decrease sidewalk and roadway congestion. Multimodal terminals may accommodate seamless transfers between current and future travel modes.

Ridership Incentives: techniques that may be applied to encourage increased transit ridership. Transit incentives include: 1) Reduced Fares, 2) Monthly Passes, 3) Passenger Amenities, 4) Increased Parking Costs, and 5) Employer Contributions (e.g. monthly pass subsidies, parking buy-outs, and restricted free parking). Increased ridership will help reduce private motor vehicle trips.

Advanced Transportation Systems

Advanced Transportation Systems refer to emerging technologies and modal alternatives, including: 1) Commuter Rail, 2) Light Rail, 3) Busways, 4) Express Lanes, 5) High Occupancy Vehicle Lanes, and 6) Tollways.

Commuter Rail: primarily provides service from outlying areas to a regional hub and between hubs. Commuter rail transit trips in the United States average twenty-two miles one-way.

Light Rail: can serve major activity centers, particularly central business districts and other areas of high trip generation or attraction. Light rail transit typically serves trips ranging in distance from one to five miles.

Busways: while service on busways may be provided by standard transit buses, busways are often viewed as a different mode because they are roadway facilities dedicated for the exclusive use of buses. This dedicated right-of-way allows for the more efficient through movement of buses, patrons, and other vehicles that would usually be constrained by bus operations in mixed-traffic.

Express Lanes: similar to high occupancy vehicle lanes, express lanes are dedicated, limited access lanes on freeways and arterials that exclusively serve through traffic. Express lanes can be separated (by barrier or buffer) or without separation (concurrent flow), or can be on separate right-of-way. Reversible lanes can be used to accommodate express traffic; changing direction during peak periods. Express lanes can be converted to high occupancy vehicle lanes when circumstances warrant.

High Occupancy Vehicle (HOV) Lanes: designed to maximize the carrying capacity of a network. This can be achieved by altering the design of the facility to provide priority treatment for HOVs. An HOV lane is typically dedicated to vehicles that have two or more passengers. Since the volume of traffic is lower, cars can travel without the delays associated with congestion. HOV facilities can be on their own separate right-of-way (ROW) or a designated lane on a freeway. These facilities are usually reserved for buses, vans, and carpools. For the HOV lane to

remain attractive, there needs to be a noticeable time savings.

Tollways: toll facilities strategically located near or adjacent to existing congested facilities may provide alternative routes to common destinations; providing relief on the existing facilities. These facilities would allow motor vehicle users a choice of continuing to utilize existing congested facilities at not additional cost or to pay designated user fees to use a facility with a higher level of service. Assuming that a reasonable percentage of travelers would elect to take the toll road, congestion relief on the original facility could be realized. Toll facilities, for the most part, would be constructed, operated, and maintained by toll collections.

IMPLEMENTATION

Charting a course of action for implementing the selected congestion management strategies necessitates setting priorities and developing a timetable for phasing. To accomplish this assignment, each strategy was examined by element to determine how each could be staged. Three phases of implementation have been established: Phase 1 - Initiation [including existing activities]; Phase 2 - Intermediate, and Phase 3 - Advanced.

The Strategy Implementation Timetable (Table 7.2) lists each strategy by category and illustrates a timeline for phasing-in each strategy. The legend at the bottom of this timetable portrays the phases and notes an asterisk (*) to denote

strategies which may require accelerated implementation at the point in time when this area is declared non-attainment of air quality standards. Strategy group tables following this timetable contain categorical strategy implementation phases. Each table notes the agency or agencies responsible for implementation, lists possible funding sources, and describes what each phase means for each strategy.

Table 7.2 Strategy Implementation Timetable

STRATEGY	THROUGH 1999	2000 - 2007	2008 - 2015	2016 - 2025
TRANSGUIDE				
ACCESS MANAGEMENT				
FREIGHT MANAGEMENT				
CORRIDOR MANAGEMENT				
RIDESHARE PROGRAM		*		
WORK SCHEDULE COORDINATION		*		*
TELECOMMUTING		*		*
TRIP PLANNING		*		*
GROWTH MANAGEMENT		*		*
PARKING MANAGEMENT		*		*
VEHICLE USE LIMITATIONS		*		*
CONGESTION PRICING		*		*
CAPACITY IMPROVEMENTS				
PRESERVATION IMPROVEMENTS				
BICYCLE FACILITIES				
PEDESTRIAN FACILITIES				
TRANSIT SERVICE ENHANCEMENTS				
TRANSIT FACILITIES				
RIDERSHIP INCENTIVES				
COMMUTER RAIL				
LIGHT RAIL				
BUSWAYS				
EXPRESS LANES				
HIGH OCCUPANCY VEHICLE LANES				
TOLLWAYS				
STRATEGY IMPLEMENTATION PHASES				
PHASE 1: INITIATION	PHASE 2: INTERMEDIATE	PHASE 3: ADVANCED		
* POTENTIAL ACCELERATED IMPLEMENTATION				

Table 7.3 Operational Management Actions

STRATEGY □ RESPONSIBILITY □ FUNDING	ACTION		
	PHASE 1	PHASE 2	PHASE 3
TRANSGUIDE □ TxDOT □ FEDERAL / STATE / LOCAL	Existing activity. Extend operations to congested freeway facilities remaining to be served.	Continue current program and add new services in accordance with established expansion plans.	Build-out TransGuide system to optimum level in accordance with established expansion plans.
ACCESS MANAGEMENT □ TxDOT / BC / CSA / SUB CITIES □ STATE / LOCAL	Existing activity. Continue signal synchronization, turn movement improvements, and other traffic flow improvements.	Establish and maintain a program for controlling design and placement of access points, medians and openings along major roadways.	Strictly enforce a program for controlling design and placement of access points, medians and openings along major roadways.
FREIGHT MANAGEMENT □ MPO / PVT / AGENCIES □ USDOT PLANNING / PRIVATE / FEDERAL / STATE / LOCAL	Existing activity. Initiated with completion of Freight Movement Study. Establish working relationship with freight movement operators and integrate freight management into planning process.	Conduct update study of freight movement to help determine established freight movement travel patterns, designate hazardous cargo routes and preferred truck routes.	Designate more restrictive hazardous cargo routes, identify preferred and mandatory truck routes, and establish (where necessary) restricted routes and dedicated freight routes.
CORRIDOR MANAGEMENT □ TxDOT / AGENCIES □ FEDERAL / STATE / LOCAL / PRIVATE	Existing activity. Maintain and Improve management of incidents, detours, weather related situations, and major events along and adjacent to major transportation corridors.	Continue to employ more effective methods and techniques toward the management of incidents, detours, weather related situations, and major events along and adjacent to corridors.	Impose more stringent standards for managing situations and events along and adjacent to corridors.

BC	Bexar County	AACOG	Alamo Area Council of Governments
CSA	City of San Antonio	TxDOT	Texas Department of Transportation
SUB	Suburban Cities	MPO	Metropolitan Planning Organization
PVT	Private Operators	VIA	VIA Metropolitan Transit

Table 7.4 Community Campaigns

STRATEGY □ RESPONSIBILITY □ FUNDING	ACTION		
	PHASE 1	PHASE 2	PHASE 3
RIDESHARE PROGRAM □ AACOG □ FHWA STP (MM)	Existing activity. Continue, extend, and maintain the areawide Rideshare Program.	To improve effectiveness, examine the feasibility of accommodating other community campaigns.	Combine the Rideshare Program, Work Schedule Changes, Telecommuting, and Trip Planning into a unified regional program.
WORK SCHEDULE CHANGES □ AACOG □ To Be Determined	Initiation. Establish, promote, and maintain a program of incentives for major employers to participate in flextime, staggered work schedules, and compressed work weeks.	Continue promotion and maintenance of incentive program. Examine the feasibility of consolidating with other community campaigns.	Combine the Rideshare Program, Work Schedule Changes, Telecommuting, and Trip Planning into a unified regional program.
TELECOMMUTING □ AACOG □ To Be Determined	Initiation. Establish, promote, and maintain a program to encourage major employers to implement telecommuting and teleconferencing.	Continue promotion and maintenance of program. Examine the feasibility of consolidating this program with other community campaigns.	Combine the Rideshare Program, Work Schedule Changes, Telecommuting, and Trip Planning into a unified regional program.
TRIP PLANNING □ AACOG □ To Be Determined	Initiation. Establish, promote, and maintain a program to encourage families and individuals to schedule personal and work trips more efficiently.	Continue promotion and maintenance of this program. Examine the feasibility of consolidating this program with other community campaigns.	Combine the Rideshare Program, Work Schedule Changes, Telecommuting, and Trip Planning into a unified regional program.

BC Bexar County
 CSA City of San Antonio
 SUB Suburban Cities
 PVT Private Operators

AACOG Alamo Area Council of Governments
 TxDOT Texas Department of Transportation
 MPO Metropolitan Planning Organization
 VIA VIA Metropolitan Transit

Table 7.5 Policy Management

STRATEGY □ RESPONSIBILITY □ FUNDING	ACTION		
	PHASE 1	PHASE 2	PHASE 3
GROWTH MANAGEMENT □ CSA & ETJ / BC / SUB CITIES □ LOCAL	Initiation. Establish and execute performance standards for growth and development of the Metropolitan Area.	Implement land development control measures, particularly pertaining to the impact of land use on the transportation system.	Establish and execute strict land development controls.
PARKING MANAGEMENT □ TxDOT/BC/CSA /VIA /SUB CITIES/PRIVATE □ STATE / LOCAL / PRIVATE	Initiation. Establish, promote, and maintain a program of incentives to encourage high occupancy vehicle use and discourage single occupancy vehicle use.	Establish disincentives for single occupancy vehicle parking opportunities, such as high occupancy vehicles only locations or higher prices for single occupancy vehicles.	Establish restrictions and penalties in selected areas for single occupancy vehicle parking opportunities, such as high occupancy vehicles only zones.
VEHICLE USE LIMITATIONS □ MPO / AGENCIES □ FEDERAL / STATE / LOCAL	Initiation. Conduct study on auto restricted zones and no-drive days. Develop vehicle use limitation incentives for voluntary or experimental implementation.	Based on completed studies, designate auto restricted zones and begin phase-in as necessary.	Establish no-drive days criteria (ozone action days, etc) and begin phase-in as necessary.
CONGESTION PRICING □ MPO / AGENCIES □ FEDERAL / STATE / LOCAL	Initiation. Conduct feasibility study on congestion pricing impact on the study area.	Based on feasibility study, establish policy and begin voluntary or experimental phase-in.	Begin full scale phase-in as necessary.

BC Bexar County
 CSA City of San Antonio
 SUB Suburban Cities
 PVT Private Operators

AACOG Alamo Area Council of Governments
 TxDOT Texas Department of Transportation
 MPO Metropolitan Planning Organization
 VIA VIA Metropolitan Transit

Table 7.6 Corridor Improvements

STRATEGY <input type="checkbox"/> RESPONSIBILITY <input type="checkbox"/> FUNDING	ACTION		
	PHASE 1	PHASE 2	PHASE 3
CAPACITY IMPROVEMENTS <input type="checkbox"/> MPO / AGENCIES <input type="checkbox"/> FEDERAL / STATE / LOCAL	Existing activity. Review Transportation Improvement Program (TIP) project selection criteria for appropriate emphasis on congested facilities.	Revise TIP project selection criteria to respond to reducing existing critically congested corridors and deterring emergence of future congested corridors.	Base TIP project selection criteria on results and recommendations of comprehensive planning studies, major investment studies, and corridor studies. Emphasis may shift from constructing projects which increase capacity to alternative modes, operational improvements, express lanes, high occupancy vehicle lanes, pedestrian and bicycle facilities, and other investments which may more effectively manage traffic congestion and improve air quality.
PRESERVATION IMPROVEMENTS <input type="checkbox"/> MPO / AGENCIES <input type="checkbox"/> FEDERAL / STATE / LOCAL	Existing activity. Review Transportation Improvement Program (TIP) project selection criteria for appropriate emphasis on congested facilities.	Revise TIP project selection criteria to direct priorities to operational and rehabilitation projects which will significantly prevent or delay the advent of congested areas.	
BICYCLE FACILITIES <input type="checkbox"/> MPO / AGENCIES <input type="checkbox"/> FEDERAL / STATE / LOCAL	Existing activity. Review Transportation Improvement Program (TIP) project selection criteria for appropriate emphasis on congested facilities.	Revise TIP project selection criteria with emphasis on bicycle projects which may reduce motor vehicle traffic along congested corridors.	
PEDESTRIAN FACILITIES <input type="checkbox"/> MPO / AGENCIES <input type="checkbox"/> FEDERAL / STATE / LOCAL	Existing activity. Review Transportation Improvement Program (TIP) project selection criteria for appropriate emphasis on congested facilities.	Revise TIP project selection criteria with emphasis on pedestrian facility projects that will provide non-vehicular alternatives along congested corridors.	

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SUB Suburban Cities
PVT Private Operators

AACOG Alamo Area Council of Governments
TxDOT Texas Department of Transportation
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VIA VIA Metropolitan Transit

Table 7.7 Public Transportation Improvements

STRATEGY □ RESPONSIBILITY □ FUNDING	ACTION		
	PHASE 1	PHASE 2	PHASE 3
TRANSIT SERVICE ENHANCEMENTS □ VIA □ FEDERAL / STATE /LOCAL	Existing activity. Continue extension of regular, para-transit, and express transit services.	Examine feasibility of extending service area to other Metropolitan Area counties, and encourage participation by all entities within proposed expanded area.	Take the necessary steps to extend the service area to include all entities willing to enter formal agreement with public transportation operating agency. This may also encompass rural public transportation.
TRANSIT FACILITIES □ VIA □ FEDERAL / STATE /LOCAL	Existing activity. Examine feasibility of a centrally located multimodal terminal facility to accommodate existing public transportation service, expanded services (commuter rail, light rail, busways), and other connections (intercity buses, rural transportation).	Take necessary steps in selecting and purchasing site, construction, and operation of a centrally located multimodal terminal, if deemed feasible. Continue expansion of park-and-ride and transfer facilities.	Continue growth and development of transit facilities to accommodate expanded public transportation services.
RIDERSHIP INCENTIVES □ VIA □ FEDERAL / STATE /LOCAL	Existing activity. Continue promotion of ridership incentives (reduced fares, monthly passes) to help reduce single occupancy vehicle trips.	Explore and apply innovative public transportation ridership incentives to continue reduction of single occupancy vehicle trips.	Continue examining and applying advanced ridership incentives.

BC	Bexar County	AACOG	Alamo Area Council of Governments
CSA	City of San Antonio	TxDOT	Texas Department of Transportation
SUB	Suburban Cities	MPO	Metropolitan Planning Organization
PVT	Private Operators	VIA	VIA Metropolitan Transit

Table 7.8 Advanced Transportation Systems

STRATEGY □ RESPONSIBILITY □ FUNDING	ACTION		
	PHASE 1	PHASE 2	PHASE 3
COMMUTER RAIL □ MPO / AGENCIES □ FEDERAL / STATE / LOCAL	Existing activity. The Austin - San Antonio Commuter Rail Study completed. Authority established to create Regional Rail District.	Create Regional Rail District. Establish initial commuter rail service between San Antonio and Austin, extended to Georgetown.	Continue to expand commuter rail service with more frequent service and possible connections to other major Texas cities.
LIGHT RAIL □ VIA □ FEDERAL / STATE / LOCAL	Initiation. Based on comprehensive studies, select initial system linkages for intensive study.	Conduct intensive study to determine feasibility, system linkages and construction phases.	Based on results of feasibility study secure funding and begin construction of system by priority.
BUSWAYS □ VIA □ FEDERAL / STATE / LOCAL	Initiation. Based on comprehensive studies, select initial system linkages as candidate projects.	Secure funding and begin constructing initial candidate projects.	Based on level of success, continue construction of all designated busways.
EXPRESS LANES □ TxDOT □ FEDERAL / STATE / LOCAL	Initiation. Based on comprehensive studies, select initial candidate projects.	Secure funding and begin constructing initial candidate projects.	Based on level of success, continue construction of all designated express lane facilities.
HIGH OCCUPANCY VEHICLE LANES □ TxDOT □ FEDERAL / STATE / LOCAL	Initiation. Based on comprehensive studies, select initial candidate projects.	Secure funding and begin constructing initial candidate projects.	Based on level of success, continue construction of all designated high occupancy vehicle lane facilities.
TOLLWAYS □ TxDOT / TTA □ FEDERAL / STATE / LOCAL	Initiation. Based on comprehensive studies, select candidate routes for intensive study.	Conduct intensive study to determine feasibility, route designations, and construction phases.	Based on results of feasibility study, secure funding and begin construction of tollways by priority.

- | | | | |
|-----|---------------------|-------|------------------------------------|
| BC | Bexar County | AACOG | Alamo Area Council of Governments |
| CSA | City of San Antonio | TxDOT | Texas Department of Transportation |
| SUB | Suburban Cities | MPO | Metropolitan Planning Organization |
| PVT | Private Operators | VIA | VIA Metropolitan Transit |

MONITORING AND MITIGATION PROGRAMS

Two Congestion Management programs have been identified to maintain and extend the monitoring program and assessment process for implementation and continuation of the system for managing traffic congestion: 1) Congestion Monitoring Program, and 2) Congestion Mitigation Program. These Congestion Management Programs have been established and are being developed to provide methods to monitor and evaluate the performance of the multi-modal transportation system, identify and evaluate alternative actions, provide information supporting the implementation of actions, and evaluate the efficiency and effectiveness of implemented actions.

Congestion Monitoring Program

Congestion Management System (CMS) guidelines require "establishment of a program for data collection and system performance monitoring to define the extent and duration of congestion, to help determine the causes of congestion, and to evaluate the efficiency and effectiveness of implemented actions. To the extent possible existing data sources should be used, as well as appropriate application of the real-time system performance monitoring capabilities available through Intelligent Transportation Systems (ITS) technologies."

The identified congested facilities existing and projected are monitored for

evaluating system performance and determining data collection requirements. The database for this system currently contains fifty-four data fields for each record, and can be expanded to additional fields as the need arises. The initial records established for this database represent existing and projected facilities as defined in the 1994 Metropolitan Transportation Plan.

The emphasis of this program is the existing congested facilities, with secondary monitoring of the projected congested facilities. As the data is updated and there is an indication that congestion is continuing to increase in a particular corridor, research is initiated to find out why. The database identifies the strategies applied to the corridor, and the strategies are examined to determine if one or more is ineffective or if the increase in congestion is due to a changing situation or unique circumstance. If it is failure of strategy, then the situation is investigated to ascertain whether the strategy (or strategies) are inappropriate for that corridor or if they are not being properly implemented (Congestion Mitigation Program).

The Congestion Monitoring Program is continually maintained for currency of data and extension of function to meet the changing monitoring needs for the area. Existing (1990 Base Year) and projected (2025 forecast Year) congested corridors are included in the Congestion Monitoring Program. The database records are continually being expanded to monitor each

roadway segment and intersection and updated for currency of data and extension of function to meet the changing monitoring needs for the Study Area.

(strategy changes, implementation modifications, technical studies, additional data collection, etc.)

Congestion Mitigation Program

CMS guidelines also require "Implementation of a process for periodic assessment of the efficiency and effectiveness of implemented strategies, in terms of the area's established performance measures. The results of this evaluation shall be provided to decision-makers to provide guidance on selection of effective strategies for future implementation."

The Congestion Mitigation Program is comprehensive. It contains an inventory of congestion management strategies and identifies implementation phases. The Congestion Mitigation Program is a continuing process of assessing the effectiveness of the selected congestion management strategies. The assessment process includes: 1) establishing the initial program inventory, 2) establishing strategy performance effectiveness measures to be used in the assessment process, 3) interviewing key personnel representing agencies responsible for implementation of strategies, 4) identifying the status of each selected strategy, 5) outlining proposed work and anticipated results for the next fiscal year, 6) identifying issues and problems associated with each strategy, and 7) preparing progress reports to include overall assessment of the program and recommended actions

8. ENVIRONMENTAL ELEMENT

BACKGROUND

Environmental issues in transportation planning continue to be a priority. The passage of the National Environmental Policy Act (NEPA) in the 1970s brought to the forefront the significance of environmental issues. NEPA mandated an environmental assessment for every federally funded project with the potential to impact the environment. If the impact will be significant then an Environmental Impact Statement (EIS) must be prepared. The EIS requires documentation of adverse and positive environmental impacts, and an evaluation of alternatives. This section will discuss the major local environmental issues: air quality and water.

AIR QUALITY

Background

The Clean Air Act of 1999 set the standard for air quality for the nation's cities. The U.S. Environmental Protection Agency (EPA) is charged with enforcing the National Ambient Air Quality Standards (NAAQS) established in the Clean Air Act. The Act's primary goal is to protect the public health from adverse air borne pollutants. The nation's metropolitan areas are categorized as being in attainment or non-attainment with the NAAQS.

Air pollutants monitored on a daily basis, as required by the Act, include Ozone, Carbon Monoxide, and Particulate Matter. The chemical reactions of Volatile Organic Compounds (VOCs) and Nitrogen Oxides (NOx) contribute to the formation of ozone in the presence of sunlight. Carbon Monoxide (CO) is a colorless, odorless, poisonous gas, produced by incomplete burning or combustion of carbon-based fuels, including gasoline, oil, and wood. Particulate Matter includes dust, soot, and other tiny bits of solid materials that are released into and move around the air. Particulates are produced by many sources, including combustion of diesel fuels, garbage incineration, road construction, and various industrial processes. A community may be in attainment for one of these pollutants and non-attainment for another.

Local Conditions

The State of Texas, through the Texas Natural Resource Conservation Commission (TNRCC) is responsible for monitoring and insuring that metropolitan areas are in compliance with the Clean Air Act of 1990. The San Antonio-Bexar County metropolitan area is presently considered by the TNRCC as being in "near-attainment" with the NAAQS.

The San Antonio-Bexar County study area currently has four air

monitoring sites. Three of these, San Antonio Northwest (C23), Camp Bullis (C58) and Calaveras (C59) measure ozone, while the last site, San Antonio Downtown (C27) does not. Three of the sites (C23, C58, and C27) are maintained by the TNRCC, and the University of Texas in Austin maintains the last site (C59).

As of this writing, the ozone regulation for the San Antonio region is currently based on an 8-hour average of 85 parts per billion. To meet the eight-hour standard, the community's "three-year average of the annual fourth-highest daily maximum eight-hour concentration measured at each monitoring site" must be less than 85 parts per billion.

According to the 1995 emissions inventory, On-Road emissions accounted for 98 tons/day of VOC, 743 tons/day of CO, and 92 tons/day of NOx. Table 8.1 shows the emissions from On-Road Vehicle Sources by pollutant and by day of the week. Figure 8.1 displays the VOC data by time of day and by day of the week.

Local Trends

Improvements in technology have had considerable effects in reducing air pollution levels (emissions from new vehicles have declined over time as emission controls and fuel efficiency have improved), further improvements in fossil-fuel burning vehicle emissions will have less significant impacts. Data from the EPA

shows that the reduction of hydrocarbons per vehicle mile decreased dramatically from approximately 17 grams in 1960 to 2.7 grams in 1995, but will decline by about only 2 grams per vehicle mile by 2005.

At the same time, due to population growth and development in the area, motor vehicle travel in the San Antonio metropolitan area is expected to increase. In 1980, there were approximately 16 million daily vehicle miles of travel (VMT). By 1997, estimated daily VMT has increased to approximately 32.4 million and is expected to continue to increase in the future. Population is expected to increase 2.4% per year; Employment is expected to increase 3.2% per year and VMT is projected to increase 3.3% per year.

Mitigation Efforts

During the Ozone Season, from April to October, in Bexar County, TNRCC calls an Ozone Action Day when meteorologists predict that, on the following day, weather conditions will be suited for the production of high ozone levels. Ozone Action Days are broadcast across the region by the National Weather Service weather wire. Notice is also given to local officials, news media, business, and industry in the participating areas.

Some activities that have been implemented locally to reduce the production of ozone include:

- use of lower Reid Vapor Pressure gasoline
- conversion of fleets to alternative fuels
- delayed school start times
- encourage modal shifts (carpool and public transportation)
- restriction of construction and maintenance activities
- gas cap replacement program

Should the San Antonio metropolitan area be declared non-attainment, some activities that may be implemented include:

- inspection and maintenance programs
- vehicle buy-back programs
- providing cleaner fuels

EPA's air quality conformity regulations ensure that metropolitan transportation systems, transportation projects, and federal projects do not cause new air quality violations, exacerbate existing ones, or delay attainment of the standards. In non-attainment areas, these regulations force a determination and offsetting of emission impacts before implementation of transportation plans and projects.

WATER

Background

Portions of the study area are environmentally sensitive with regards to water quality. Large portions of northern Bexar County serve as the recharge zone for the metropolitan area's sole source of water - the Edwards Aquifer. Construction of impervious cover over the recharge zone will impact the natural flow and absorption of water, and could increase the possibilities of pollutants from the runoff entering a waterway.

The Edwards Aquifer is a natural system composed of three major areas. The largest of these three is the Drainage Area which makes up approximately 60% of the total Aquifer System. Rain falling in this zone flows south and east by way of rivers and creeks onto the Recharge Zone. In this area the water percolates down through the cracks and joints in the stream beds and sinkholes into the porous limestone below. Moving underground, the water flows south and east, where it becomes contained at depth under pressure in the artesian area or within the well zone limits. Here the water forces its way to the surface through springs or is easily withdrawn by wells. Outside the well zone limit line, groundwater is usually of poorer quality or insufficient quantities to sustain urban development. The study area primarily uses water that enters the Recharge Zone in the west, from Uvalde and Medina Counties.

Local Trends

During the 1970s and 1980s residential development in the San Antonio-Bexar County metropolitan area occurred predominantly in the northern part of the region. Because of the concern of continued development over the Recharge Zone, construction in the 1990s has occurred in the western and northeastern areas of the County, slightly curbing the expansion to the north.

The strong, continued growth of the metropolitan area has brought with it other concerns. The most significant concern is whether or not the area's sole source of water will be sufficient to sustain the continued level of growth that the area is expected to have in the future. In anticipation of continued growth, the San Antonio Water System has begun negotiations to purchase water from other sources.

As the metropolitan area continues to grow, the needed transportation projects will impact surface water flow and infiltration, especially during storm or flood conditions. Because transportation facilities generally cause an increase in the impermeable surface area, roadways can result in increasing local surface runoff and reducing water infiltration into the soil. Roadway construction projects can also cause the altering of drainage patterns at stream crossings, by changing the speed, direction and amount of storm water flow.

Mitigation Efforts

There are several mitigation strategies that could be used to reduce storm water runoff and degradation of the Edwards Aquifer by minimizing the impact of transportation improvements. Most of these can be directly incorporated into the design of the transportation facility. Engineering on new projects, and redesign and retrofit of existing facilities could include:

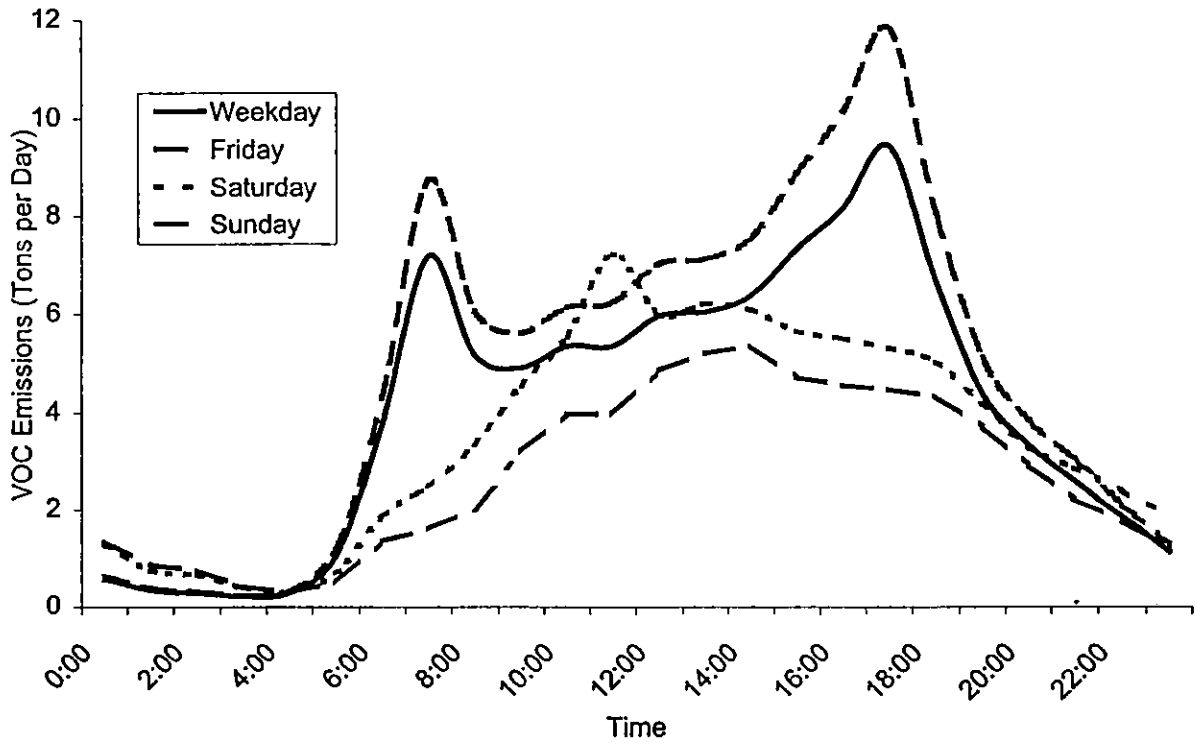
- erosion control measures and runoff management techniques should be used to prevent pollution of adjacent waterways and the Edwards Aquifer
- adjustments to the alignments of transportation facilities should be used to avoid flood hazards
- greater use of permeable surfaces should be employed to reduce impacts on ground water recharge
- cost/pricing strategies to reduce demand for paved parking or increasing fines for intentional discharge

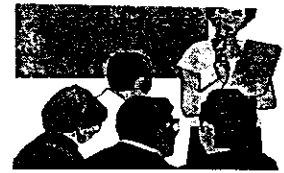
Other mitigation strategies could include compliance with federal, state and local policies, standards and land use strategies that address water resources.

Table 8.1 Emissions from On-Road Vehicle Sources (in tons per day)

	Weekday			Friday	Saturday	Sunday
	1994	1995	Percent Change	1995	1995	1995
Total VOC	82.40	97.88	18.79%	118.91	81.99	65.67
CO	719.30	743.20	3.32%	908.52	618.36	493.20
NOx	91.90	92.48	0.63%	112.38	79.00	63.70

Figure 8.1 Average On-Road VOC Emissions for July 1995





9. PUBLIC INVOLVEMENT PROCESS

BACKGROUND

The mission of the San Antonio - Bexar County Metropolitan Planning Organization (MPO) is to provide a continuous, comprehensive and coordinated ("3-C") regional transportation planning process for the safe and efficient movement of people and goods consistent with the community's overall economic, social and environmental goals.

A proactive approach to an effective public involvement process requires several elements:

- Early, continuous, and meaningful public involvement;
- reasonable public access to technical planning information;
- collaborative input on transportation alternatives, evaluation criteria and mitigation needs;
- transportation planning meetings that are open to the public; and
- access to the planning and decision-making process prior to closure.

REGIONAL TRANSPORTATION ATTITUDE SURVEY

A successful Metropolitan Transportation Plan (MTP) is critical to achieving the vision for the transportation future of our region. Accordingly, the MPO proactively solicited the involvement of a broad cross-section of citizens, affected public agencies, private transportation

providers, traditionally underserved groups and all other interested parties in the process of creating this transportation plan.

Building a good plan requires a statistically valid benchmark or starting point regarding attitudes and perceptions concerning the region's current transportation system. An attitude survey, the Regional Transportation Attitude Survey, was conducted to capture statistically valid information about public opinions, attitudes, beliefs, and values regarding existing transportation modes and issues, potential changes in travel behavior and lifestyles, and desires regarding future alternative forms of transportation.

During May and June 1997, 1200 households were selected for the 15 minute survey in English or Spanish through random digit dialing across the metropolitan area. The Oversight Committee responsible for approval of the survey design and methodology consisted of representatives from all transportation agencies, a statistician, an environmentalist, and neighborhood associations. The confidence level achieved for the survey was 90% + or - 5%.

In summary, the survey revealed several things. First, that 80% of commuters are satisfied with driving alone

in their automobiles and that they want to continue the transportation status quo. However, the survey also showed that many citizens have quality of life and environmental concerns and are not strongly opposed to considering alternative forms of transportation.

PUBLIC INVOLVEMENT - PHASE 1

Technical Working Group

A broad array of local professional engineers, planners, architects, environmentalists, land developers, and freight operators were invited to join MPO member agency staff personnel thus creating the Technical Working Group (TWG), numbering about 75 people.

At a daylong worksession on September 29, 1998, the TWG was divided into four groups: 1) Roadway, 2) HOV, 3) Light Rail, and 4) Urban Design. The TWG used the MPO's previously developed demographic forecast data and travel demand output, as well as the city of San Antonio's Master Plan policies, Community Revitalization Action Group report, VIA Metropolitan Transit's 2025 Visioning report, the results of the Regional Attitude Survey and information on other transportation modes currently not available in the San Antonio metropolitan area (High Occupancy Vehicle [HOV] lanes, busways, light rail, and commuter rail).

Each of the groups developed a transportation network based on the travel

mode of the group they were in. The Urban Design group was to use whatever modes they felt were able to provide the best mobility opportunities for the study area. These networks were tested using the multimodal travel demand model developed for the San Antonio study area. The model results were used in the second phase of the public involvement.

Citizen Working Group

For this portion of the public involvement, the metropolitan study area was divided into five geographical sectors: Southeast, Southwest, Northwest, Northcentral, and Northeast. Local elected officials (federal, state, county, city, and suburban cities) were individually briefed on the MPO's public involvement plan and its purpose. These elected officials were asked to designate constituent representatives to work with the MPO for an extended period. With the assistance of a local consultant for this project, approximately 75 citizens were recruited for the Citizens Working Group (CWG).

The first CWG worksession was held on November 4, 1998. These members were briefed on the same technical information used by the TWG: demographic forecasts and travel demand output, the city of San Antonio's Master Plan policies, Community Revitalization Action Group report, VIA's 2025 Visioning report, the results of the Regional Attitude Survey and information on other potential

transportation modes. The five groups were asked to comment on the Roadway, HOV and Light Rail networks developed by the TWG. The CWG members were asked if the networks suited their home to work travel needs, what they specifically liked about each of the networks, what they did not like about the networks, and specific recommendations about how the networks could be improved to better suit personal and community needs. These results were summarized and presented to the MPO Transportation Steering Committee and were also provided to the TWG for the second phase of public involvement.

PUBLIC INVOLVEMENT - PHASE 2

Technical Working Group

The second TWG worksession was held on November 20, 1998. At this worksession, the comments from the CWG meeting and the travel demand modeling input for the three networks (Roadway, HOV, and Light Rail) were used. Each of the four groups, regardless of the earlier modal designation, used criteria involving ridership, mobility, system connectivity, environment and quality of life, and infrastructure management and system preservation, evaluated, on a corridor basis each of the recommended improvements: roadway, light rail, or busway/HOV lanes. From the various network improvements recommended, each group developed a multi-modal network that would best meet the traveling needs of the community, again, taking into account the previously

developed plans and available information. In a large consensus building session, one transportation network was developed that contained added roadway capacity, over 100 miles of light rail, approximately 30 miles of HOV/Busway lanes, one toll road, and the San Antonio-Austin commuter rail line. This "consensus" network was tested, again using the multimodal model and the results used at the next CWG meeting.

Citizen Working Group

The second CWG worksession was held on February 13, 1999. The CWG was asked to comment on the "consensus" network developed at the previous TWG worksession, both in a community sense and by the geographic sector that they represented. The CWG also provided input on transportation management strategies and land use and growth management strategies such as ridesharing, work schedule changes, telecommuting, traffic flow improvements, access management, parking management, congestion pricing, and freight movement, and on possible methods of additional financing such as increase in the gas tax and/or an increase in the sales tax. The input received at this worksession was summarized and presented to the MPO Transportation Steering Committee.

Student Advisory Group

A third group (Student Advisory Group) of approximately 60 students and faculty members representing 15 area high

schools met on April 20, 1999 for a daylong worksession and provided a "future taxpayer" perspective on the draft MTP created by the technical and citizen workgroups. Each student and faculty member was given \$5 billion in play money. This is the amount of traditional funding that is expected will be available to this area over the next 25 years. The students were asked to "buy" projects - added capacity roadway, HOV/busways, light rail projects, and also to provide a high, medium or low level of funding (lump sums) for other transportation modes such as bicycle and pedestrian projects, roadway maintenance, bus service, and the rideshare program, using this available funding. The students were then given an option to "tax" themselves to fund additional needed projects and, if chose to do so, were given an additional \$2 billion. This is the approximate amount generated by an additional $\frac{1}{2}\%$ sales tax increase in sales tax.

The students were primarily interested in transit, especially light rail, the San Antonio-Austin Commuter Rail project, upgrading freeway interchanges, and adding additional lanes on I-35 north and Loop 410.

SUMMIT WORKSHOP

All three working groups (TWG, CWG and the Student Advisory Group) were invited to a "Summit Workshop" held on May 22, 1999. The purpose of the Summit was to develop a preliminary

financially constrained list of projects. Again, breaking into five groups, each group was given \$5 billion in play money. Each group had to reach consensus on projects and lump sum amounts (bus service, rideshare, bicycle and pedestrian projects) prior to that project being considered "funded". Similar to the Student Advisory Group, the Summit groups were given the opportunity "tax" themselves to fund additional needed projects and, if chose to do so, were given an additional \$2 billion. There was a significant amount of consensus between the five groups in funding both roadway and transit projects. The results of the Summit Workshop were used to develop a draft financially constrained list of projects.

INFORMATIONAL BRIEFINGS

During August and September 1999, MPO staff made informational presentations to small groups of citizens and local policy making bodies. The presentation outlined the process used to date to develop the Metropolitan Transportation Plan, describing both the technical work and the extensive public involvement process.

These informational briefings were made to the policy boards of the Alamo Area Council of Governments and VIA Metropolitan Transit; the Greater Bexar County Council of Cities; the Greater San Antonio, North San Antonio, and South San Antonio Chambers of Commerce Boards and Committees; the City of San Antonio

Planning Commission, and Neighborhood Associations. Sixteen informational briefings were made. In addition to information being presented about the Plan update process, the participants were encouraged to attend one of the five public meetings scheduled for mid-September.

PUBLIC MEETINGS

Five public meetings were held during mid-September in five sectors of the Study Area. These meetings began with a general presentation, which outlined the process used to date to develop the Metropolitan Transportation Plan, describing both the technical work and the extensive public involvement process. After the general presentation, the citizens were divided into small groups, facilitated by knowledgeable agency staff.

In the small groups, the facilitators asked the participants to respond to questions regarding the projects currently identified in the Plan. The questions were as follows:

- Roadway Projects
 - Do you like or not like the roadway projects that have been included in the Plan?
 - Are there additional corridors that you feel should be highlighted in the Plan either for additional capacity (lanes) or for reconstruction?

- Bus Transit
 - This is the bus service that VIA has planned out to the year 2025 using the current $\frac{1}{2}\%$ sales tax. Is this a good distribution of increased service levels?
 - Are there areas where service should be reallocated to better serve other areas?
- Light Rail Transit
 - Should light rail transit be included in the Plan?
 - Is the sales tax increase the most likely funding source or do you recommend another source of funds?
 - There are three scenarios that we have developed assuming a $\frac{1}{4}\%$ sales tax, a 50% federal match, and a portion allocated for system operation and maintenance facility. These are the lines that have the best ridership potential and that the public involvement that we have done so far has supported. Do you prefer any of these three scenarios?
 - Is there another scenario you think would be better?
- San Antonio-Austin Commuter Rail
 - We are showing the Bexar County portion of the San Antonio-Austin Commuter Rail project. It has proposed stops at Kelly, Downtown, the Airport and near Loop 1604. The Bexar County section is 23 miles long and costs about \$72

million, which included construction, stations, and vehicles. Including the Commuter Rail project in the Plan will likely require the identification of an additional funding source. Do you think the Commuter Rail project should be included in the Plan?

- What additional funding source do you recommend?
- High Occupancy Vehicle Lanes/Busways
 - HOV Lanes and busways can provide higher capacity transit service with a little more flexibility than light rail. We tested HOV Lanes and busways and while they did not perform very well they may still be an important component of this Plan. At this time we have not identified a funding source for these transportation options. Do you think HOV Lanes and/or busways should be included in the Plan in the corridor in which they have been identified?
 - What additional funding source do you recommend?
- Toll Roads
 - Toll roads are a way to get projects funded faster. We tested a toll road in the SH 151 corridor and the Bandera Road corridor between Loop 410 and Loop 1604. The toll road on Bandera Road worked pretty well as far as usage. Do you think toll roads should be included in the Plan?
 - Do you think the Bandera Road

corridor is a good candidate toll road project?

- Bicycle/Pedestrian/Rideshare
 - Over a 20-year period, from 2004-2025, we have targeted \$22 million for (stand-alone) bicycle projects, \$22 million for (stand-alone) pedestrian projects, and \$4 million for the Rideshare Program. What do you think about the need for sidewalk, bicycle, and rideshare programs?
 - Have we programmed sufficient dollars for these programs?

The small groups reconvened to the larger group and reported out their group's results. The results were summarized and presented to the Transportation Steering Committee and were be used to complete the Metropolitan Transportation Plan.

SUMMARY

While working with the technical, citizen and student groups, the general public was kept apprised of the MTP Update process through quarterly MTP Update newsletters. The MPO also had a ten minute video developed called "The Metropolitan Transportation Plan - It's Your Future" which has been aired in various venues throughout the development of the Plan. Members of the news media have been invited to each of the MTP Update worksessions resulting in several articles in the daily and weekly newspapers. Additionally, articles describing the MTP

Update process were published in the MPO's quarterly newsletter and distributed to the MPO's master mailing list of more than 900 individuals and organizations. A second video is in the process of being developed which will describe both the process and the results of the Metropolitan Transportation Plan.

In summary, the public has been involved in the planning process early, continuously, and in a meaningful way; were provided reasonable technical information; collaboratively determined alternatives and solutions. This process made them true partners in creating the metropolitan area's new long-range transportation plan.

10. TRANSPORTATION MODAL ANALYSIS

BACKGROUND

A significant level of transportation mode analysis was considered in the development of the Metropolitan Transportation Plan. This section documents the modal analysis as a component of project development. The purpose for this methodology was to use a systemwide analysis approach and evaluate how the different modes interact to optimize mobility, as well as evaluating modal options on a corridor by corridor basis.

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) required studies of major metropolitan transportation planning investments, both highways and transit, as part of the metropolitan transportation planning process. It was designed to integrate the analysis of alternatives into the metropolitan planning process to allow for the appropriate consideration of how funds would be best spent to promote multi-modal planning. These studies were termed "Major Investment Studies (MIS)".

The new transportation bill, the Transportation Equity Act for the 21st Century (TEA-21), directed the Department of Transportation to eliminate the MIS as a separate requirement in the planning process, and to promulgate regulations to integrate such requirements, as appropriate, as part of the planning

analysis pursuant to the FHWA/FTA planning provisions and National Environmental Policy Act (NEPA).

The San Antonio-Bexar County Metropolitan Planning Organization (MPO) developed a very specific technical methodology to consider alternate viable modes in major travel corridors. The MPO also conducted a very extensive public involvement approach that exceeds the public involvement requirement for an MIS. The Department of Transportation acknowledged that one of the very positive aspects of the MIS process was the proactive public involvement that was initiated and carried out in each of the major investment studies. The public involvement efforts were a significant reason that a consensus was reached and a decision made on the mode and design scope in corridors. Even with the elimination of the separate MIS process, an active public involvement process is required in the planning and NEPA process. Because of the project successes, the Department of Transportation has urged transportation agencies to continue the highly visible proactive public involvement in the planning and environmental process.

TECHNICAL ANALYSIS

As described in Section 9 Public Involvement, a significant amount of public involvement occurred throughout the

development of the Plan. The public involvement, coupled with technical analysis, considered various transportation modes in travel corridors.

The technical analysis process used was similar to that which would likely be used for a MIS: existing conditions were documented, and transportation problems were defined both at a system and at a corridor level. Additionally, conceptual alternatives were identified and assessed based on travel demand forecasts and other data.

A broad array of local professional engineers, planners, architects, environmentalists, land developers, and freight operators were invited to join MPO member agency staff thus creating the Technical Working Group (TWG), numbering about 75 people.

At a daylong worksession on September 29, 1998, the TWG was divided into four groups: 1) Roadway, 2) HOV Lane, 3) Light Rail, and 4) Urban Design. Information made available to the TWG included the MPO's previously developed demographic forecast data and travel demand output, as well as the city of San Antonio's Master Plan policies, Community Revitalization Action Group report, VIA Metropolitan Transit's 2025 Visioning report, the results of the Regional Attitude Survey and information on other transportation modes currently not available in the San Antonio metropolitan

area (High Occupancy Vehicle [HOV] lanes, busways, light rail, and commuter rail). At the first Technical Working Group meeting, each of the groups developed a transportation network based on the travel mode of the group they were in. Therefore, extensive HOV Lane/Busway, Roadway and Light Rail networks were developed. The Urban Design group was to use whatever modes they felt were able to provide the best mobility opportunities for the study area.

These networks were tested using the multi-modal travel demand model developed for the San Antonio study area. The model results were used in the second phase of the public involvement.

Base Case Network

The roadway base case network is defined as the financially constrained network that was adopted in the December 1994 as part of the previous Metropolitan Transportation Plan development. The out-year for this network was 2015.

Roadway Network

The roadway network developed by the TWG is shown in Figure 10.1. The roadway network represented added capacity projects including:

- IH-35 north between downtown and Loop 1604

Figure 10.1 Modal Analysis: Roadway Network



0 4 8 Miles



- IH-10 east from Loop 410 to the county line
- IH-35 south from US 90 to the county line
- IH-37 south from Loop 410 to the county line
- US 90 from IH-35 to SH 151
- SH 151 from US 90 to Loop 1604 and beyond
- SH 16 from IH-410 to Loop 1604
- IH-10 west from Loop 1604 to the county line
- US 281 from Loop 1604 to the county line
- IH-410 (northern crescent) from IH-35 north to US 90
- Loop 1604 in its entirety
- Kelly Parkway
- Wurzbach Parkway
- Other arterial streets

The City of San Antonio's Major Thoroughfare Plan was also recommended being added to the roadway network.

A number of the roadway improvements outlined above, both increased roadway capacity and freeway interchange improvements, were recommended for implementation not only because of future congestion levels but also for safety reasons due to the increased amount of freight movement in and around the San Antonio metropolitan area. These improvements include the projects on:

- IH-10 east
- Loop 1604

- IH-37 south
- IH-35 south
- IH-10 west

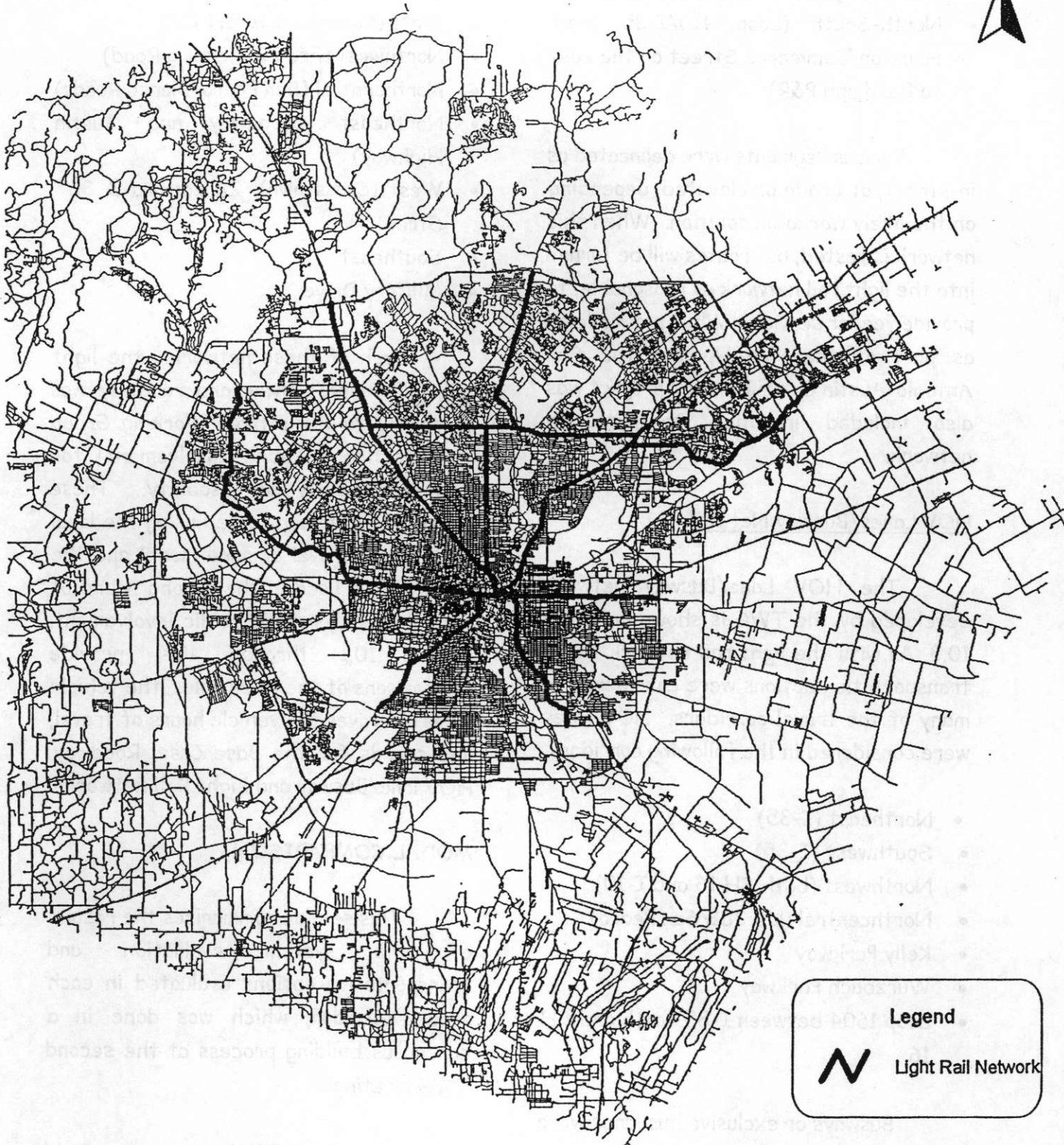
Examination of the roadway network indicates that with only a few exceptions, added capacity roadway projects are primarily outside Loop 1604 on the north and outside Loop 410 on the south. Within this area, the expressways and many of the arterial streets have been widened to the extent practical. Because of their location in the currently less developed areas, other travel modes were generally not compared with adding general purpose lanes.

Light Rail Network


The light rail network developed by the TWG as part of the MTP Update is shown in Figure 10.2. This transportation option was considered in many of the major travel corridors:

- East (Commerce/Houston Streets)
- Southeast (I-37/New Braunfels)
- Southwest (generally Frio City Road)
- West (Commerce/Culebra)
- Northwest (Fredericksburg Rd/I-10)
- Northcentral (San Pedro/US 281)
- North-South (General McMullen/ Fredericksburg Road/I-10)
- East-West corridor (generally Loop 410 then on new alignment to Culebra/Loop 1604 to the west and Randolph AFB on the east)
- North-South (Military Drive between Quintana and New Braunfels)

Figure 10.2 Modal Analysis: Light Rail Network



Legend

 Light Rail Network

0 4 8 Miles



- Northeast Corridor (Broadway to Austin Highway to Randolph P&R)
- North-South (Loop 410/I-35 from Houston/Commerce Street on the east to Randolph P&R)

Various segments were delineated as in-street, at-grade or elevated, depending on the likely workable solution. When this network is tested, bus routes will be turned into the light rail network as reasonable, to provide feeder service. While not modeled as part of the Plan Update, the San Antonio-Austin Commuter Rail project was also included in this transportation network.

HOV Lanes/Busway Network

The HOV Lane/Busway network developed by the TWG is shown in Figure 10.3. As with the light rail network these transportation options were considered in many of the travel corridors. HOV lanes were considered in the following corridors:

- Northeast (I-35)
- Southwest (I-35)
- Northwest (both SH 16 and I-10)
- Northcentral (US 281/San Pedro)
- Kelly Parkway
- Wurzbach Parkway
- Loop 1604 between I-35 north and SH 16

Busways or exclusive bus lanes were considered in the following corridors:

- East (Commerce Street)
- Southwest (Nogalitos)
- West (Commerce to SH 151)
- Northwest (Fredericksburg Road)
- Northcentral (San Pedro/Blanco Roads)
- Northeast (Broadway and Austin Highway)
- West (Crosstown): Zarzamora & 36th Street
- Southeast
- Military Drive

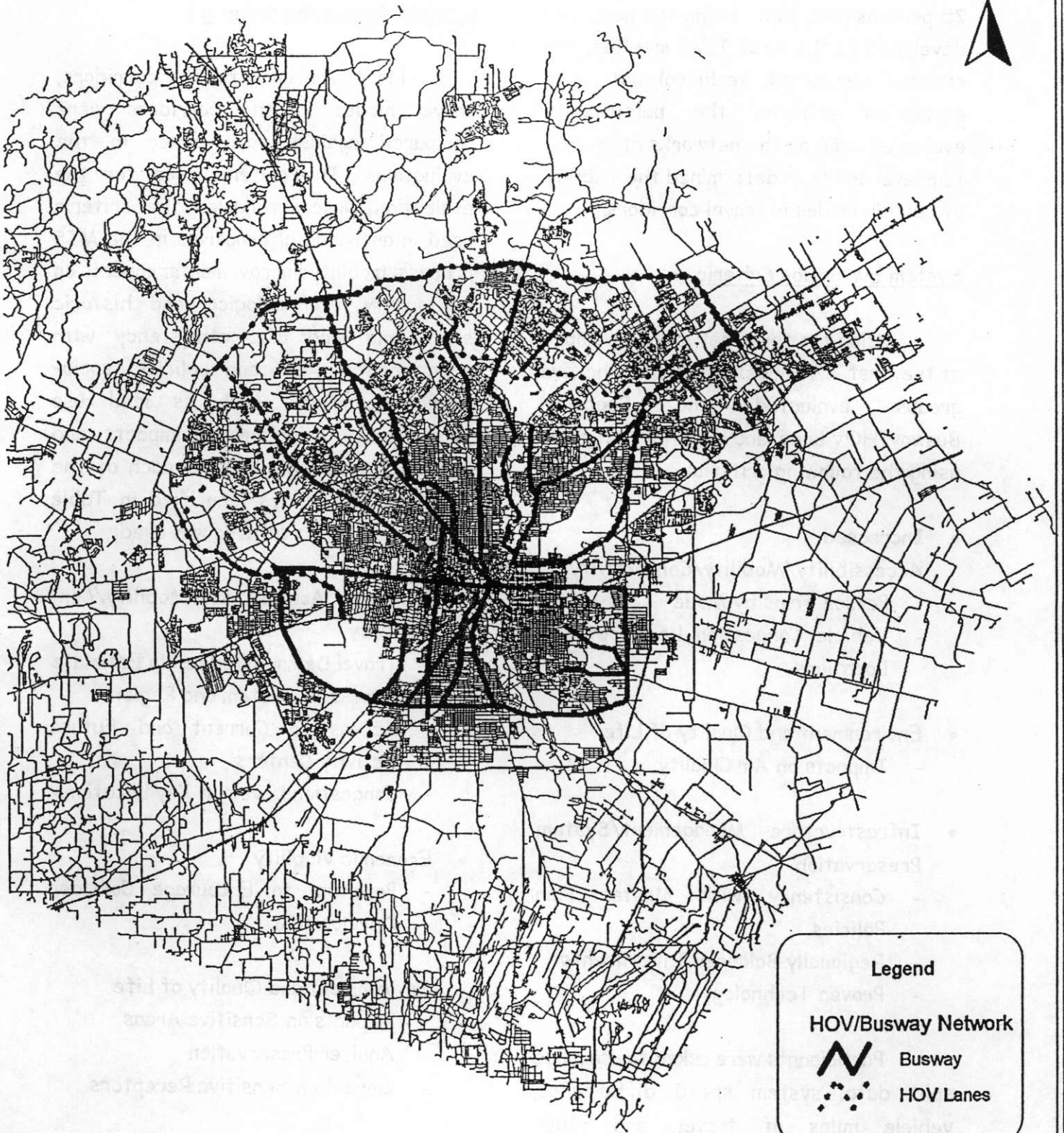
Each of these networks, the light rail, HOV lane/busway and roadway was presented to the Citizen Working Group (see Section 9 Public Involvement) for input on mobility and usability. These networks were then tested using the local multi-modal travel demand model and the results were used in the second round of technical analysis and public involvement. Tables 10.1 through 10.4 provide comparisons of the lanes miles, the vehicle miles of travel, the vehicle hours of travel, and speeds for the Base Case, Roadway, HOV lane/Busway and Light Rail networks.

MODAL COMPARISON

This section summarizes the results of the system evaluation and transportation options evaluated in each travel corridor, which was done in a consensus building process at the second TWG meeting.

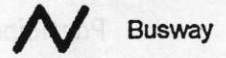
The second TWG meeting was held on November 20, 1998 and approximately

Figure 10.3 Modal Analysis: HOV Lane/Busway Network



Legend

HOV/Busway Network



Busway



HOV Lanes

0 4 8 Miles



75 persons attended. Using the networks developed at the first TWG meeting, the citizens' comments, technical data, and evaluation criteria, the participants evaluated each of the networks at a system level and then determined the viability of certain modes in travel corridors.

System Evaluation Criteria

Using the three networks developed at the first TWG meeting, each of the five groups evaluated the Roadway, Busway/HOV Lane, and Light Rail networks using the following criteria:

- Increased Accessibility/Mobility/Connectivity
 - Person Trips by Mode
 - Vehicle Congestion Levels at Key Locations
- Environment and Quality of Life
 - Impacts on Air Quality
- Infrastructure Management/System Preservation
 - Consistency with Master Plan Policies
 - Regionally Balanced Investments
 - Proven Technology

Participants were asked to use mode split data, system speed differences, vehicle miles of travel, and other information to evaluate each of these modal systems.

Corridor Evaluation Criteria

Next, for each of the corridors, travel modes in the corridors were compared against each other in the evaluation. The criteria used for the evaluation closely followed the criteria used in analyzing alternatives in the MIS process: mobility improvements; impacts on air quality, archaeological and historic sites, and land use; consistency with governmental plans and policies; socio-economic impacts such as land use compatibility, neighborhood impacts, and economic development. For each of the corridors and modes identified in Table 10.5 the following criteria was used:

- Increased Accessibility/Mobility/Connectivity
 - Travel Demand/Ridership Estimate
 - Access to System and Region
 - Access to Current and Future Activity Centers
 - Congestion Levels at Key Locations
- Economic Viability
 - Potential to Encourage Corridor Development
- Environment and Quality of Life
 - Impacts on Sensitive Areas
 - Aquifer Preservation
 - Impact on Sensitive Receptors
- Infrastructure Management/System Preservation
 - Alternative Development

These factors were considered by each of the five groups in each of the corridors with specific instructions to consider volume/ capacity ratios at key locations and intersections; existing and proposed land uses; impacts on cultural sites, historic sites and parklands; visual, aesthetic and noise impacts of each corridor alternative; and degree of difficulty in project development including right-of-way acquisition and system operation. Based on the technical evaluation, each of the five groups developed a future year multi-modal transportation network.

Then, through a consensus building process, a single network was developed that used the best components of each groups' networks. This network was named the "consensus network" which was the product of the second Technical Working

Group Meeting. The major roadway components of this consensus network are shown in Figure 10.4, the light rail components are shown in Figure 10.5, and the HOV lane/Busway components are shown in Figure 10.6. The consensus itself is shown in Figure 10.7. Tables 10.1 through 10.4 also include the consensus network lane miles, vehicle miles of travel, vehicle hours of travel, and speeds by facility type. This consensus network was used for additional public involvement efforts later in the Plan development process.

Table 10.1 Lane Miles by Facility Type

Facility Type	Base Case (2020)	Roadway (2020)	HOV Lane/ Busway(2020)	Light Rail (2020)	Base Case (2025)	Consensus (2025)	Plan Network (2025)
Radial Fwy/Expy	580	850	860	580	580	1,020	1,020
Radial Parkway	390	470	390	390	390	370	330
Primary Div. Arterial	870	1,030	840	850	870	870	880
Primary Undiv. Arterial	860	820	840	850	860	870	890
Minor Div. Arterial	420	530	430	420	420	490	450
Minor Undiv. Arterial	1,100	1,030	1,090	1,100	1,100	1,190	1,190
Div. Collector	160	140	160	160	160	160	160
Undiv. Collector	1,070	1,010	1,070	1,070	1,070	1,000	1,000
Ramp	1	2	10	1	1	1	1
Circum. Freeway	420	760	510	420	420	560	520
Circum. Parkway	10	80	10	10	10	80	8
Circum. Arterial	100	0	100	100	100	200	200
Arterial HOV	0	0	80	0	0	40	20
Total	5,981	6,722	6,390	5,951	5,981	6,851	6,750

Table 10.2 Vehicle Miles of Travel by Facility Type

Facility Type	Base Case (2020)	Roadway (2020)	HOV Lane/ Busway(2020)	Light Rail (2020)	Base Case (2025)	Consensus (2025)	Plan Network (2025)
Radial Fwy/Expy	11,939,870	13,746,580	12,500,430	11,954,100	12,333,580	13,522,530	13,719,950
Radial Parkway	4,690,140	4,527,990	4,478,450	4,655,770	4,775,160	4,919,970	4,764,820
Primary Div. Art.	6,161,650	5,562,200	5,917,580	6,074,720	6,328,480	5,081,670	5,201,450
Primary Undiv. Art.	4,319,310	4,042,390	4,177,160	4,271,150	4,385,350	4,195,370	4,255,880
Minor Div. Art.	1,810,470	1,601,950	1,825,690	1,821,770	1,913,000	1,776,870	1,826,070
Minor Undiv. Art.	4,308,010	3,783,530	4,209,000	4,303,190	4,462,530	4,018,890	4,050,930
Div. Collector	702,620	387,150	692,730	695,720	740,480	541,280	543,650
Undiv. Collector	2,429,940	1,875,470	2,433,260	2,426,600	2,633,060	2,103,030	2,115,970
Ramp	9,870	17,810	14,580	10,110	9,140	16,070	11,790
Circum. Freeway	10,738,750	12,210,400	10,625,710	10,702,990	10,969,150	12,014,770	12,012,700
Circum. Parkway	93,250	103,060	91,450	93,100	90,640	142,650	145,500
Circum. Arterial	511,790	2,440	501,690	510,440	536,700	661,230	667,050
Arterial HOV	0	0	215,910	0	0	110,650	17,570
Total	47,715,670	47,860,970	47,683,640	47,519,660	49,177,270	49,104,980	49,333,350

Table 10.3 Vehicle Hours of Travel by Facility Type

Facility Type	Base Case (2020)	Roadway (2020)	HOV Lane/ Busway(2020)	Light Rail (2020)	Base Case (2025)	Consensus (2025)	Plan Network (2025)
Radial Fwy/Expy	391,110	396,690	393,860	392,940	421,540	389,780	399,430
Radial Parkway	148,790	138,580	137,890	147,200	153,510	146,330	143,060
Primary Div. Art.	374,710	266,070	351,830	373,350	402,540	258,950	272,190
Primary Undiv. Art.	223,120	209,970	207,970	219,570	227,140	220,620	228,600
Minor Div. Arterial	121,300	85,430	119,170	123,820	146,180	110,110	113,350
Minor Undiv. Art.	338,260	285,730	326,310	340,860	357,790	282,050	292,960
Div. Collector	82,520	22,120	69,020	80,870	81,350	37,910	37,860
Undiv. Collector	235,740	152,330	235,170	234,130	260,650	202,310	205,360
Ramp	280	460	420	290	260	440	340
Circum. Freeway	279,720	303,300	269,600	278,220	288,310	300,500	301,130
Circum. Parkway	6,720	2,060	6,290	6,670	6,010	2,850	2,910
Circum. Arterial	14,740	50	14,440	14,620	15,490	15,150	15,320
Arterial HOV	0	0	10,300	0	0	3,780	500
Total	2,217,010	1,862,790	2,142,270	2,212,540	2,360,770	1,970,780	2,013,010

Table 10.4 Speed (in mph) by Facility Type

Facility Type	Base Case (2020)	Roadway (2020)	HOV Lane/ Busway (2020)	Light Rail (2020)	Base Case (2025)	Consensus (2025)	Plan Network (2025)
Radial Freeway	31	35	32	30	29	35	34
Radial Parkway	32	33	32	32	31	34	33
Primary Div. Art.	16	21	17	16	16	20	19
Primary Undiv. Art.	19	19	20	19	19	19	19
Minor Div. Art.	15	19	15	15	13	16	16
Minor Undiv. Art.	13	13	13	13	12	14	14
Div. Collector	9	18	10	9	9	14	14
Undiv. Collector	10	12	10	10	10	10	10
Ramp	35	39	35	35	35	37	35
Circum. Freeway	38	40	39	38	38	40	40
Circum. Parkway	14	50	15	14	15	50	50
Circum. Arterial	35	49	35	35	35	44	44
Arterial HOV	-	-	21	-	-	29	31
Total	22	26	22	21	21	25	25

Note: Only the Base Case (2020) and the Plan Network (2025) are financially constrained.

Table 10.5 Transportation Mode Analysis Summary

Facility Type	Base Case	Additional General Purpose Lanes	HOV Lanes	Toll Road	Busway	Light Rail
I-10/Fredericksburg Road Corridor	X	X	X			X
US 281/San Pedro Corridor	X		X		X	X
Bandera Road Corridor	X	X	X	X		
East-West Corridor	X				X	X
Southeast Corridor	X				X	X
West Corridor (Crosstowns)	X				X	X
SH 151 Corridor	X	X	X	X		X
Northeast Corridor	X				X	X
Military Drive Corridor	X				X	X
Southwest Corridor	X		X		X	X
Loop 1604 (N) Corridor	X	X	X			
Blanco Rd (N of Loop 1604)	X	X			X	

Figure 10.4 Consensus Network: Roadway Component

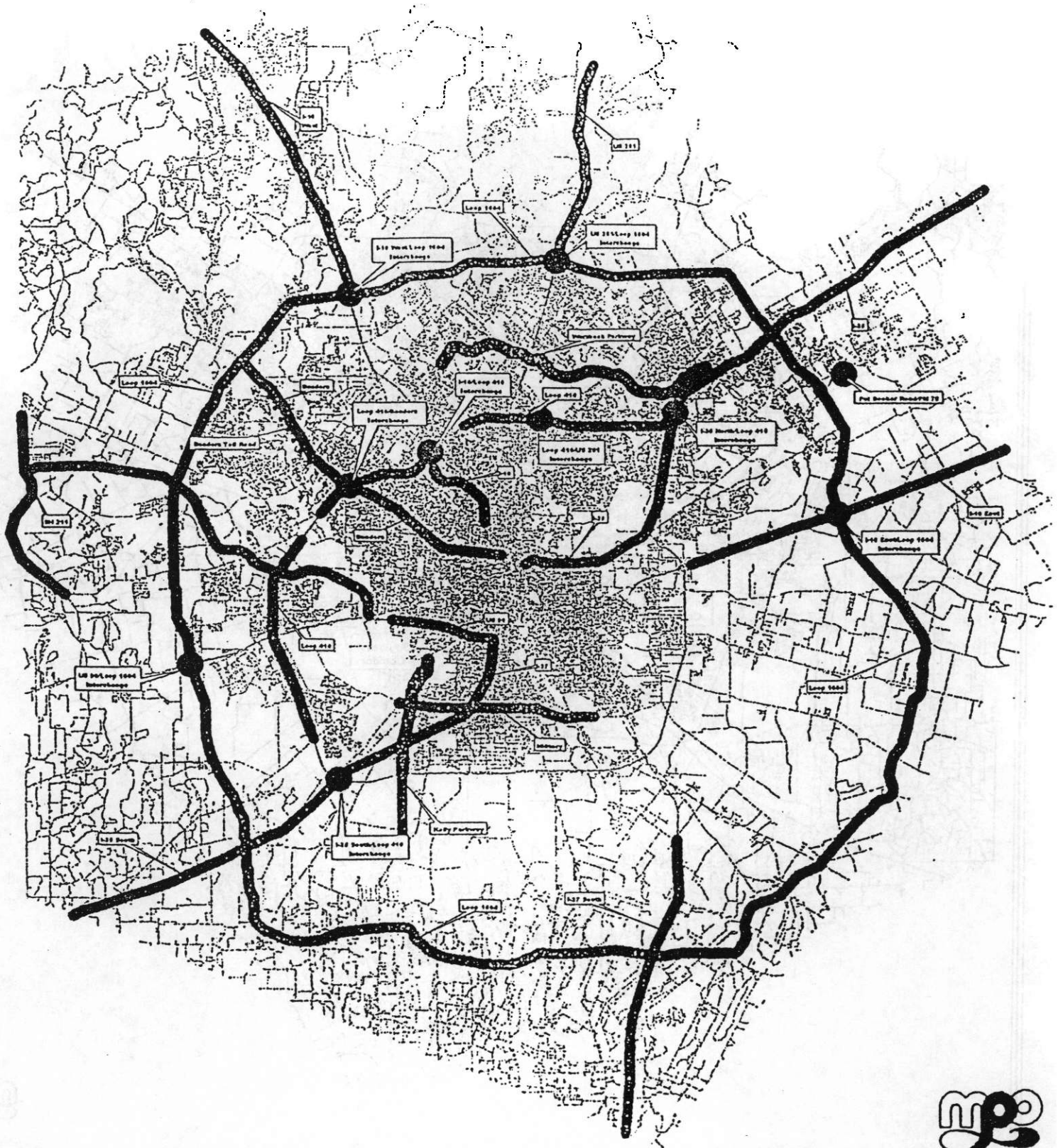


Figure 10.5 Consensus Network: Light Rail Component



Figure 10.6 Consensus Network: HOV Lane/Busway Component

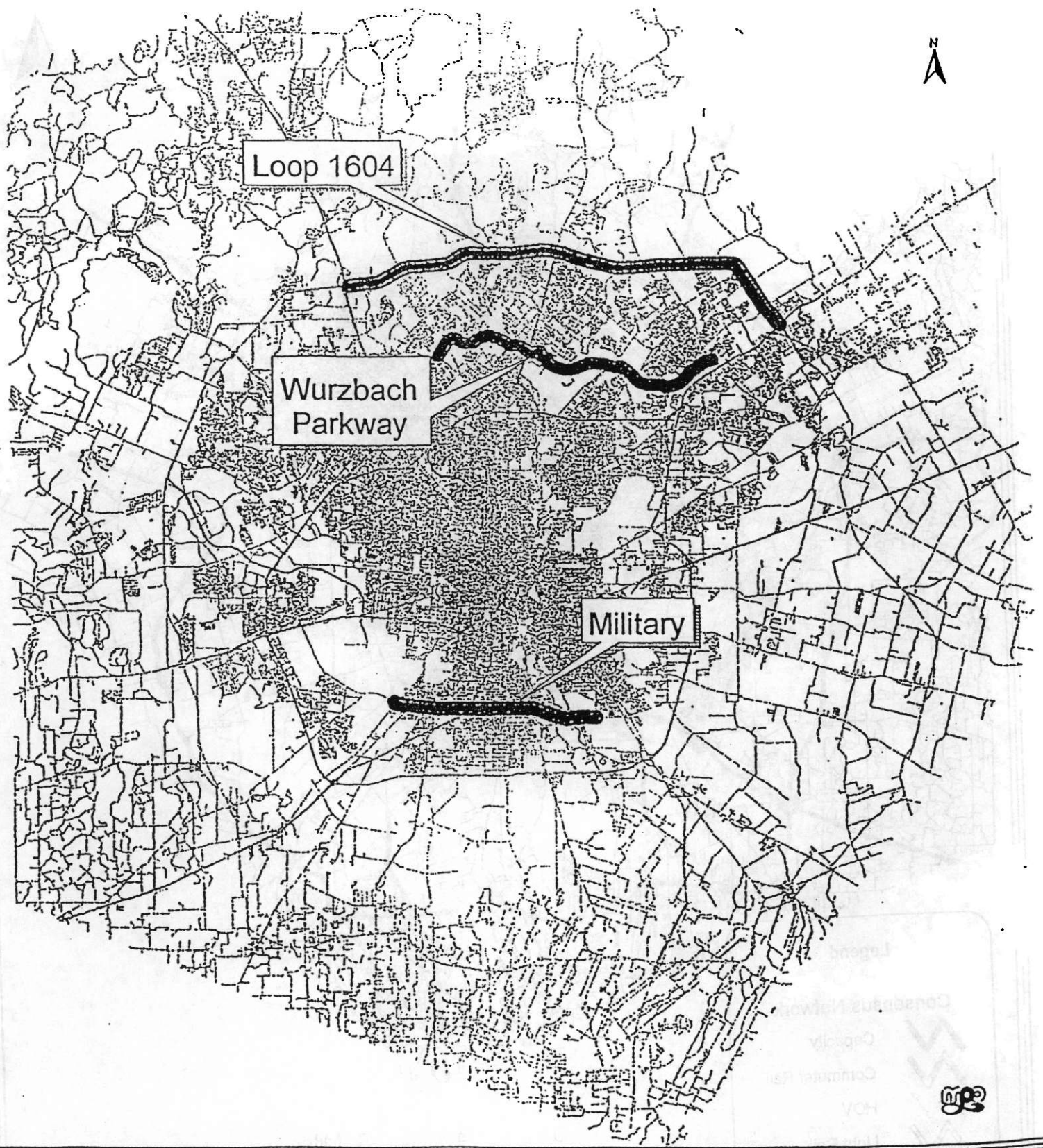
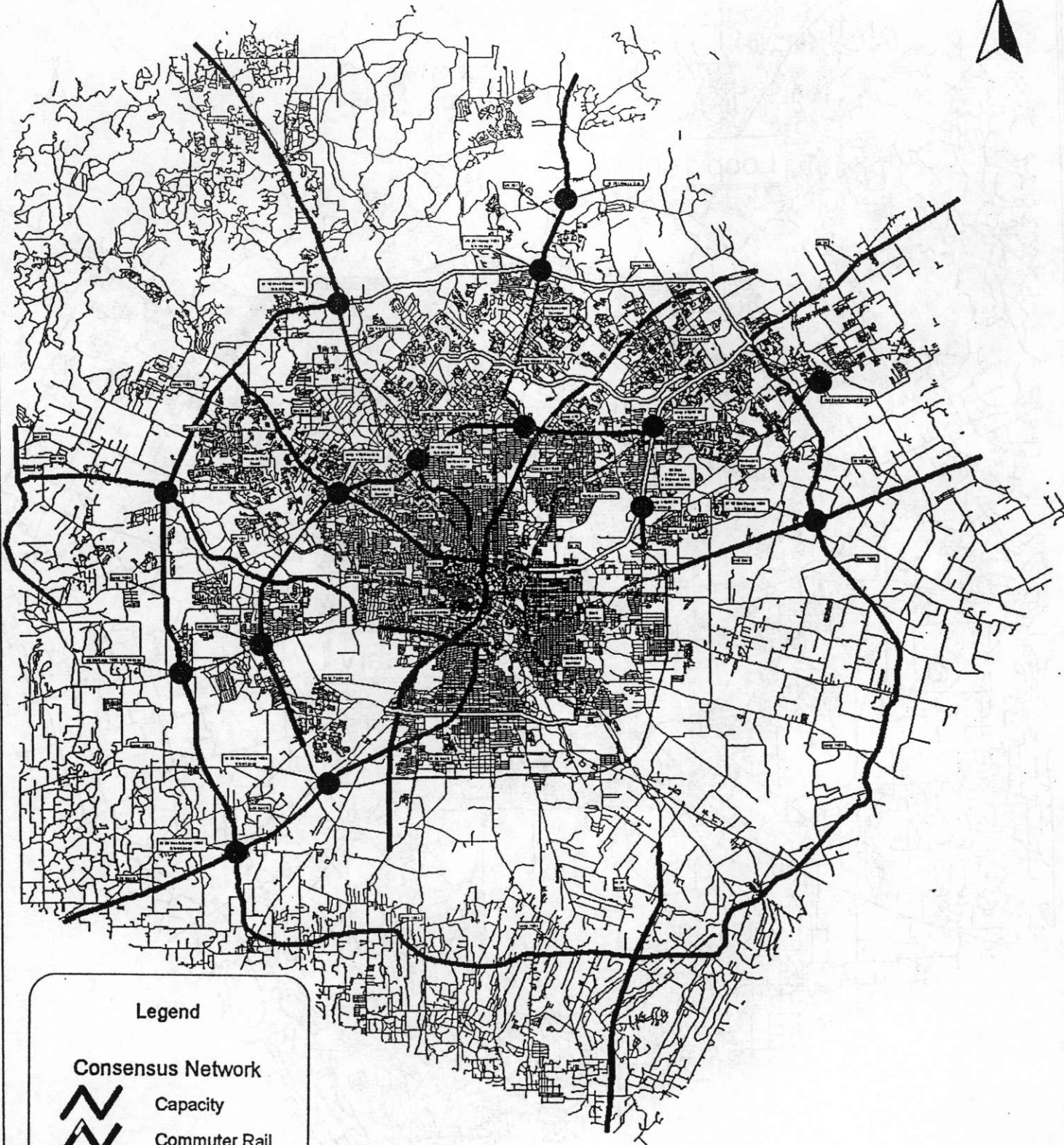







Figure 10.7 Consensus Network



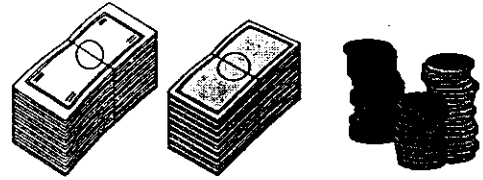
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Consensus Network

-  Capacity
-  Commuter Rail
-  HOV
-  Light Rail
-  Toll

0 4 8 Miles





11. FINANCIAL PLAN

BACKGROUND

The transportation system in the San Antonio-Bexar County study area will need to be maintained and enhanced to meet the mobility needs of people and goods for the 25-year horizon of this plan. To meet the growing travel needs, it is necessary to identify reasonable and available federal, state, and local transportation funds, both public and private. Traditional transportation funds are available through a variety of sources, many of which contain restrictions on how they can be used and/or allocated. It is also necessary to estimate relevant expenses including capital for both maintenance and operation of the system.

The Financial Plan Element of the 1994 Metropolitan Transportation Plan was based on fiscal constraints under the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. The Transportation Equity Act for the 21st Century (TEA 21) followed ISTEA. The provisions of this new legislation and the allocation of funding to the San Antonio - Bexar County Transportation Study Area serves as the basis for the 1999 Metropolitan Transportation Plan Financial Plan Element.

In order to meet the expected mobility needs, this section investigates the available existing and forecasted funding amounts from governmental sources. Specifically, it looks at recent historical trends in transportation-related expenditures and projects them forward for 25 years. In most cases, categories of funding and assumptions used in the future year forecasts are identified. The governmental entities included in this section are the Texas Department of Transportation, City of San Antonio, Bexar County, VIA Metropolitan Transit, and the suburban cities within the study area.

TEXAS DEPARTMENT OF TRANSPORTATION

The Texas Department of Transportation (TxDOT) has responsibility for, and jurisdiction over, interstate highways and frontage roads, United States (US) highways, State highways, and farm-to-market (FM) roads and ranch-to-market (RM) roads. The average annual maintenance cost per lane mile for the San Antonio District of the Texas Department of Transportation is \$6,312. This cost is based on actual Fiscal Year 1997 maintenance expenditures (\$18,576,412) for 2,943 lane miles.

Table 11.1 reflects the anticipated funding levels for funding categories available for roadway maintenance and expansion for the twenty-five year period beginning with Fiscal Year 2001 through Fiscal Year 2025.

Although not considered existing funding currently available to the Study

Area, the Congestion Mitigation and Air Quality (CMAQ) Improvement Program funding is available to states for distribution to metropolitan areas in non-attainment of air quality standards. The San Antonio area is currently in attainment, although this status could change in the near future or during the scope of the MTP Update horizon (2025).

Table 11.1 2025 Metropolitan Transportation Plan Anticipated Funding Levels

Category	Description	Funding
1, 3A, 12	NHS Mobility	\$3,289,200,000
2	Interstate Maintenance	\$219,600,000
4C, 5, 13D, 17	STP Mobility/State Funds	\$659,747,000
3D, 10B	CMAQ, TMS & Maintenance	\$207,500,000
7	Preventive Maintenance	\$400,200,000
4A, 4G	Safety & RR Grade Separation	\$16,800,000
3C, 3E	NHS Rehabilitation & Misc.	\$116,300,000
4E, 4F	STP Rehabilitation /Mobility	\$23,000,000
6A, 6B	On & Off System Bridge	\$24,300,000
8A, 14, 16	State Rehabilitation & Misc.	\$98,200,000
11	State Discretionary	\$240,700,000
4B	Transportation Enhancement	\$109,500,000
13A	State Mobility	\$59,600,000
10A	Traffic Operations	\$36,100,000
15	Demonstration Projects	\$49,600,000
	Section 5310	\$4,350,000
Total		\$5,554,697,000

BEXAR COUNTY

Transportation improvement projects and funding for these projects (including highway and transit projects involving County financing or property) within the jurisdiction of Bexar County must be approved by Commissioners Court. The Public Works Division of the Bexar County Infrastructure Services Department has primary responsibility for administering transportation improvements for the County. The Public Works Director (County Engineer) administers the road funds for County projects.

The average annual maintenance cost per lane mile for Bexar County is \$5,340. This cost is based on actual Fiscal Year 1998 maintenance expenditures (\$10,158,027) for 1,902 lane miles. This figure does not include rehabilitation costs, which are included as capital costs.

Dedicated Funds

County roadway maintenance and improvement projects are primarily budgeted through two dedicated funds: (1) Special Road and Bridge Fund, and (2) Farm-to-Market and Lateral Road Fund. A third fund, the Capital Projects Bond Fund, represented projects approved by bond issues (\$21 million in 1973, and \$34 million in 1982). This Fund is no longer active, as all projects approved through these two bond issues have been completed and no

further bond issues are under consideration or being planned.

Special Road and Bridge Fund: The Special Road and Bridge Fund is financed by a \$10 vehicle registration fee. This fund is the primary revenue source for County road and bridge improvements, including construction, reconstruction, rehabilitation, purchase of right-of-way, preventive maintenance, supplemental routine maintenance, matching funds, and other related transportation improvements.

Farm-to-Market and Lateral Road Fund: The Farm-to-Market and Lateral Road Fund is financed by an in-lieu-of sales tax rebate from the State. This fund is currently used primarily for operations and maintenance of the County road system.

Methods of Financing

As previously indicated, financing for County road funds are derived from two principal sources: 1) vehicle registration fees, and 2) in-lieu-of sales tax rebate.

Vehicle Registration Fees: In 1984, the Bexar County Commissioners approved a \$5 increase in the vehicle registration fee (Optional County Motor Vehicle Registration Fee as authorized by the State of Texas: VATS 6675a-9a), effective January 1985. Revenue generated from this fee was designated to be used only for road and bridge operations

(Special Road and Bridge Fund). County Commissioners exercised its option for an additional increase of \$5 in the vehicle registration fee, effective January 1990. This increase also was designated for the Special Road and Bridge Fund with the intention that this increase would eliminate the need for future bond issues for road improvements. Vehicle registration information is shown in Table 11.2.

In-Lieu-of Sales Tax: Beginning January 1, 1993, the State Law (VATS 6675a-10a) designated an in-lieu-of sales tax on automobiles to counties for roads and bridges. Prior to this date, counties were allowed to use this revenue of general fund purposes. The revenue that Bexar County receives is based on 5% of the sales tax received on automobile sales in the County the previous calendar year. This revenue is designated exclusively for the Farm-to-Market and Lateral Road Fund.

Revenue and Expenditures

Table 11.3 represents revenue and expenditure information for Bexar County road improvements and maintenance from FY 1991 through FY 2025. This information is presented by fiscal year group; each group representing five fiscal years. Actual revenues and expenditures (break-down of how revenues were eventually expended) are from FY 1991 - 2000, including estimates for Fiscal Years 1999 and 2000. Projected revenues and expenditures are from FY 2001 - 2025. The revenue projections are based on study area population growth forecasts. Projected maintenance costs represent 65% of the projected expenditures, based on average actual operation and maintenance expenditures from 1991 - 1998. Projected capital improvement costs represent 35% of the projected expenditures.

Table 11.2 Vehicle Registration - Bexar County (Selected Years)

Year	Number of Vehicles	Year	Number of Vehicles
1990*	900,019	2010***	1,132,270
1995*	963,792	2015***	1,204,830
2000**	1,000,000	2020***	1,282,040
2005***	1,064,080	2025***	1,365,000
* Actual Vehicle Registration: Bexar County Tax Assessor-Collector ** Conservative Estimate Based On Vehicle Registration Trend *** Projections Based On Study Area Population Growth Forecasts			

Table 11.3 Bexar County Revenue and Expenditures

Actual: 1991 - 2000*
 Projected: 2001 - 2025

Fiscal Year Group	FM & Lateral Road Fund	Special Road & Bridge Fund	Total Revenue	Total Costs	Oper. & Maint. Costs	Capital Impr. Costs
1991 - 1995	25,818,143	43,306,450	69,124,593	69,124,593	44,930,985	24,193,608
1996 - 2000	31,730,499	47,414,302	79,144,801	79,144,801	51,444,120	27,700,681
TOTAL 1991 - 2000	<u>57,548,642</u>	<u>90,720,752</u>	<u>148,269,394</u>	<u>148,269,394</u>	<u>96,375,105</u>	<u>51,894,289</u>
2001 - 2005	33,739,100	51,906,400	85,645,500	85,645,500	55,669,575	29,975,925
2006 - 2010	35,902,400	55,232,700	91,135,100	91,135,100	59,237,815	31,897,285
2011 - 2015	38,202,000	58,772,100	96,974,100	96,974,100	63,033,165	33,940,935
2016 - 2020	40,650,100	62,538,600	103,188,700	103,188,700	67,072,655	36,116,045
2021 - 2025	43,237,800	66,554,200	109,792,000	109,792,000	71,364,800	38,427,200
TOTAL 2001 - 2025	<u>191,731,400</u>	<u>295,004,000</u>	<u>486,735,400</u>	<u>486,735,400</u>	<u>316,378,010</u>	<u>170,357,390</u>

* Includes Estimates For Fiscal Years 1999 & 2000

CITY OF SAN ANTONIO

Capital Improvements

In mid-1999 voters in the City of San Antonio approved a \$140.2 million bond program. This program included a Streets and Pedestrian Improvements portion in the amount of \$41.3 million. \$21.6 million of the Streets and Pedestrian Improvements were designated as matching funds for Metropolitan Planning Organization (MPO) projects.

Street Maintenance

The ten-year annualized allocation of general fund revenues for street maintenance since FY 1991 amounts to \$17,969,000. The financial information is shown in Table 11.4. Since the system has a total of approximately 10,047 lane miles, this translates to a systemwide expenditure of \$1,788 per lane mile. The actual allocation of funds for street maintenance is subject to changes in local policy over time.

The revenue sources that contribute to the city's general fund are: 1) Sales Tax, 2) Property Tax, 3) City Public Service, and 4) other fees. VIA Metropolitan Transit also contributes to the maintenance of the street system.

Street reconstruction augments the street maintenance program, extending the life expectancy of city streets. This is inclusive of seal coat, rehabilitation, crack seal, asphalt overlay and base failure.

The following assumptions are inherent in this exercise:

- Street maintenance allocation will increase an average of 2.57 percent annually between 2000 and 2025.
- The annualized amount of \$17,969,000 is used as the base for future estimates.
- There will not be a change in policy or local priorities over time.

The following caveats will affect the estimates:

- Upturns and downturns in the local economy.
- Changes in policy and local governmental priorities.
- Roadway reconstruction from other funding sources.

**Table 11.4 City of San Antonio Street Maintenance
Estimated Revenues and Expenditures**

Actual: 1991 - 2000*

Projected: 2001 - 2025

Fiscal Year Group	Funding Amount	Expenditures
1991 - 1995	\$75,798,000	\$75,798,000
1996 - 2000	\$103,888,000	\$103,888,000
Total 1991 - 2000	<u>\$179,686,000</u>	<u>\$179,686,000</u>
2001 - 2005	\$97,012,000	\$97,012,000
2006 - 2010	\$110,135,000	\$110,135,000
2011 - 2015	\$125,034,000	\$125,034,000
2016 - 2020	\$141,948,000	\$141,948,000
2021 - 2025	\$161,151,000	\$161,151,000
Total 2001 - 2025	<u>\$635,280,000</u>	<u>\$635,280,000</u>

* Includes Estimates For Fiscal Years 1999 & 2000

VIA METROPOLITAN TRANSIT

VIA's revenues are received from four major sources: 1) Fares, 2) Sales Tax, 3) Grants, and 4) Interest and Other Revenue. The fares (operating revenues) are approximately 21% of the total budgeted revenues in Fiscal Year 1998-99. Fares are collected from the customers as they board the bus or van. The majority of VIA's budgeted revenue (69%) is received from the ½¢ sales tax collected on items sold within the VIA service area.

The grant revenues are budgeted at 3% of the total revenues. Included in the grant revenues are capital grant funds that will be used to offset expenses in the purchased transportation and vehicle maintenance areas. Interest and other miscellaneous revenues make up the remaining 7%. VIA's expected revenue information is shown in Table 11.5 and the expenditure information is shown in Table 11.6.

Table 11.5 VIA Metropolitan Transit Revenues
(in millions of dollars)
Actual: 1996 - 2000
Projected: 2001 - 2025

Fiscal Year Group	Operating Revenues	Investment Income	1/2% Sales Tax	Total Grants	Other Revenue	Total Revenue
1996 - 2000	93.714	28.847	288.139	73.078	0.487	484.266
2001 - 2005	106.123	25.127	368.428	92.766	(0.296)	592.148
2006 - 2010	121.539	21.676	448.718	108.590	(0.477)	700.046
2011 - 2015	136.955	18.226	529.007	124.415	(0.658)	807.945
2016 - 2020	152.371	14.776	609.297	140.239	(0.839)	915.844
2021 - 2025	167.786	11.326	689.586	156.063	(1.020)	1,023.741
Total 2001 - 2025	<u>684.774</u>	<u>91.131</u>	<u>2,645.036</u>	<u>622.073</u>	<u>(3.290)</u>	<u>4,039.724</u>

Table 11.6 VIA Metropolitan Transit Expenditures
(in millions of dollars)
Actual: 1996 - 2000
Projected: 2001 - 2025

Fiscal Year Group	Revenue Vehicles (Capital)	Non-Rev Vehicles (Capital)	Bldgs/ Equip (Capital)	Line Service Operating Expenses	VIAtrans Operating Expenses	Other Operating Expenses	Depreciation (Non Federal Share)	Non-Operating Expenses	Total Expenses
1996 - 2000	9.817	1.004	33.170	308.961	86.480	9.657	13.620	3.740	466.450
2001 - 2005	59.583	1.885	28.301	369.595	108.760	9.443	31.811	19.635	629.013
2006 - 2010	43.288	0.384	11.310	430.447	133.497	10.808	47.297	21.546	698.577
2011 - 2015	40.620	0.403	6.500	488.685	156.782	12.159	63.685	23.425	792.258
2016 - 2020	51.860	0.423	6.824	548.143	180.073	13.510	80.072	25.304	906.210
2021 - 2025	70.624	0.445	7.166	609.240	203.364	14.861	96.460	27.183	1,029.342
Total 2001 - 2025	<u>265.975</u>	<u>3.539</u>	<u>60.101</u>	<u>2,446.110</u>	<u>782.476</u>	<u>60.781</u>	<u>319.325</u>	<u>117.093</u>	<u>4,055.407</u>

SUBURBAN CITIES

The suburban communities and cities in the San Antonio-Bexar County Urban Transportation Study Area vary in population from approximately 600 to more than 15,000. Due to their small size, most entities are unable to sustain any large transportation improvement projects. Some of the larger suburban cities have been able to fund single projects through bond issues, however, the overall transportation improvement plans of these entities primarily consist of basic maintenance of local streets within corporate boundaries. Maintenance budgets for existing streets have varied widely from city to city and from year to year.

In the high growth area of the northeast section of the study area where established cities are in place, the new roads constructed by developers for new subdivisions are forcing these cities to ensure existing connecting roads are able to handle the increased traffic load. This puts a significant strain on the smaller cities' transportation maintenance budgets. The newly established and growing cities of the northwest have, by and large, not experienced the road maintenance problems of older suburban communities, but are experiencing the beginning of similar trends. Older established enclave cities (e.g. Alamo Heights, Olmos Park) with little growth potential will mainly continue to be concerned with maintenance and rehabilitation. Whether new or old, it appears that all suburban cities will be

relying on the availability of federal and state funds to rebuild, widen, or rehabilitate existing arterials and collectors within their city limits.

FUTURE FINANCING OPPORTUNITIES

Prospective Financing Methods

Future financing opportunities are prospective financing or revenue producing possibilities that could become available for developing the areawide transportation system. These financing methods include extensions of established financing programs, augmented financing methods, and exploratory financing methods. Established financing program extensions are methods for financing or generating revenue by extending or modifying established programs to be used locally for developing the areawide transportation system. Although these programs are already established, enabling legislation will be necessary to extend or modify each program. Augmented financing methods pertain to project oriented financing rather than program oriented financing. Exploratory financing methods pertain to a variety of nontraditional revenue generating techniques which (except for road districts) would be relatively new to the Study Area. Further investigation of these methods would be necessary before making recommendations. Selected methods for possible future application for the Study Area include: 1) Local Sales Tax (General), 2) Local Sales Tax (Special), 3) Local Fuel Tax, 4) Vehicle Registration Fee,

5) Toll Corridors, 6) Public/Private Ventures, 7) Traffic Impact Fee, 8) Road District, and 9) Property Tax and Utility Fee Extensions. Table 11.7 exemplifies revenue generating potential for local general sales tax, local fuel tax, and extended vehicle registration fees.

Local Sales Tax (General): Local general sales tax extension considerations include: (1) increasing the local general sales tax option by a rate in the range of $\frac{1}{4}\text{¢}$ per dollar to $\frac{1}{2}\text{¢}$ per dollar to be used exclusively for improving areawide transportation facilities, or (2) increasing the local sales tax option by a rate in the range of $\frac{1}{4}\text{¢}$ per dollar to $\frac{1}{2}\text{¢}$ per dollar to be designated for specific projects or categories.

Local Sales Tax (Special): Local special sales tax considerations are similar to local general sales tax considerations, but pertain only to a segment of the sales tax base or to an exclusive sales market. Special local sales tax segments include: (1) Vehicle Rentals, (2) Motor Vehicle Parts and Tires, (3) New and Used Motor Vehicles, and (4) Motor Vehicle Fuel. A local special sales tax may be levied on any one of these segments or a combination. Enabling legislation would be necessary to impose any local special sales tax.

Local Fuel Tax: Local fuel tax considerations include: 1) a local fuel tax with 100% of the revenues distributed within the designated area, or 2) increased state fuel tax distributed proportionately

to local governments; to be used exclusively for improving transportation facilities. Local fuel tax information is shown in Table 11.7.

Vehicle Registration Fee: Vehicle registration fee extension considerations include: 1) collecting a fee in the range of \$2.50 to \$10.00 per registered vehicle per year for areawide transportation improvements, or 2) collecting a fee in the range of \$2.50 to \$10.00 per registered vehicle per year to be designated for specific projects or funding categories. Current legislation allows for County Governments to collect up to \$10.00 per registered vehicle per year to be used exclusively for developing and maintaining county infrastructure. Similar legislation could be pursued for areawide infrastructure improvements. Vehicle registration fee information is shown in Table 11.7.

Toll Corridors: Toll roads and other toll facilities strategically located near or adjacent to existing congested facilities may provide alternative routes to common destinations; providing relief on the existing facilities. These facilities would allow motor vehicle users a choice of continuing to utilize existing congested facilities at not additional cost or to pay designated user fees to use a facility with a higher level of service. Assuming that a reasonable percentage of travelers would elect to take the toll road, congestion relief on the original facility could be realized. Toll facilities, for the most part, would be constructed, operated, and

maintained by toll collections. Surplus revenues from toll collections may also be used to help finance other non-toll facilities within a designated area. Revenue estimates would depend on: 1) selected roadway(s) and functions, 2) cost of construction, operation, and maintenance, and 3) established rate. Toll corridors can be operated by the Texas Turnpike Authority (for State System facilities) or a local toll road authority (which would require enabling legislation to create an authority). Designating selected roadways as toll facilities enhances opportunities for public / private partnerships in financing transportation facilities, which can help provide leveraging of federal funds for construction projects.

Public/Private Ventures: As previously introduced, designating toll corridors enhances opportunities for public / private partnerships in financing transportation facilities. Public/private ventures may also include parking facilities, signalization, auxiliary lanes, pedestrian facilities, bicycle facilities, transit improvements, operational improvements, providing matching funds for transportation improvement projects, and other situations which may help leverage available financing for transportation improvements.

Traffic Impact Fee: Traffic impact fees are fees collected on new developments

based on the anticipated amount of traffic that the particular development would generate, as specified by performance criteria. These fees, in turn, would be applied to construction of necessary external major thoroughfares (or to improve existing thoroughfares). Traffic impact fees would not replace dedication of right-of-way, but would change the manner in which new thoroughfares are constructed (or existing thoroughfares are improved).

Road District: Road districts are assessment or improvement districts established to finance the construction or improvement of a particular transportation facility or within a designated area. Improvements may include the roadway, drainage, curbs, sidewalks, curb ramps, and other transportation related improvements (signage, signals). Road districts usually are wholly within a single governmental jurisdiction, but could be multi-jurisdictional with agreement among all parties concerned.

Property Tax/Utility Fee Extensions: Extending established property tax rates and utility fees (water, cable TV, etc.) are actions worthy of consideration for generating additional revenue to be designated for exclusive use for street repair (including curbs, curb ramps, and sidewalks).

**Table 11.7 Prospective Financing Methods Revenue Generation Potential
(in thousands of dollars)**

Fiscal Year Group	Local Sales Tax (General) *		Local Fuel Tax **		Vehicle Registration Fee (per Year) ***	
	@ ½ ¢ per \$	@ ¼ ¢ per \$	@ 5 ¢ per gal.	@ 2½ ¢ per gal.	@ \$10 per veh.	@ \$5 per veh.
2001 - 2005	368,428.4	184,214.2	221,899.9	110,950.0	51,906.4	25,953.2
2006 - 2010	448,717.9	224,359.0	236,119.8	118,059.9	55,232.7	27,616.4
2011 - 2015	529,007.5	264,503.8	251,250.7	125,625.3	58,772.1	29,386.0
2016 - 2020	609,297.0	304,648.5	267,352.5	133,676.3	62,538.6	31,269.3
2021 - 2025	689,586.5	344,793.2	284,519.2	142,259.6	66,554.2	33,277.1
Total 2001 - 2025	<u>2,645,037.3</u>	<u>1,322,518.7</u>	<u>1,261,142.1</u>	<u>630,571.1</u>	<u>295,004.0</u>	<u>147,502.0</u>

* Based on VIA Metropolitan Transit trended preliminary sales tax projections.
 ** Based on 855 gallons per vehicle per year (1999 Texas average: Federal Highway Administration) multiplied by projected vehicle registration in Bexar County.
 *** Based on projected vehicle registration in Bexar County.

FINANCING ADMINISTRATION

Five regional structures exist within the Study Area which currently, or could potentially, administer financing of transportation system improvements: 1) Alamo Area Council of Governments (AACOG), 2) San Antonio District of Texas Department of Transportation (TxDOT), 3) VIA Metropolitan Transit (VIA), 4) Bexar County, and 5) the San Antonio-Bexar County Metropolitan Planning Organization (MPO).

Several additional structures for administering new sources of revenue were identified to introduce some alternatives for future consideration if the need for such structures becomes necessary or desirable. These structures may be considered as mechanisms to augment existing regional structures. There are combinations of these concepts that are possible. Creating a new structure and mechanism for improving infrastructure may require enabling legislation, referendum, jurisdictional action (court order, ordinance, etc.), or application. Several methods that may have merit for

further consideration within the Study Area include: 1) State Infrastructure Bank, 2) Texas Turnpike Authority, 3) Local Tollway Authority, 4) Commuter Rail District, 5) Advanced Transportation District, and 6) Metropolitan District.

State Infrastructure Bank

A State Infrastructure Bank (SIB) is an infrastructure investment fund created at the State level. Established by the 75th Texas Legislature, the Texas Department of Transportation's state infrastructure bank maintains a revolving loan fund that may be made available (through application) to appropriate public and private entities to borrow money to finance transportation projects, subject to approval by the Texas Transportation Commission approval. This mechanism allows accelerated funding for needed transportation projects, provided they comply with federal and state standards.

Texas Turnpike Authority

Texas State Senate Bill 370, adopted during the 75th Texas State Legislature held in 1997, simultaneously, abolished and recreated the Texas Turnpike Authority (TTA) as a new division of Texas Department of Transportation. Managed by the Turnpike Authority Board, The Texas Turnpike Authority has responsibility to study, design, construct, operate, expand, and extend toll road projects as part of the state highway system.

Local Tollway Authority

A local toll road authority may need to be established in order to administer the toll collecting system on a designated local toll road (or toll roads). The Texas Turnpike Authority was created to administer the toll collection system on designated State facilities. For a local toll road authority, the determination must first be made to designate a particular roadway corridor (or corridors) as toll facilities. Then, action must be initiated to obtain the toll road authority designation; possibly requiring approval by the Texas Legislature.

Commuter Rail District

According to the *Austin - San Antonio Commuter Rail Study Feasibility Report (March 1999, Carter-Burgess)*, "Formation of a Regional Rail District was allowed by Senate Bill 657, enacted by the Texas Legislature during the 1997 session. This legislation provides that the two major cities (Austin and San Antonio) and two major counties (Travis and Bexar) may, by a series of resolutions, create a Regional Rail District for this corridor. In addition, five other cities and 13 other counties may join the district."

"The legislation provides that a Board of Directors be appointed with certain powers. Included in these powers are the authorization to develop, own and operate a commuter rail system, and also to issue revenue bonds for the general operation of

the system. In addition, the Board is authorized to enter into contracts with local governments that levy property taxes to finance infrastructure, and certain other conditions related to financing the system. The Regional Rail District has not yet been formed."

Advanced Transportation District

Creation of an Advanced Transportation District and authorization of the imposition of a local sales and use tax for advanced transportation (Senate Bill 769) was enacted by the Texas Legislature during the 1999 session. A referendum would be needed to establish the Advanced Transportation District and to collect a $\frac{1}{4}\%$ local sales tax for financing the development of a light rail system, busways, and other eligible advanced transportation systems identified in the legislation. As enacted by this legislation, "advanced transportation means light rail, commuter rail, fixed guideways, high occupancy vehicle lanes, traffic monitoring systems, and other advanced transportation facilities and services, including planning, feasibility studies, and professional and other services in connection with those facilities and services."

This legislation authorizes that "the board of an authority in which the sales and use tax is imposed at a rate of one-half of one percent and in which the principal municipality has a population of more than 700,000 may order an election to create an advanced transportation district within the

authority's boundaries and to impose a sales and use tax for advanced transportation under this subchapter. If approved at the election, the rate of the sales and use tax for advanced transportation is one-fourth of one percent."

Again, Table 11.7 shows the potential Advanced Transportation District Revenue information.

Metropolitan District

A Metropolitan District is a special government with elected officials and specific taxing empowerment. Enabling legislation would be required to create a district. Such a district could be empowered to establish and collect a local fuel tax (also requiring enabling legislation); revenues would be used exclusively to finance transportation improvements within the defined area in which such taxes are collected.

Establish a program to be administered by a local agency to be used exclusively for: 1) major transportation investments, 2) congestion mitigation, 3) metropolitan street program, 4) fund leveraging/local match program, 5) engineering, design, and environmental assessment of essential multi-jurisdictional network linkages, and 6) purchase of right-of-way. Action would need to be initiated with the Texas State Legislature for enabling legislation to authorize the State of Texas to collect an additional local fuel

tax of not more than 6¢ per gallon to be distributed to a designated fiscal agents to be used exclusively for metropolitan transportation system development (75%)

Table 11.8 shows this program's revenue potential.

Table 11.8 Metropolitan Transportation System Development Program Revenue Generation Potential

Fiscal Year Group	Local Fuel Tax		
	@ 4½ ¢ per gallon (Metro Program)	@ 1½ ¢ per gallon (School Allocation)	@ 6 ¢ per gallon (Total)
2001 - 2005	\$199,709,910	\$66,569,970	\$266,279,880
2006 - 2010	\$212,507,820	\$70,835,940	\$283,343,760
2011 - 2015	\$226,125,630	\$75,375,210	\$301,500,840
2016 - 2020	\$240,617,250	\$80,205,750	\$320,823,000
2021 - 2025	\$256,067,280	\$85,355,760	\$341,423,040
Total 2001 - 2025	<u>\$1,135,027,890</u>	<u>\$378,342,630</u>	<u>\$1,513,370,520</u>

PROJECT FUNDING PROCESS

All transportation system improvement projects identified as part of the Year 2025 network were considered for inclusion into this Metropolitan Transportation Plan. Based on consideration of existing financing programs (as shown in Table 11.9, the following process was used for prioritizing and selecting projects for funding through 2025.

- Developed a complete, fiscally unconstrained list of transportation system improvement projects (or lump sum categories) identified as part of the Year 2025 Network. The list included estimated costs for each project.

- Delineated target funding amounts for certain transportation improvement categories (e.g. rideshare, pedestrian, bicycle).
- Grouped projects that were to be financed with established financing programs into appropriate funding categories. Unfunded projects are candidates for additional funding that may become available. Potential additional financing revenues are shown in Table 11.10.

**Table 11.9 San Antonio - Bexar County 2025 Anticipated Funding
(in millions of dollars)**

Category/ Description	Fiscal Year Groups					Total
	2001-2005	2006-2010	2011-2015	2016-2020	2021-2025	
NHS Mobility	515.911	578.735	649.222	728.295	817.037	3,289.200
Interstate Maintenance	34.444	38.638	43.345	48.624	54.549	219.600
STP Mobility/ State Funds	199.893	95.963	107.651	120.763	135.477	659.747
CMAQ, TMS & Maintenance	32.546	36.510	40.956	45.945	51.543	207.500
Preventive Maintenance	62.771	70.415	78.992	88.612	99.410	400.200
Safety & RR Grade Separation	2.635	2.956	3.316	3.720	4.173	16.800
NHS Rehabilitation & Misc.	18.242	20.463	22.955	25.751	28.889	116.300
STP Rehabilitation/ Mobility	3.607	4.047	4.540	5.093	5.713	23.000
On & Off System Bridge	3.810	4.277	4.797	5.380	6.036	24.300
State Rehab & Misc.	15.403	17.278	19.383	21.743	24.393	98.200
State Discretionary	37.754	42.351	47.509	53.296	59.790	240.700
Transportation Enhancement	17.175	19.267	21.613	24.245	27.200	109.500
State Mobility	9.348	10.486	11.764	13.197	14.805	59.600
Traffic Operations	5.662	6.352	7.126	7.993	8.967	36.100
Demonstration Projects	7.792	8.754	9.811	10.991	12.252	49.600
Section 5307	0.683	0.768	0.860	0.964	1.075	4.350
Total Traditional Roadway	967.666	957.260	1,073.840	1,204.612	1,351.309	5,554.697
Transit Operating Revenues	106.123	121.539	136.955	152.371	167.786	684.774
Transit Investment Income	25.127	21.676	18.226	14.776	11.326	91.131
½% Sales Tax (amount currently collected)	368.428	448.718	529.007	609.297	689.586	2,645.036
Transit Capital Grants	92.766	108.590	124.415	140.239	156.063	622.073
Other	(0.296)	(0.477)	(0.658)	(0.839)	(1.020)	(3.290)
Total Transit	592.148	700.046	807.945	915.844	1,023.741	4,039.724
Traditional Funding Grand Total	1,559.814	1,657.306	1,881.785	2,120.456	2,375.050	9,594.421

Table 11.10 Potential Financing Revenue

Fiscal Year Group	Advanced Transportation District (see Table 11.7)	Metropolitan Transportation System Development Program (see Table 11.8)	Total Extended Financing Programs
2001 - 2005	\$ 184,214,200	\$ 199,709,910	\$ 383,921,110
2006 - 2010	\$ 224,359,000	\$ 212,507,820	\$ 436,866,820
2011 - 2015	\$ 264,503,800	\$ 226,125,630	\$ 490,629,430
2016 - 2020	\$ 304,648,500	\$ 240,617,250	\$ 545,265,750
2021 - 2025	\$ 344,793,200	\$ 256,067,280	\$ 600,860,480
Total 2001 - 2025	<u>\$ 1,322,518,700</u>	<u>\$ 1,135,027,890</u>	<u>\$ 2,457,546,590</u>

CONTINUED FINANCIAL PLANNING

The investigation of innovative financing methods as possible future resources for financing transportation system development and improvements, including: traffic impact fees, road

districts, local special sales tax, added utility fees, and property tax extensions will continued throughout the life of this Plan.

REVENUE SUMMARY

Funded Projects

Roadway Projects : See pages 1 - 33 of the Project List (Section 12)

Transit Projects: See pages 34 - 42 of the Project List (Section 12)

Estimated Traditional Revenue Sources

Roadway (includes Section 5310 funding)-----	\$5,554,697,000
Transit (years 2001-2025) -----	\$4,039,724,000
Transit (year 2000)-----	<u>\$134,000,000</u>
Total Traditional Revenue -----	<u>\$9,728,421,000</u>

Unfunded Projects

See Supplemental List of Unfunded Roadway and Transit Projects in Section 12

Potential Additional Revenue Sources

Advanced Transportation District-----	\$1,322,518,700
Metro Trans System Development Program-----	<u>\$1,135,027,890</u>
Total - Extended Financing Programs-----	<u>\$2,457,546,590</u>
(local portion only; does not include matching federal dollars)	

Toll Facilities -----to be determined at a later date
Commuter Rail District -----to be determined at a later date
Public/Private Ventures -----to be determined at a later date

12. PROJECT LIST

The San Antonio - Bexar County Metropolitan Planning Organization (MPO) has undertaken an extensive amount of technical analysis and public involvement to arrive at the list of roadway and transit projects contained in this plan. Using the San Antonio Multi-modal Travel Demand Model these roadways were tested for their ability to transport people and goods. Environmental, archaeological, and other criteria were also taken into consideration when these projects were evaluated. The original transit project list was reduced in order to meet the constraints of projected financial resources available to the San Antonio area over the next 25 years. This constrained plan will not eliminate congestion. Levels of congestion are projected to continue to grow.

The final project list in this plan reflects consultation with local community and neighborhood organizations, local elected officials and interested citizens. The list is financially constrained, consistent with the TEA-21 planning regulations. Lump sum figures have been included in the list to allow for some flexibility in safety, bicycle, pedestrian, and preservation of existing roadway projects over the next 25 years. The Metropolitan Transportation Plan, and this Project Listing, can be revised, as necessary, to meet the changing needs and demands of the community.

TRANSPORTATION STEERING COMMITTEE ACTION

The MPO Transportation Steering Committee took action on the Metropolitan Transportation Plan at their meeting on December 6, 1999. The action was divided into eight separate motions, adopting seven major components of the project list with Motion #8 adopting the Metropolitan Transportation Plan document. These motions are further described below.

Motion #1 Roadway Component

After a brief presentation by the mayor of the City of Leon Valley, the motion was made to remove the phrase "with flyovers" in the SH 16 (Bandera Road) project descriptions in the project list and to adopt the roadway component of the Metropolitan Transportation Plan. The motion carried unanimously.

Motion #2 Funded Transit Component

Councilwoman Debra Guerrero questioned Mr. John Milam, General Manager, VIA Metropolitan Transit, on two items 1) VIAtrans service improvements and 2) increasing the dollar amount contribution for infrastructure to the City of San Antonio. The planned communications improvements for the VIAtrans system were briefly described by Mr. Milam. These Automated Vehicle Loca-

tion (AVL) improvements will enable VIAtrans dispatch staff to know the location of the VIAtrans vans at all times in order to manage the fleet more effectively. This system is expected to be in place early next calendar year. Mr. Milam also stated that VIA and the City of San Antonio were beginning discussions regarding VIA's contributions to the City of San Antonio for street improvements. The motion was made to include the VIAtrans AVL description and VIA's contribution to street maintenance in the Plan text. Mr. Michael Martin asked that Bexar County and the suburban cities be included in the infrastructure discussions with VIA. The motion carried unanimously.

Motion #3 Bicycle/Pedestrian/Rideshare Component

The motion was made and seconded to adopt the bicycle, pedestrian, and rideshare components of the Metropolitan Transportation Plan. There was no discussion. The motion carried unanimously.

Motion #4 Toll Road Component

The motion was made and seconded to adopt the toll road component of the Metropolitan Transportation Plan as an option for further consideration, but not as an endorsement of the project. There was no discussion. The motion carried unanimously.

Motion #5 San Antonio-Austin Commuter Rail Component

The motion was made and seconded to adopt the San Antonio-Austin Commuter Rail component of the Metropolitan Transportation Plan as an option for further consideration, but not as an endorsement of the project. The Commuter Rail project will be listed on an illustrative list of projects in the Plan as there is currently not an identified funding source. The motion carried unanimously.

Motion #6 High Occupancy Vehicle Lane/Busway Component

The motion was made and seconded to adopt the High Occupancy Vehicle Lane/Busway component of the Metropolitan Transportation Plan as an option for further consideration. These projects will be listed on an illustrative list of projects in the Plan as there is currently not an identified funding source. The motion carried unanimously.

Motion #7 Light Rail Component

Mr. Bill Barker, Director of Planning at VIA Metropolitan Transit, made a presentation on VIA's System Plan effort. After much discussion, the motion was made and seconded to adopt the Advanced Transportation component, including a fixed guideway component. This motion does not constitute any

endorsement. The motion carried unanimously. These light rail projects will be listed on an illustrative list of projects in the Plan as there is currently not an identified funding source.

Motion #8 Metropolitan Transportation Plan

The motion was made and seconded to adopt the Metropolitan Transportation Plan. There was no discussion. The motion carried unanimously.

Metropolitan Transportation Plan Project List

Funding Category		Project Name		PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From		Limit To	
MPO Number		Project Description		Project Cost	
10A-Traf.Con.Dev.		Districtwide		Status:	TIP-2000
915 0 916		Varies		Proj Type:	Oper
HAW 3158.0	10A00	200 Traffic Signals (2000)			\$1,036,000
10A-Traf.Con.Dev.		Districtwide		Status:	TIP-2001
915 0 903		Varies		Proj Type:	Oper
H7AW 3063.0	10A01	Districtwide Traffic Control (2001)			\$1,036,000
10A-Traf.Con.Dev.		Districtwide		Status:	TIP-2002
915 0 920		Varies		Proj Type:	Oper
HAW 3181.0	10A02	Districtwide Traffic Control (2002)			\$1,036,000
10A-Traf.Con.Dev.		Districtwide		Status:	TIP-2003
915 0 904		Varies		Proj Type:	Oper
HAW 3200.0	10A03	Districtwide Traffic Control (2003)			\$1,727,333
10A-Traf.Con.Dev.		SH 218 (Pat Booker Rd)		Status:	TIP-2000
465 1 49		Village Oak Drive	FM 78	Proj Type:	Oper
H9NE 3157.0	10A00	Upgrade various traffic signals			\$1,400,000
10A-Traf.Con.Dev.		Various Locations		Status:	MTP
- - -		-		Proj Type:	Oper
HAW 9000.0	10A	2025 Lump Sum: Traffic Control Devices			\$29,864,667
Funding Category Sum					\$36,100,000
Funding Category Percent of Total					0.37%
10B-Rehab TMS		Districtwide		Status:	TIP-2001
915 0 905		Varies		Proj Type:	ITS/TMS
H9AW 3064.0	10B01	Districtwide Traffic Management (2001)			\$950,000
10B-Rehab TMS		Districtwide		Status:	TIP-2002
915 0 921		Varies		Proj Type:	ITS/TMS
HAW 3182.0	10B02	Districtwide Traffic Management (2002)			\$950,000
10B-Rehab TMS		Districtwide		Status:	TIP-2003
915 0 906		Varies		Proj Type:	ITS/TMS
HAW 3201.0	10B03	Districtwide Traffic Management (2003)			\$2,505,000
10B-Rehab TMS		Districtwide		Status:	TIP-2000
915 0 918		Varies		Proj Type:	ITS/TMS
HAW 3159.0	10B00	TMS Rehab (2000)			\$950,000
10B-Rehab TMS		FM 1346		Status:	TIP-2003
1437 1 28		FM 1516	Loop 1604	Proj Type:	Rehab
HSE 3204.0	14_03	Reconstruct roadway and add shoulders			\$2,757,300
10B-Rehab TMS		Various Locations		Status:	MTP
- - -		-		Proj Type:	ITS/TMS
HAW 9050.0	10B	2025 Lump Sum: Traffic Management Systems			\$44,787,700

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From	Limit To	
MPO Number		Project Description		Project Cost
Funding Category Sum				\$52,900,000
Funding Category Percent of Total				0.55%
11-St. Discr.		FM 471 (Grissom Rd)		Status: TIP-2000
849 1 35		0.99 KM SW of SH 16	0.57 KM SW of SH 16	Proj Type: Other
H NW 3086	11_01	Drainage revisions		\$176,100
11-St. Discr.		IH 10		Status: TIP-2000
- - -		at Ackerman	-	Proj Type: Oper
H2NE 3218.0	15_00	Install traffic signal		\$100,000
11-St. Discr.		IH 410		Status: TIP-2000
521 6 87		US 281 (S)	San Antonio River	Proj Type: Oper
H1SE 3160.0	1100	Ramp reversal and ramp additions		\$1,000,000
11-St. Discr.		Loop 1604		Status: TIP-2001
2452 2 61		FM 1535 (NW Military)	Bitters Rd.	Proj Type: Oper
H1NW 3207.0	11_01	Construct Salado Cr bridges & cont fr rd		\$1,760,200
11-St. Discr.		US 281		Status: TIP-2003
253 4 114		at Stone Oak Parkway	-	Proj Type: Interchange
H1NC 3203.0	11_03	Construct Interchange		\$8,650,000
11-St. Discr.		US 281		Status: TIP-2003
253 4 113		at Evans	-	Proj Type: Interchange
H1NC 3202.0	11_03	Construct Interchange		\$12,742,100
11-St. Discr.		Various Locations		Status: MTP
- - -		-	-	Proj Type: Lump Sum
HAW 9100.0	11	2025 Lump Sum: District Discretionary		\$216,271,600
Funding Category Sum				\$240,700,000
Funding Category Percent of Total				2.49%
13A-State Mobility		Various Locations		Status: MTP
- - -		-	-	Proj Type: Mobility
HAW 9150.0	13A	2025 Lump Sum: State Mobility		\$59,600,000
Funding Category Sum				\$59,600,000
Funding Category Percent of Total				0.62%
13D-USP		24th		Status: TIP-2001
915 12 347		Elmendorf Lake	El Paso	Proj Type: Rehab
H3N 3103.0	13D01	Reconstruct street and provide sidewalk		\$572,724
13D-USP		Ackerman		Status: TIP-2002
915 12 261		IH 10	Dietrich	Proj Type: Rehab
H3NE 2034	13D00	Reconstruct with 48' concrete pavement with additional lanes at IH 10		\$475,850
13D-USP		Ackerman Rd.		Status: TIP-2000
915 12 261		North City Limits	Binz-Engleman Road	Proj Type: Maint
H7NE 851.1	3E98	Base repair, planing and asphaltic overlay		\$239,000

Funding Category		Project Name		PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From		Limit To	
MPO Number		Project Description		Project Cost	
13D-USP		Alamo		Status:	TIP-2000
915 12 234		Durango	Cedar	Proj Type:	Rehab
H3DT 1014	3E00	Reconstruct w/ curbs, sidewalks, & traffic control			\$1,074,475
13D-USP		Evers		Status:	TIP-2000
915 12 320		Huebner Road	Forest Meadow	Proj Type:	Rehab
H3N 3060	3E00	Reconstruct existing street			\$511,880
13D-USP		Flores, South		Status:	TIP-2000
915 12 239		San Pedro Creek	Franciscan	Proj Type:	Rehab
H3SW 1022.3	3E00	Reconstruct roadway			\$493,329
13D-USP		Flores, South		Status:	TIP-2000
915 12 237		Durango	Alamo	Proj Type:	Rehab
H3DT 1022.1	3E00	Reconstruct roadway			\$785,354
13D-USP		Flores, South		Status:	TIP-2000
915 12 238		Alamo	San Pedro Creek	Proj Type:	Rehab
H3DT 1022.2	3E00	Reconstruct roadway			\$719,852
13D-USP		Huebner Road		Status:	TIP-2000
915 12 321		Evers Road	East of City Limit (Redbird	Proj Type:	Rehab
H3N 3061	3E00	Reconstruct existing street from 44' to 55'. Add turning lane for saf			\$532,343
13D-USP		New Braunfels, N		Status:	TIP-2000
915 12 242		IH-35	Grayson	Proj Type:	Rehab
H3NE 1036.0	13D00	Reconstruct roadway			\$294,365
13D-USP		New Braunfels, S.		Status:	TIP-2000
915 12 346		Steves	Fair	Proj Type:	Rehab
H3SE 3104.0	13D01	Reconstruct street			\$468,235
13D-USP		Rittiman		Status:	TIP-2000
915 12 262		Austin Hwy (Loop 368)	Harry Wurzbach	Proj Type:	Maint
H3NE 2035	13	Base repair, pavement milling and			\$1,130,971
13D-USP		Various Locations		Status:	MTP
- - -		-	-	Proj Type:	Lump Sum
HAW 9200	13D	2025 Lump Sum: Urban Street Program			\$71,101,622
Funding Category Sum					\$78,400,000
Funding Category Percent of Total					0.81%
15-Fed Demo		36th St.		Status:	TIP-2002
915 12 322		US 90	Growdon	Proj Type:	Capacity-Ot
H1SW 3031	4C02	Widen roadway to 6 lanes with curbs and sidewalks			\$3,505,026
15-Fed Demo		Multimodal Downtown Project		Status:	TIP-2000
915 12 900		-	-	Proj Type:	Other
H15D 3070	15_00	MIS for Multimodal Downtown Improvement Project			\$938,000

Funding Category		Project Name		PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From		Limit To	
MPO Number		Project Description		Project Cost	
15-Fed Demo		San Antonio River		Status:	TIP-2002
915 12 901		Guenther St	Eagleland	Proj Type:	Enhancemen
H15D 3067	15_02	Extension of SA Riverwalk w/Hike-Bike path to Mission Trails			\$2,344,000
15-Fed Demo		US 90		Status:	TIP-2001
24 8 110		At 36th Street intersection	-	Proj Type:	Rehab
H15S 3082	15_01	Reconstruction intersection			\$1,460,287
15-Fed Demo		Various Locations		Status:	MTP
- - -		-		Proj Type:	Lump Sum
HAW 9250	15	2025 Lump Sum: Federal Demonstration Projects			\$41,352,687
Funding Category Sum					\$49,600,000
Funding Category Percent of Total					0.51%
16-Misc		ADA Projects		Status:	TIP-2000
915 0 45		San Antonio Districtwide	-	Proj Type:	Pedes
H5AW 922.1	1600	Remaining ADA Projects			\$211,200
16-Misc		Districtwide		Status:	TIP-2001
915 0 907		Varies	-	Proj Type:	Other
H7AW 3065.0	1601	Districtwide Landscape (2001)			\$365,400
16-Misc		FM 1516		Status:	TIP-2000
1477 1 900		@ West Saltrillo Creek	-	Proj Type:	Maint
	3170 16F	Repair erosion and clean culverts			\$10,000
16-Misc		FM 2696		Status:	TIP-2000
2708 1 900		Wilderness Oak Street	South of Cibolo Creek	Proj Type:	Maint
H NC 3171	16F00	Roadbed, erosion and guardrail repair			\$201,067
16-Misc		FM 471		Status:	TIP-2000
849 1 904		@ Leon Creek	-	Proj Type:	Maint
H NW 3169	16F00	Remove gravel wash-off			\$180,000
16-Misc		IH 10 on South Frontage Road		Status:	TIP-2000
25 2 910		Woman Hollering Creek	-	Proj Type:	Maint
H NE 3166	16F00	Remove and regrade channel			\$10,000
16-Misc		IH 10 on South Frontage Road		Status:	TIP-2000
25 2 901		0.4 miles	Pfeil Road	Proj Type:	Maint
H NE 3165	16F00	Repair riprap channel			\$110,000
16-Misc		IH 35 North on West Frontage Road		Status:	TIP-2000
17 10 910		Holbrook	Walzem	Proj Type:	Maint
H NE 3164	16F00	Repair riprap and clean out wash-off			\$1,500,000
16-Misc		IH 410		Status:	TIP-2000
521 4 901		@ Perrin-Beitel Creek	-	Proj Type:	Maint
H NE 3168	16F00	Repair erosion and remove debris			\$45,000

Funding Category		Project Name		PROJECT LIST ADOPTED ON 12/6/9		
CSJ		Limit From		Limit To		
MPO Number		Project Description				Project Cost
16-Misc		SH 218 (Pat Booker Rd)		Status:	TIP-2000	
465 1 51		At SPTC in Universal City		-	Proj Type: Maint	
H NE 1091	16 00	Install concrete railroad crossings			\$44,000	
16-Misc		US 281		Status:	TIP-2000	
73 8 906		@ Jones Maltsberger		-	Proj Type: Maint	
H NC 3167	16F00	Repair riprap			\$30,000	
16-Misc		Various Locations		Status:	MTP	
- - -		-		-	Proj Type: Maint	
HAW 9300.0	16	2025 Lump Sum: Landscape, rest areas, RR Maint, emergencies, etc.			\$73,014,533	
Funding Category Sum					\$75,721,200	
Funding Category Percent of Total					0.78%	
16C-Other Funds		Districtwide		Status:	TIP-2002	
915 0 908		Varies		-	Proj Type: Other	
HAW 3183.0	16C02	Districtwide Landscape (2002)			\$390,000	
16C-Other Funds		Districtwide		Status:	TIP-2003	
915 0 909		Varies		-	Proj Type: Other	
HAW 3206.0	16C03	Districtwide Landscape (2003)			\$390,000	
16C-Other Funds		Districtwide		Status:	TIP-2000	
915 0 912		Varies		-	Proj Type: Other	
HAW 3163.0	16C00	Landscape (2000)			\$365,400	
16C-Other Funds		IH 35 North		Status:	TIP-2000	
16 7 115		S. Frontage Road from Phoenix		Olympia Parkway	Proj Type: Oper	
HNE 3161.0	16C00	Reconstruct frontage road			\$357,800	
16C-Other Funds		Loop 345		Status:	TIP-2000	
72 8 105		Cinnamon Cr @ USAA Blvd		-	Proj Type: Oper	
H NW 3162	16C	Add dual left turn lanes at USAA entrances			\$175,600	
Funding Category Sum					\$1,678,800	
Funding Category Percent of Total					0.02%	
17-PASS		Various Locations		Status:	MTP	
- - -		-		-	Proj Type: Lump Sum	
HAW 9400	17	2025 Lump Sum: Rehab, Mobility			\$4,296,500	
17-PASS		Wurzbach Rd		Status:	TIP-2001	
915 12 131		0.6 Mi East of Ingram Rd		Leon Valley WCL	Proj Type: Capacity-Ot	
H17N 3072	17_00	Reconstruct 2 lane to 4 lane w/continuous left turn lane			\$1,503,500	
Funding Category Sum					\$5,800,000	
Funding Category Percent of Total					0.06%	
2-IM		Districtwide		Status:	TIP-2003	
915 0 911		Varies		-	Proj Type: Maint	
HAW 3189.0	2_03	Districtwide Interstate Maint (2003)			\$10,000,000	

Funding Category		Project Name		PROJECT LIST ADOPTED ON 12/6/9		
CSJ		Limit From		Limit To		
MPO Number		Project Description				Project Cost
2-IM		IH 35				Status: TIP-2002
17 10 213		@ Fratt Interchange				Proj Type: Maint
H7BE 3174	2_02	Asphaltic Overlay				\$1,556,500
2-IM		IH 35				Status: TIP-2002
17 10 211		0.35KM W of US 281		0.21 KM E of US 281		Proj Type: Maint
H7NE 3172	2_02	Planing & ACP Overlay				\$163,100
2-IM		IH 35				Status: TIP-2002
17 10 212		1.5 KM S of FM 1976		0.4 KM S of FM 1976		Proj Type: Rehab
H7NE 3173	2_02	Reconstruct existing roadway				\$418,400
2-IM		IH 35 North				Status: TIP-2001
17 10 203		Holbrook		FM 1976 (Walzem Rd)		Proj Type: Oper
H2NE 2081	2 98	Add Auxiliary Lanes & Ramp Transitions				\$154,500
2-IM		IH 35 North				Status: TIP-2003
16 7 900		0.189 Mi North of Crestway		0.189 Mi North of Toepper		Proj Type: Maint
H7NE 3184	2_03	Seal coat and overlay frontage road				\$810,000
2-IM		IH 35 North				Status: TIP-2003
17 10 901		0.9 Mi South of FM 1976		0.2 Mi South of FM 1976		Proj Type: Rehab
H7NE 3185	2_03	Reconstruct existing frontage road				\$420,000
2-IM		IH 35 South				Status: TIP-2000
17 9 79		Loop 13 (S.W. Military Dr)		US 90		Proj Type: Maint
H7SE 1086	2 00	Replace bridge rail				\$189,500
2-IM		IH 35 South				Status: TIP-2000
17 9 78		Loop 13 (S.W. Military Dr)		US 90		Proj Type: Maint
H7SE 1085	2 00	Replace metal median barrier				\$818,500
2-IM		IH 37				Status: TIP-2002
73 9 24		SPRR		Loop 1604		Proj Type: Maint
H7SE 3176	2_02	Refurbish signs				\$76,900
2-IM		IH 37				Status: TIP-2002
73 8 134		Fair Ave.		SPRR		Proj Type: Maint
H7SE 3175	2_02	Refurbish signs				\$123,100
2-IM		IH 37				Status: TIP-2000
73 9 23		0.9 KM N of Loop 1604		Atascosa CL		Proj Type: Maint
H7SE 2093	2 00	Planing, asphaltic overlay, texturing shoulders				\$679,700
2-IM		IH 410				Status: TIP-2000
521 5 111		At various locations				Proj Type: Maint
H7SE 1087	2 00	Signing (Mission Trails)				\$500,000
2-IM		IH 410				Status: TIP-2001
521 6 84		Salado Creek		0.2 Mi N of FM 1346		Proj Type: Maint
H7SE 3028	2 01	Planing, sealcoat and asphaltic overlay				\$1,455,200

Funding Category		Project Name		PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From		Limit To	
MPO Number		Project Description		Project Cost	
2-IM		IH 410		Status:	TIP-2003
521 4 902		On westbound frontage road @	-	Proj Type:	Oper
H2N 3186	2_03	Construct right turn lane			\$100,000
2-IM		IH 410		Status:	TIP-2003
521 4 904		FM 3487 (Culebra)	SH 16	Proj Type:	Maint
H2N 3187	2_03	Planing, seal coat, asphaltic overlay & pavement markings			\$544,300
2-IM		IH 410		Status:	TIP-2003
521 4 905		NB and SB Frontage road from	US 90 to SH 151	Proj Type:	Maint
H2N 3188	2_03	Planing, seal coat, asphaltic overlay & pavement markings			\$547,500
2-IM		IH 410		Status:	TIP-2002
521 5 116		2.6 Mi S of Valley Hi Dr, N	US 90	Proj Type:	Maint
H7SW 3178	2_02	Refurbish signs			\$56,500
2-IM		IH 410		Status:	TIP-2001
521 6 72		IH 35 (N), (S)	2.092 KM N of SP 117 (Sou	Proj Type:	Maint
H7SE 3027	2_01	Refurbish guide signs			\$533,900
2-IM		IH 410		Status:	TIP-2001
521 6 62		Southcross Blvd, S & W	0.2 Mi W of US 281	Proj Type:	Maint
H7SE 3026	2_01	Refurbish guide signs			\$101,000
2-IM		IH 410		Status:	TIP-2001
521 5 96		0.2 Mi W. of US 281, W	0.2 Mi S of Valley Hi Drive	Proj Type:	Maint
H7SW 3025	2_01	Refurbish guide signs			\$640,222
2-IM		IH 410		Status:	TIP-2002
521 4 243		US 90	Callaghan	Proj Type:	Maint
H7SW 3177	2_02	Refurbish signs			\$143,500
2-IM		TAS Replacement		Status:	TIP-2000
915 0 60		Districtwide	-	Proj Type:	Maint
H4AW 986.0	200	Replace guardrail terminal anchor sections			\$2,000,000
2-IM		VA-Districtwide		Status:	TIP-2000
915 0 60		-	-	Proj Type:	Maint
H4AW 986	2_00	Replace Guardrail Terminal Anchor Sections Districtwide			\$2,000,000
2-IM		Varions Locations		Status:	TIP-2001
- - -		Districtwide	-	Proj Type:	Maint
AW 3219.0	2_01	Signing, delineation, pavement markings (FY 2001)			\$500,000
2-IM		Various Locations		Status:	MTP
- - -		-	-	Proj Type:	Maint
HAW 9450	2	2025 Lump Sum: Districtwide Interstate Maintenance			\$193,567,678
2-IM		Various Locations		Status:	TIP-2003
- - -		Districtwide	-	Proj Type:	Maint
AW 3221.0	2_03	Signing, delineation, pavement markings (FY 2003)			\$500,000

Funding Category	Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ	Limit From	Limit To	
MPO Number	Project Description	Project Cost	
2-IM	Various Locations	Status:	TIP-2000
- - -	Districtwide	Proj Type:	Maint
AW 3217.0 2_00	Signing, delineation & pavement markings (FY 2000)		\$500,000
2-IM	Various Locations	Status:	TIP-2002
- - -	Districtwide	Proj Type:	Maint
AW 3220.0 2_02	Signing, delineation, pavement markings (FY 2002)		\$500,000
Funding Category Sum			\$219,600,000
Funding Category Percent of Total			2.27%
3A - NHS Mobility	IH 10	Status:	TIP-2002
72 12 155	0.2 Mi. S of Callaghan	0.2 Mi S of N. Crossroads	Proj Type: Interchange
H1N1W 703 3A02	Reconstruct IH 10/IH 410 Interchange and TMS		\$9,200,000
3A - NHS Mobility	IH 10	Status:	MTP
- - -	FM 3351	2.25 KM S of Leon Springs	Proj Type: Capacity-Fw
3006 3A	Upgrade to 8 lane freeway with 4 lane frontage road and TMS		\$10,714,286
3A - NHS Mobility	IH 10 East	Status:	MTP
- - -	IH 410	Guadalupe CL	Proj Type: Capacity-Fw
9519 3A	Widen to eight lane freeway		\$84,107,000
3A - NHS Mobility	IH 10 East/IH 410 Interchange	Status:	MTP
- - -	-	-	Proj Type: Interchange
9514 3A	Reconstruct Interchange		\$120,000,000
3A - NHS Mobility	IH 10 East/Loop 1604 Interchange	Status:	MTP
- - -	-	-	Proj Type: Interchange
9515 3A	Reconstruct Interchange		\$125,000,000
3A - NHS Mobility	IH 10 West	Status:	MTP
- - -	2.25 KM S of Leon Springs, S	2.41 KM N of Loop 1604	Proj Type: Capacity-Fw
3007 3A	Upgrade to 8 lane freeway with 4 lane frontage road and TMS		\$15,000,000
3A - NHS Mobility	IH 10 West/Loop 1604 Interchange	Status:	MTP
- - -	-	-	Proj Type: Interchange
9513 3A	Reconstruct Interchange		\$125,000,000
3A - NHS Mobility	IH 10/IH 410	Status:	MTP
- - -	At NB IH 10 Mainlanes	-	Proj Type: Interchange
H1N1W 703.5 3A	Construct Interchange Phase 5		\$9,200,000
3A - NHS Mobility	IH 10/IH 410	Status:	TIP-2002
72 12 159	0.2 Mi. S. of Callaghan Rd.	0.2 Mi S. of N. Crossroads	Proj Type: Interchange
H1N1W 703.2 3A01	Construct Interchange & TMS (Phase 2)		\$27,900,000
3A - NHS Mobility	IH 10/IH 410	Status:	TIP-2002
72 12 168	At SB IH 10 Mainlanes	-	Proj Type: Interchange
H1N1W 703.4 3A	Construct Interchange Phase 4		\$9,700,000

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9		
CSJ		Limit From	Limit To		
MPO Number		Project Description			Project Cost
3A - NHS Mobility		IH 10/IH 410			Status: TIP-2002
72 12 169		EB IH 410 to NB IH 10 and	WB IH 410 to NB & SB IH		Proj Type: Interchange
H1NW 703.3	3A01	Construct Interchange Phase 3			\$19,600,000
3A - NHS Mobility		IH 10W			Status: MTP
- - -		FM 3351	Kendall CL		Proj Type: Capacity-Fw
H1NW 9527	3A	Widen existing freeway from 4 to 8 lanes.			\$26,000,000
3A - NHS Mobility		IH 35			Status: MTP
- - -		@ IH 410, SW of San Antonio	-		Proj Type: Capacity-Fw
H1NE 9526	3A	Widen existing freeway from 4 to 6 lanes.			\$100,000,000
3A - NHS Mobility		IH 35 North			Status: MTP
17 10 206		IH 35/IH 410 Interchange (Fra	1.6 km N of FM 1976 (Walz		Proj Type: Capacity-Fw
	3A				\$133,600,000
3A - NHS Mobility		IH 35 North			Status: MTP
17 10 168		Holbrook	Walzem Road		Proj Type: Capacity-Fw
	3A				\$123,600,000
3A - NHS Mobility		IH 35 North			Status: MTP
- - -		1.6 KM N of FM 1976	Loop 1604		Proj Type: Capacity-Fw
H1NE 9524	3A	Widen existing freeway from 8 to 10 lanes			\$49,700,000
3A - NHS Mobility		IH 35 North			Status: MTP
17 10 180		US 281/IH 37 (Downtown)	Holbrook		Proj Type: Capacity-Fw
	3A				\$118,400,000
3A - NHS Mobility		IH 35 South			Status: MTP
- - -		IH 410	Atascosa CL		Proj Type: Capacity-Fw
9522	3A	Widen to six lane freeway			\$88,765,000
3A - NHS Mobility		IH 35 South			Status: MTP
- - -		Loop 13	IH 410		Proj Type: Capacity-Fw
3008	3A	Upgrade to 8 lane freeway and TMS			\$42,940,000
3A - NHS Mobility		IH 35 South			Status: MTP
- - -		US 90	S. to Loop 13		Proj Type: Capacity-Fw
H1SW 1027	3A	Upgrade to 8 lane freeway and TMS			\$22,760,000
3A - NHS Mobility		IH 37			Status: MTP
- - -		0.5 Mile North of Southton Rd	Atascosa CL		Proj Type: Capacity-Fw
H1SE 9521	3A	Widen existing freeway from 4 to 6 lanes			\$21,060,000
3A - NHS Mobility		IH 37			Status: MTP
- - -		0.5 Mile North of Southton Roa	IH 410		Proj Type: Capacity-Fw
9520	3A	Widen existing freeway from 4 to 6 lanes			\$4,940,000
3A - NHS Mobility		IH 410			Status: MTP
- - -		@ SH 16 (Bandera)	-		Proj Type: Oper
H1NW 2007	3A	Construct Interchange and TMS			\$27,409,700

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From	Limit To	
MPO Number		Project Description		Project Cost
3A - NHS Mobility		IH 410		Status: MTP
- - -		FM 2536 (Old Pearsall)	US 90	Proj Type: Capacity-Fw
HISW 9509	3A	Widen existing freeway from 4 to 6 lanes		\$17,075,000
3A - NHS Mobility		IH 410		Status: TIP-2003
521 4 190		Ingram	Callaghan	Proj Type: Capacity-Fw
HINW 2006	3A	Upgrade to 10 lane freeway and TMS		\$27,140,633
3A - NHS Mobility		IH 410		Status: TIP-2001
- - -		McCullough	US 281	Proj Type: Rehab
HINC 3149.0	3A03	Reconstruct and widen bridges at McCullough & US 281		\$12,680,000
3A - NHS Mobility		IH 410		Status: TIP-2003
521 4 210		McCullough Ave.	Nacogdoches	Proj Type: Capacity-Fw
HINE 2002	3A	Upgrade to 10 lane freeway		\$32,500,000
3A - NHS Mobility		IH 410		Status: MTP
- - -		Nacogdoches Road	Loop 368 (Austin Hwy)	Proj Type: Capacity-Fw
HINE 2001	3A	Upgrade to 10 lane freeway and TMS		\$32,534,368
3A - NHS Mobility		IH 410		Status: TIP-2000
521 4 216		Callaghan Road	Fredericksburg Road	Proj Type: Capacity-Fw
HINW 2005	3A00	Upgrade to 10 lane freeway with TMS and utilities		\$16,840,100
3A - NHS Mobility		IH 410		Status: MTP
- - -		US 90	Culebra Road	Proj Type: Capacity-Fw
3009	3A	Upgrade to 8 lane freeway with 4 lane frontage road and TMS		\$15,775,000
3A - NHS Mobility		IH 410		Status: MTP
- - -		IH 35 (South)	FM 2536	Proj Type: Capacity-Fw
HISW 9511	3A	Widen existing freeway from 4 to 6 lanes		\$7,452,500
3A - NHS Mobility		IH 410		Status: TIP-2002
521 4 189		Blanco Road	McCullough	Proj Type: Capacity-Fw
3066	3A02	Upgrade to 10 lane freeway and TMS		\$32,000,000
3A - NHS Mobility		IH 410		Status: TIP-2001
521 4 236		Honeysuckle Lane	Blanco Rd	Proj Type: Capacity-Fw
HINW 2003	3A01	Upgrade to 10 lane freeway and TMS		\$22,500,000
3A - NHS Mobility		IH 410		Status: TIP-2000
521 4 221		Jackson-Keller Road	Honeysuckle Lane	Proj Type: Capacity-Fw
HINW 2004	3A00	Upgrade to 10 lane freeway with TMS and utilities		\$29,300,000
3A - NHS Mobility		IH 410		Status: TIP-2003
521 4 209		Culebra Rd	Ingram Rd	Proj Type: Capacity-Fw
HINW 2008	3A	Upgrade to 8 lane freeway and TMS		\$8,483,908
3A - NHS Mobility		IH 410 (Northeast)		Status: MTP
- - -		IH 10 (East), N	IH 35 (North)	Proj Type: Capacity-Fw
HINE 9508	3A	Widen existing freeway from 4 to 6 lanes		\$41,100,000

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9		
CSJ		Limit From	Limit To		
MPO Number		Project Description			Project Cost
3A - NHS Mobility		IH 410 SW			Status: MTP
- - -		@US 90 West	(Interchange)		Proj Type: Interchange
H1SW 9512	3A	Interchange Improvements			\$125,000,000
3A - NHS Mobility		IH 410/US 281			Status: MTP
- - -		Phase 3 of 5	-		Proj Type: Interchange
H1NW 715.7	3A	Construct Interchange			\$37,000,000
3A - NHS Mobility		IH 410/US 281			Status: MTP
- - -		Phase 5 of 5	-		Proj Type: Interchange
HINE 715.8	3A	Construct Interchange, connectors, and TSM			\$6,300,000
3A - NHS Mobility		IH 410/US 281			Status: TIP-2001
521 4 223		Phase 2 of 5	-		Proj Type: Interchange
HINE 715.6	3A	Construct Interchange			\$51,500,000
3A - NHS Mobility		IH 410/US 281			Status: MTP
- - -		Phase 4 of 5	-		Proj Type: Interchange
9531	3A	Construct Interchange			\$6,300,000
3A - NHS Mobility		Loop 1604			Status: MTP
- - -		1.93 KM S of SH 16 S	0.64 KM N of Military Dr		Proj Type: Capacity-Fw
9506	3A	Upgrade existing roadway to 4 lane divided freeway			\$26,267,300
3A - NHS Mobility		Loop 1604			Status: MTP
- - -		@US 90 West	(Interchange)		Proj Type: Interchange
H1SW 9510	3A	Interchange Improvements			\$125,000,000
3A - NHS Mobility		Loop 1604			Status: TIP-2001
2452 1 37		1.1 KM N. of FM 471 (Culebra Rd	0.6 KM North of Military D		Proj Type: Capacity-Fre
H1NW 1090	3A00	Upgrade to 4 lane divided by adding			\$11,232,901
3A - NHS Mobility		Loop 1604			Status: TIP-2001
2452 1 36		0.6 KM North of Military Dr	1.3 KM North of US 90		Proj Type: Capacity-Ot
H1NW 1089	3A00	Upgrade to 4 lane divided by adding			\$10,000,600
3A - NHS Mobility		Loop 1604			Status: MTP
- - -		IH 10 West	IH 35 North		Proj Type: Capacity-Fw
H1NW 9507	3A	Widen existing freeway from 4 to 6 lanes			\$39,528,000
3A - NHS Mobility		Loop 1604			Status: MTP
- - -		SH 218 S	Kitty Hawk		Proj Type: Capacity-Fw
9501	3A	Upgrade to four lane freeway w/frontage roads			\$3,194,500
3A - NHS Mobility		Loop 1604			Status: MTP
- - -		IH 10 East	US 90 West		Proj Type: Capacity-Ot
H1SE 9503	3A	Widen from 2 lanes to 4 lanes divided			\$241,620,000
3A - NHS Mobility		Loop 1604			Status: MTP
- - -		Graytown Rd, N	Kitty Hawk		Proj Type: Capacity-Fw
HINE 9502	3A	Widen existing freeway from 2 to 4 lanes			\$18,760,200

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9		
CSJ		Limit From	Limit To		
MPO Number		Project Description			Project Cost
3A - NHS Mobility		Loop 1604			Status: MTP
- - -		IH 10 (East), N	Graytown Rd		Proj Type: Capacity-Fw
HISE 9504	3A	Widen existing freeway from 2 to 4 lanes			\$13,758,500
3A - NHS Mobility		Loop 1604			Status: MTP
- - -		0.6 KM N of Military Dr	1.4 KM S of US 90		Proj Type: Capacity-Fw
9505	3A	Upgrade to four lane freeway w/frontage roads			\$33,317,000
3A - NHS Mobility		O'Connor			Status: TIP-2000
8000 15 13		Crosswinds	IH 35		Proj Type: Capacity-Ot
HINE 3208.0	3A00	Construct 4 lane divided roadway			\$2,171,000
3A - NHS Mobility		SH 151			Status: MTP
- - -		At Loop 1604	-		Proj Type: Interchange
3010	3A	Construct Interchange			\$4,200,000
3A - NHS Mobility		SH 151			Status: MTP
- - -		At IH 410	-		Proj Type: Capacity-Ot
3011	3A	Construct Interchange			\$21,071,400
3A - NHS Mobility		SH 151			Status: NEW MTP
- - -		Loop 1604	Westover Hills		Proj Type: Capacity-Ot
		Upgrade existing 4 lane to 6 lane			
3A - NHS Mobility		SH 16			Status: MTP
- - -		IH 410	FM 1517		Proj Type: Capacity-Ot
3015	3A	Upgrade to 6 and 8 lanes with flyovers			\$34,474,700
3A - NHS Mobility		SH 16			Status: MTP
- - -		FM 1517	Loop 1604		Proj Type: Capacity-Ot
3014	3A	Widen to 6 and 8 lanes with flyovers			\$19,690,000
3A - NHS Mobility		SH 211			Status: TIP-2003
3544 6 1		Bexar CL, 2.9 Mi N of FM 1957,	Bexar CL, 4.5 Mi N of FM 1		Proj Type: Capacity-Ot
3155	3A	Construct two lane rural highway on new location			\$756,845
3A - NHS Mobility		SH 211			Status: TIP-2003
3544 3 2		Bexar CL, 2.0 Mi S of FM 471,N	FM 471 (Culebra)		Proj Type: Capacity-Ot
3152	3A	Construct two lane rural highway on new location			\$962,880
3A - NHS Mobility		SH 211			Status: TIP-2003
3544 4 2		FM 1957 (Potranco Road), N 2.9	Medina CL		Proj Type: Capacity-Ot
3153	3A	Construct two lane rural highway on new location			\$2,147,750
3A - NHS Mobility		SH 211			Status: TIP-2003
3544 5 1		Medina CL, 4.5 Mi N of FM 1957	Medina CL, 2.0 Mi S of FM		Proj Type: Capacity-Ot
3154	3A	Construct two lane rural highway on new location			\$524,377
3A - NHS Mobility		SH 218 (Pat Booker Rd)			Status: MTP
- - -		At FM 78 (SPRR)	-		Proj Type: Interchange
3016	3A	Construct Interchange at Randolph AFB			\$15,600,000

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9		
CSJ		Limit From	Limit To		
MPO Number		Project Description			Project Cost
3A - NHS Mobility		SH 218 (Pat Booker Rd)			Status: MTP
- - -		Loop 1604	FM 78		Proj Type: Capacity-Ot
HINE 1045	3B	Upgrade to 6 lanes with con't left turn lanes			\$9,300,000
3A - NHS Mobility		Spur 371 (General Hudnell)			Status: MTP
- - -		US 90	vic of Frio City/Cupples		Proj Type: Capacity-Ot
3017	3A	Widen to 6 lanes; Construct interchange at US 90 and at			\$50,600,000
3A - NHS Mobility		Spur 371 (Kelly Parkway)			Status: MTP
- - -		vic of Frio City/Cupples	SH 16 S		Proj Type: Capacity-Ot
3018	3A	Construct new four lane divided arterial on new location			\$91,800,000
3A - NHS Mobility		Spur 421 (Bandera Rd)			Status: MTP
- - -		IH 410	Evers		Proj Type: Capacity-Ot
HINW 117.2	3A98	Widen to 6 lane divided urban with			\$7,357,977
3A - NHS Mobility		Spur 421 (Bandera Rd)			Status: MTP
- - -		Evers Rd.	Cincinnati Ave		Proj Type: Capacity-Ot
HINW 117.3	3A98	Widen to 6 lanes with a continuous			\$12,886,800
3A - NHS Mobility		Spur 421 (Bandera Rd)			Status: MTP
- - -		Cincinnati Avenue	IH 10		Proj Type: Capacity-Ot
HINW 117.4	3A	Widen to 6 lane divided urban			\$10,250,601
3A - NHS Mobility		US 281			Status: MTP
- - -		2.5 Mi N of Loop 1604	Comal CL		Proj Type: Capacity-Fw
HINC 9533	3A	Widen existing freeway from 4 to 8 lanes w/frontage roads			\$48,222,125
3A - NHS Mobility		US 281/Loop 1604 Interchange			Status: MTP
- - -		-	-		Proj Type: Interchange
9534	3A	Construct Interchange			\$125,000,000
3A - NHS Mobility		US 90			Status: MTP
- - -		36th Street	I-35 South		Proj Type: Capacity-Ot
3021	3A	Construct frontage roads			\$25,690,000
3A - NHS Mobility		US 90			Status: MTP
- - -		At Loop 13 (SW Military)	-		Proj Type: Oper
3020	3A	Reconstruct Intersection			\$9,880,000
3A - NHS Mobility		US 90W			Status: MTP
- - -		@Loop 1604	-		Proj Type: Interchange
H1SW 9529	3A	Reconstruct Interchange			\$125,000,000
3A - NHS Mobility		US 90W			Status: MTP
- - -		SH 211	0.8 Mile West of IH 410		Proj Type: Capacity-Fw
H1SW 9536	3A	Widen existing freeway from 4 to 6 lanes			\$6,400,000
3A - NHS Mobility		US 90W			Status: MTP
- - -		0.8 Mile West of IH 410	IH 410		Proj Type: Capacity-Fw
H1SW 9535	3A	Widen existing freeway from 4 to 6 lanes			\$700,000

Funding Category		Project Name		PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From		Limit To	
MPO Number		Project Description		Project Cost	
3A - NHS Mobility		Various Locations		Status:	MTP
- - -		-		Proj Type:	Lump Sum
HAW 9500	3A	2025 Lump Sum: Mobility			\$274,049,049
3A - NHS Mobility		Wurzbach Parkway		Status:	TIP-2003
915 12 224		FM 2696	West Ave	Proj Type:	Capacity-Ot
H1NC 3150.0	3A03	Construct new four lane roadway on new alignment			\$11,296,000
3A - NHS Mobility		Wurzbach Parkway		Status:	MTP
- - -		West Ave	US 281	Proj Type:	Capacity-Ot
9516	3A	Construct new four lane roadway on new alignment			\$5,711,000
3A - NHS Mobility		Wurzbach Parkway		Status:	MTP
- - -		US 281	Jones Maltsberger	Proj Type:	Capacity-Ot
9517	3A	Construct new four lane roadway on new alignment			\$14,701,000
Funding Category Sum					\$3,289,200,000
Funding Category Percent of Total					34.07%
3C - NHS Rehab		US 90		Status:	TIP-2003
24 8 900		IH 35	2.38 Mi West of IH 35	Proj Type:	Maint
3191	3C	ACP Overlay and pavement markings			\$1,674,300
3C - NHS Rehab		Various Locations		Status:	MTP
- - -		-		Proj Type:	Lump Sum
HAW 9550	3C	2025 Lump Sum: Rehab, Operations, Safety Projects			\$55,225,700
Funding Category Sum					\$56,900,000
Funding Category Percent of Total					0.59%
3D - NHS TMS		IH 35		Status:	TIP-2003
16 7 108		Guadalupe CL NE	1.77 KM N of FM 1976 (Fra	Proj Type:	ITS/TMS
3192	3D	Traffic Management System			\$6,646,000
3D - NHS TMS		IH 35 North		Status:	TIP-2000
17 10 195		1.77 KM N. of FM 1976 (Fratt I	FM 1976 (Walzem)	Proj Type:	ITS/TMS
H9NE 1055	3	Traffic Management System			\$1,120,100
3D - NHS TMS		IH 35 South		Status:	MTP
- - -		Southcross	Spur 422	Proj Type:	ITS/TMS
9604	3D	Traffic Management System			\$2,658,000
3D - NHS TMS		IH 37		Status:	TIP-2001
73 8 122		Loop 13	1.3 Mi S. of US 181	Proj Type:	ITS/TMS
H9SE 3029	30	Traffic Management System			\$4,784,000
3D - NHS TMS		IH 410		Status:	MTP
- - -		IH 10 East	IH 35 (North)	Proj Type:	ITS/TMS
9601	3D	Traffic Management System			\$5,157,000
3D - NHS TMS		IH 410		Status:	TIP-2003
521 5 115		Valley Hi Drive	0.24 KM North of US 90	Proj Type:	ITS/TMS
H9SW 3151	3D03	Traffic Management System			\$1,260,000

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Funding Category	Project Name	Limit From	Limit To	Project Cost
CSJ				
MPO Number	Project Description			
3D - NHS TMS	IH 410			Status: TIP-2002
521 4 233	0.24 KM N of US 90	Culebra Rd		Proj Type: ITS/TMS
H9N 1081 3E99	Install Traffic Management System			\$3,800,000
3D - NHS TMS	IH 410			Status: MTP
- - -	IH 10	IH 35		Proj Type: ITS/TMS
9602 3D	Traffic Management System			\$1,645,400
3D - NHS TMS	Loop 1604			Status: TIP-2001
2452 2 59	0.8 KM W of Babcock Road	SH 16 (N)		Proj Type: ITS/TMS
H9N 3030 30	Traffic Management System			\$2,930,000
3D - NHS TMS	Loop 1604			Status: MTP
- - -	Bitters	US 281		Proj Type: ITS/TMS
9603 3D	Traffic Management System			\$366,000
3D - NHS TMS	Loop 1604			Status: MTP
- - -	3.21 KM E. of US 281 N.	1.61 KM N. of FM 2252		Proj Type: ITS/TMS
H9NE 1082 3E99	Install Traffic Management System			\$3,440,000
3D - NHS TMS	Various Locations			Status: MTP
- - -	-	-		Proj Type: ITS/TMS
HAW 9600 3D	2025 Lump Sum: Traffic Management Systems			\$120,793,500
Funding Category Sum				\$154,600,000
Funding Category Percent of Total				1.60%
3E - NHS Misc	Various Locations			Status: MTP
- - -	-	-		Proj Type: Lump Sum
HAW 9650 3E	2025 Lump Sum: Operations, Safety, etc.			\$59,400,000
Funding Category Sum				\$59,400,000
Funding Category Percent of Total				0.62%
4A-STP Safety	FM 471			Status: TIP-2002
849 1 36	@ Loop 1604	-		Proj Type: Safety
3179 4A	Construct overpass			\$2,000,000
4A-STP Safety	US 281			Status: TIP-2003
253 4 112	@ Borgfeld	-		Proj Type: Safety
H4NE 3194 4A03	Construct overpass			\$2,000,000
4A-STP Safety	Various Locations			Status: MTP
- - -	-	-		Proj Type: Safety
HAW 9700 4A	2025 Lump Sum: Safety Projects			\$12,800,000
Funding Category Sum				\$16,800,000.
Funding Category Percent of Total				0.17%
4B-STP Enhancement	Mission Trails Project (Phase 2)			Status: TIP-2000
915 12 257	Loop 13 (SE Military Dr)	E. Southcross		Proj Type: Enhancemen
H8SE 600.2 4B98	Enhance roadway, trails, markers that lead to the missions			\$5,578,650

Funding Category	Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ	Limit From	Limit To	
MPO Number	Project Description	Project Cost	
4B-STP Enhancement	Mission Trails Project (Phase 3)	Status:	TIP-2000
915 12 258	E. Southcross Mitchell St.	Proj Type:	Enhancemen
H8SE 600.3 4B98	Develop. of scenic, bicycle & pedestrian		\$3,028,410
4B-STP Enhancement	Mission Trails Project (Phase 4)	Status:	TIP-2001
915 12 259	Mitchell St The Alamo	Proj Type:	Enhancemen
H8SE 600.4 4B98	Enhance roadways, trails, markers that lead to the missions		\$2,390,850
4B-STP Enhancement	Mission Trails Project (Phase 5)	Status:	TIP-2001
915 12 163	Mission Espada The Alamo	Proj Type:	Enhancemen
H8SE 600.5 4B98	Enhance roadways, trails, markers that lead to the missions		\$2,727,340
4B-STP Enhancement	Various Locations	Status:	MTP
- - -	-	Proj Type:	Enhancemen
HAW 9750 4B	2025 Lump Sum: Transportation Enhancement		\$95,774,750
Funding Category Sum			\$109,500,000
Funding Category Percent of Total			1.13%
4C-STP-MM	24th	Status:	TIP-2000
915 12 169	Commerce Culebra	Proj Type:	Rehab
H3N 4.1 4C00	Reconstruct existing 4 lane street and improve		\$2,300,000
4C-STP-MM	Alamo	Status:	TIP-2003
915 12 350	Cedar San Antonio River	Proj Type:	Pedes
HDW 3131.0 4C03	Construct sidewalks		\$292,326
4C-STP-MM	Alamo / Broadway Corridor	Status:	TIP-2000
915 12 291	Josephine The Alamo	Proj Type:	Bicycle
H8DT 2036 4C99	Bicycle signage and markings		\$39,000
4C-STP-MM	Austin Highway (Loop 368)	Status:	TIP-2002
16 8 25	Broadway Walzem	Proj Type:	Bicycle
H8NE 3032 4C02	Bicycle warning signs.		\$9,600
4C-STP-MM	Ave. B (North)	Status:	TIP-2000
915 12 282	Tuleta Mulberry	Proj Type:	Bicycle
H8DT 2037 4C00	Construct 10' bicycle path on west side of		\$91,613
4C-STP-MM	Ave. B (South) / Josephine	Status:	TIP-2000
915 12 283	Lions Fields/Alamo Josephine/St. Mary's	Proj Type:	Bicycle
H8DT 2039 4C00	Construct 10' bicycle path on west side of		\$262,825
4C-STP-MM	Babcock	Status:	OLD MTP
- - -	Hausman Loop 1604	Proj Type:	Oper
H1NW 1016 4C	Realign and upgrade existing		\$1,346,400
4C-STP-MM	Babcock	Status:	OLD MTP
- - -	De Zavala Hausman	Proj Type:	Capacity-Ot
H1NW 877 4C99	Construct 5 lane section on new alignment/two new bridges		\$5,621,300

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From	Limit To	
MPO Number		Project Description		Project Cost
4C-STP-MM		Babcock Rd. Alternate	Status:	TIP-2001
915 12 303		Spring Rain	Spring Time	Proj Type: Bicycle
H8N 2067	4C01	Bicycle Path Signage and markings (Shared Lanes)		\$271,200
4C-STP-MM		Bicycle Racks	Status:	TIP-2003
915 12 351		-	-	Proj Type: Bicycle
HDW 3132.0	4C03	Install bike racks at approx 100 locations		\$72,000
4C-STP-MM		Bicycle Racks on Buses	Status:	TIP-2000
915 12 352		-	-	Proj Type: Bicycle
H8AW 3133.0	4C03	Purchase 460 Bicycle Racks for Buses		\$243,800
4C-STP-MM		Bicycle Route Street Map	Status:	TIP-2002
915 12 323		City Wide	-	Proj Type: Bicycle
H8AW 3033	4C02	Map delineating existing bicycle facilities		\$10,000
4C-STP-MM		Bitters Road	Status:	TIP-2000
915 12 278		Broadway	Nacogdoches Rd.	Proj Type: Oper
H2NE 2040	4C00	Two 12 ft. lanes w/ center turn lane, sidewalks, signal		\$1,953,326
4C-STP-MM		Bitters Road	Status:	TIP-2001
915 12 231		W. of West Ave (W.of US 281)	East of Heimer (E. of US 2	Proj Type: Oper
H2NE 979	4C00	EB to US 281 add rt turn ln., WB to US 281		\$900,000
4C-STP-MM		Blanco Road	Status:	TIP-2000
915 12 150		At Jackson Keller	-	Proj Type: Oper
H2N 657	4C99	Widen intersection for left turn lanes on		\$564,000
4C-STP-MM		Blanco Road	Status:	OLD MTP
- - -		At Fresno	-	Proj Type: Oper
878	4C	Intersection Improvement		\$875,000
4C-STP-MM		Blanco Road	Status:	TIP-2003
2708 01 27		Lockhill-Selma	Patricia	Proj Type: Pedes
H5N 3210.0	4C03	Construct sidewalks on west side of roadway		\$528,988
4C-STP-MM		Botanical Gardens Route	Status:	TIP-2000
915 12 284		Botanical Gardens	Ave. B	Proj Type: Bicycle
H8DT 2041	4C00	10' bicycle path on north side of		\$118,322
4C-STP-MM		Brazos, South	Status:	MTP
- - -		Durango	Frio City Rd.	Proj Type: Rehab
H3SW 9	4C	Reconstruct arterial w/ sidewalks and drainage		\$2,688,000
4C-STP-MM		Broadway	Status:	OLD MTP
- - -		Wetmore	IH 410	Proj Type: Capacity-Ot
H1NE 1017	4C	Upgrade existing roadway to 6 lanes		\$5,400,000
4C-STP-MM		Bulverde Road	Status:	TIP-2002
915 12 324		@ Evans	-	Proj Type: Oper
H2NE 3034	4C02	Construct left turn lanes on all approaches		\$113,300

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9		
CSJ		Limit From	Limit To		
MPO Number		Project Description			Project Cost
4C-STP-MM		Bulverde Road			Status: OLD MTP
- - -		Quiet Meadow	Loop 1604		Proj Type: Capacity-Ot
HINE 850	4C	Reconstruct on new alignment to 7 lane section			\$2,952,000
4C-STP-MM		Callaghan			Status: TIP-2000
915 12 286		Old Hwy 90	Castroville Rd.		Proj Type: Bicycle
H8SW 2043	4C00	Construct 10' bicycle path on west side of			\$75,195
4C-STP-MM		Callaghan			Status: TIP-2001
915 12 154		Bandera (SP 421)	W. Horseshoe Bend		Proj Type: Capacity-Ot
H1NW 132.4	4C00	Reconstruct and widen to 4 lanes w/cont. lt turn			\$2,900,000
4C-STP-MM		Callaghan			Status: TIP-2001
915 12 294		Hemphill	Culebra		Proj Type: Rehab
H1NW 2068	4C01	Reconstruct to 62' (4 lanes) w/left turn lane, curbs,			\$1,530,705
4C-STP-MM		Callaghan			Status: TIP-2001
915 12 266		W. Horse Shoe Bend	Ingram Road		Proj Type: Capacity-Ot
H1NW 132.3	4C	Reconstruct and widen to 4 lanes w/cont left turn lane			\$1,618,647
4C-STP-MM		Callaghan			Status: OLD MTP
- - -		Bandera	IH 410		Proj Type: Capacity-Ot
132.5	4C	Widen exist. street to 4 lanes w/ partial			\$1,287,600
4C-STP-MM		Callaghan			Status: OLD MTP
- - -		Commerce	Culebra		Proj Type: Capacity-Ot
132.2	4C	Widen existing 2 lane street to 4 lanes			\$3,000,000
4C-STP-MM		CBD to San Antonio College			Status: TIP-2000
915 12 288		Alamo to SAC via Alamo, 4th	Lexington & Howard		Proj Type: Bicycle
H8DT 2044	4C99	Bicycle signage and markings			\$43,680
4C-STP-MM		Cincinnati			Status: TIP-2000
915 12 289		St. Mary's University	Navidad		Proj Type: Bicycle
H8N 2045	4C99	Bicycle signage and markings			\$25,200
4C-STP-MM		Cincinnati / Ashby			Status: TIP-2000
915 12 290		Navidad	North St. Mary's St.		Proj Type: Bicycle
H8N 2046	4C99	Bicycle signage and markings			\$25,200
4C-STP-MM		City Wide ADA Sidewalk Program			Status: TIP-2002
915 12 340		City Wide	-		Proj Type: Pedes
H5AW 3035	4C02	Reconstruct and/or provide ADA accessible sidewalks			\$281,100
4C-STP-MM		City Wide School Safety Program			Status: TIP-2002
915 12 325		City Wide	-		Proj Type: Safety
H4AW 3036	4C02	Install school safety flashing signs at various locations			\$500,000
4C-STP-MM		Clark			Status: TIP-2003
915 12 353		Southcross	Hot Wells		Proj Type: Pedes
HSE 3134.0	4C03	Construct sidewalks			\$403,711

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/99	
CSJ		Limit From	Limit To	
MPO Number		Project Description		Project Cost
4C-STP-MM		Clark	Status:	TIP-2003
915 12 354		Fair	Southcross	Proj Type: Rehab
HSE 3135.0	4C03	Reconstruct road w/curbs, sidewalks & drainage		\$1,448,370
4C-STP-MM		Crestway	Status:	TIP-2001
915 12 295		Miller Road	New World	Proj Type: Capacity-Ot
H1NE 2069	4C01	Widen to 62' with curbs, sidewalks, driveways,		\$1,575,000
4C-STP-MM		Crestway Drive	Status:	TIP-2003
915 12 355		New World	Windcrest City Limit	Proj Type: Oper
HNE 3136.0	4C03	Reconstruct road w/curb, sidewalks, driveways and drainage		\$1,102,800
4C-STP-MM		Culebra Rd (FM 471)	Status:	TIP-2001
849 1 33		FM 1560	Loop 1604	Proj Type: Capacity-Ot
H1NW 2098	4C01	Widen existing two lane road to 4 lanes with		\$2,587,320
4C-STP-MM		Culebra Rd (FM 471)	Status:	TIP-2001
849 1 34		Les Harrison	Loop 1604	Proj Type: Bicycle
H8N 2097	4C01	Bicycle warning signs		\$3,000
4C-STP-MM		Demya	Status:	TIP-2002
915 12 326		IH 410	Hunt	Proj Type: Rehab
H3SW 3037	4C02	Reconstruct existing 2 lanes with curbs and sidewalks		\$910,680
4C-STP-MM		DeZavala	Status:	OLD MTP
- - -		Autumn Vista	Babcock	Proj Type: Capacity-Ot
H1NW 1020	4C	Upgrade existing roadway to 4 lanes		\$1,734,000
4C-STP-MM		Dietz	Status:	TIP-2000
915 46 28		FM 3009	Borgfeld	Proj Type: Oper
H3NE 870	4C99	Widen existing roadway to 2 lanes w/ center		\$711,000
4C-STP-MM		Evers	Status:	TIP-2000
915 12 125		At Wurzbach	-	Proj Type: Oper
H2N 335	4C99	Widen to construct left turn lanes		\$282,000
4C-STP-MM		Evers	Status:	OLD MTP
- - -		Huebner	Forest Dell (City Limits)	Proj Type: Oper
H2N 685	4C	Widen to lengthen left turn lane		\$1,622,000
4C-STP-MM		Flores, S	Status:	TIP-2002
915 12 327		Malone	Octavia	Proj Type: Rehab
H3DT 3038	4C02	Reconstruct existing 4 lane road (44') with sidewalks		\$887,410
4C-STP-MM		Flores, South	Status:	OLD MTP
- - -		IH 410	Blue Wing	Proj Type: Capacity-Ot
H1SW 1040	4C	Widen to a 4 lane divided roadway		\$6,752,400
4C-STP-MM		FM 1535	Status:	TIP-2003
- - -		Braesview	Huebner	Proj Type: Capacity-Ot
H NC 3120.0	4C03	Widen from four to six lanes		\$5,046,000

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From	Limit To	
MPO Number		Project Description		Project Cost
4C-STP-MM		FM 1535		Status: MTP
- - -		Huebner	Loop 1604	Proj Type: Capacity-Ot
9805	4C			\$4,454,400
4C-STP-MM		FM 1976 (Gibbs-Sprawl)		Status: MTP
- - -		Gibbs-Sprawl/Walzern Rd.	FM 1516 (Toepperwein Rd)	Proj Type: Capacity-Ot
NE 125	4C	Widen to 4 lane divided urban with cont.		\$3,388,000
4C-STP-MM		FM 2252		Status: MTP
- - -		Loop 1604	FM 3009	Proj Type: Capacity-Ot
9812	4C	Widen to 4 lanes w/cont left turn lane		\$10,000,000
4C-STP-MM		FM 2252		Status: MTP
- - -		IH 410	Loop 1604	Proj Type: Capacity-Ot
9806	4C	Widen to 6 lanes w/cont left turn lane		\$22,000,000
4C-STP-MM		FM 2536 (Pearsall Road)		Status: TIP-2002
2440 1 18		IH 410	Covel	Proj Type: Bicycle
H8SW 3039	4C02	Bicycle warning signs		\$4,200
4C-STP-MM		FM 2536 (Pearsall Road)		Status: TIP-2001
2440 1 13		Loop 13 (Military Drive)	IH 410	Proj Type: Capacity-Ot
H1SW 127	4C01	Widen to 4 lane divided urban with median		\$5,356,000
4C-STP-MM		FM 2696		Status: MTP
- - -		W. Oak Estates	Old Blanco Road	Proj Type: Capacity-Ot
9808	4C	Widen 2 lane to 4 lane w/cont left turn lane		\$1,422,000
4C-STP-MM		FM 2696		Status: TIP-2003
- - -		Loop 1604	Wilderness Oaks	Proj Type: Capacity-Ot
HNC 3121.0	4C03	Widen 2 lane to 4 lane w/cont left turn lane		\$1,416,500
4C-STP-MM		FM 2696		Status: MTP
- - -		Wilderness Oaks	W. Oak Estates	Proj Type: Capacity-Ot
9803	4C	Widen 2 lane to 4 lane w/cont left turn lane		\$1,898,800
4C-STP-MM		FM 3009		Status: MTP
- - -		Guadalupe CL	FM 2252	Proj Type: Capacity-Ot
9809	4C	Upgrade from 2 lanes to 4 lanes		\$6,804,600
4C-STP-MM		FM 3009		Status: MTP
- - -		IH 35	Comal CL	Proj Type: Capacity-Ot
9810	4C	Upgrade from 4 lanes to 6 lanes		\$613,000
4C-STP-MM		FM 3351 (Ralph Fair Road)		Status: TIP-2002
3212 6 12		Comal County Line	IH 10	Proj Type: Oper
H2N 3040	4C02	Construct left turn lanes at Fawn Mountain, Pimlico, Dietz-Elkhorn, Fai		\$337,620
4C-STP-MM		FM 3487		Status: MTP
2344 01 005		IH 410	FM 1957 (Potranco)	Proj Type: Capacity-Ot
9801	4C	Widen to 6 lanes w/left turn lanes		\$547,959

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From	Limit To	
MPO Number		Project Description		Project Cost
4C-STP-MM		FM 3487		Status: TIP-2003
- - -		Micron Dr./Pipers Lane	Timber Path (Old Grissom	Proj Type: Capacity-Ot
HNW 3122.0	4C03	Widen road to 6 lanes w/cont left turn lane		\$1,744,000
4C-STP-MM		FM 3487		Status: TIP-2003
- - -		IH 410	Micron Dr./Pipers Lane	Proj Type: Capacity-Ot
HNW 3123.0	4C03	Widen road to 6 lanes w/cont left turn lane		\$3,077,000
4C-STP-MM		FM 3487		Status: MTP
- - -		Timber Path (Old Grissom Road)	FM 471	Proj Type: Capacity-Ot
9811	4C	Upgrade from 4 lanes to 6 lanes		\$4,206,930
4C-STP-MM		FM 3487		Status: MTP
- - -		FM 1957 (Potranco)	Micron Dr./Pipers Lane	Proj Type: Capacity-Ot
9813	4C	Upgrade from 4 to 6 lanes		\$2,529,041
4C-STP-MM		FM 3502		Status: OLD MTP
- - -		.2 Miles West of Salitrillo Cree	E. Branch in Converse to F	Proj Type: Rehab
HINE 415	4C98	Reconstruct and widen existing roadway		\$364,500
4C-STP-MM		FM 471		Status: TIP-2003
849 01 39		SH 16	Loop 1604	Proj Type: Pedes
HNW 3124.0	4C03	Construct sidewalks (east side of roadway)		\$700,000
4C-STP-MM		FM 471		Status: MTP
- - -		FM 3487	Loop 1604	Proj Type: Capacity-Ot
9802	4C	Upgrade from 4 lanes to 6 lanes		\$3,665,000
4C-STP-MM		Foster Road		Status: TIP-2003
915 12 357		at Summer Fest	-	Proj Type: Oper
HNE 3126.0	4C03	Construct traffic signal		\$100,000
4C-STP-MM		Foster Road		Status: TIP-2003
915 12 356		at Candlemeadow	-	Proj Type: Oper
HNE 3125.0	4C03	Construct traffic signal		\$100,000
4C-STP-MM		Frio City Rd		Status: TIP-2001
915 12 270		Brazos	Zarzamora	Proj Type: Capacity-Ot
H1SW 2047	4C00	Widen to 4 lanes w/ curbs,		\$2,086,272
4C-STP-MM		Frio City Rd.		Status: MTP
- - -		Spur 371 (General Hudnell)	Brazos	Proj Type: Rehab
H3SW 860	4C	Reconstruct thoroughfare with curbs, sidewalks		\$4,224,000
4C-STP-MM		General Hudnell/Frio City Road Access Ramp		Status: TIP-2003
24 09 22		-	-	Proj Type: Oper
H3SW 3213.0	4C03	Construct 26' wide access ramp		\$562,869
4C-STP-MM		Gevers St		Status: TIP-2000
915 12 306		IH 10	Southcross	Proj Type: Pedes
H5SE 2099	4C01	Construct sidewalks		\$696,831

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CSJ	Limit From	Limit To	
MPO Number	Project Description	Project Cost	
4C-STP-MM	Hackberry	Status:	TIP-2003
915 12 358	Steves	Southcross	Proj Type: Rehab
H3SE 3214.0	4C03	Reconstruct road w/curbs, sidewalks and drainage	\$3,057,279
4C-STP-MM	Henderson Pass	Status:	TIP-2000
915 12 307	Thousand Oaks	Gold Canyon	Proj Type: Pedes
H5NE 2070	4C01	Construct sidewalks both sides	\$351,460
4C-STP-MM	Hildebrand	Status:	TIP-2000
915 12 161	IH-10	Breeden	Proj Type: Oper
H2N 229	4C99	Reconstruct exist. street & widen for	\$1,752,000
4C-STP-MM	Hildebrand	Status:	OLD MTP
- - -	Breeden	Shook	Proj Type: Capacity-Ot
H1NW 1026	4C	Upgrade existing roadway to 4 lanes	\$1,428,000
4C-STP-MM	Hildebrand	Status:	TIP-2000
915 12 273	at US 281	-	Proj Type: Oper
H2NE 2049	4C99	Construct westbound right turn lane onto	\$91,627
4C-STP-MM	Hot Wells	Status:	TIP-2003
915 12 359	IH 37	New Braunfels	Proj Type: Pedes
H5SE 3211.0	4C03	Construct sidewalks	\$320,172
4C-STP-MM	Houston	Status:	TIP-2003
915 12 360	Pine	Polaris	Proj Type: Rehab
HSE 3137.0	4C03	Reconstruct road w/curbs, sidewalks and drainage	\$2,767,239
4C-STP-MM	Houston St.	Status:	TIP-2000
915 12 172	Bowie	Pine	Proj Type: Rehab
H3NE 546.1	4C99	Reconstruct existing street	\$1,786,403
4C-STP-MM	Hunt Lane	Status:	TIP-2000
915 12 276	Marbach Rd.	US 90	Proj Type: Oper
H3SW 2050	4C00	Reconstruct and widen roadway w/ center turn	\$2,349,534
4C-STP-MM	Hutchins	Status:	OLD MTP
- - -	Zarzamora	Commercial	Proj Type: Rehab
H3SW 863	4C	Reconstruct with curbs and sidewalks	\$2,112,000
4C-STP-MM	IH 10	Status:	MTP
- - -	N. Crossroads Boulevard	Fulton Avenue	Proj Type: Capacity-Fw
H1NW 56	3A	Upgrade to 10 lane freeway and TMS	\$38,317,200
4C-STP-MM	IH 10 Overpass	Status:	TIP-2003
72 7 48	at Dominion	-	Proj Type: Interchange
HNC 3127.0	4C03	Construct Interchange	\$5,800,000
4C-STP-MM	IH 410	Status:	TIP-2000
521 4 244	Bertetti	Marbach	Proj Type: Pedes
3115	4C 00	Construct curbs and sidewalks along both frontage roads	\$218,900

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9		
CSJ		Limit From	Limit To		
MPO Number		Project Description			Project Cost
4C-STP-MM		IH 410, South			Status: MTP
- - -		Between the SPRR and	the UPRR		Proj Type: Oper
SW 683	4C	Construct exit and entrance ramps			\$2,000,000
4C-STP-MM		Ingram			Status: TIP-2003
915 12 361		Callaghan	Benrus		Proj Type: Bicycle
H2NE 3138.0	4C03	Provide bike lanes, one on each side			\$192,931
4C-STP-MM		Isom			Status: TIP-2002
915 12 328		Ramsey	US 281		Proj Type: Oper
H2NE 3041	4C02	Reconstruct 2 lane street to 2 lanes w/continuous left turn land and si			\$863,970
4C-STP-MM		Jackson Keller			Status: OLD MTP
- - -		IH 410	Vance Jackson		Proj Type: Capacity-Ot
H2N 906	4C	Reconstruct existing 4 lane and widen for con't left turn lane			\$886,400
4C-STP-MM		Jackson Keller			Status: OLD MTP
- - -		Blanco	IH 410		Proj Type: Capacity-Ot
H1NW 905	4C	Reconstruct to 44 foot pavement (5 lanes at West Ave. and			\$3,458,900
4C-STP-MM		Jones Maltsberger			Status: OLD MTP
- - -		Thousand Oaks	Redland Rd.		Proj Type: Capacity-Ot
H1NE 1029	4C	Upgrade existing roadway to 4 lanes			\$3,468,000
4C-STP-MM		Jones Maltsberger			Status: TIP-2002
915 12 329		US 281	East of UPRR tracks		Proj Type: Rehab
H1NE 3042	4C02	Reconstruct and widen to 4 lanes			\$330,000
4C-STP-MM		Jones Maltsberger			Status: OLD MTP
- - -		US 281	Old Jones Maltsberger		Proj Type: Oper
H1NE 908	4C	Reconstruct and widen to 4 lanes with a con't left turn lane			\$347,500
4C-STP-MM		Jones Maltsberger			Status: OLD MTP
- - -		US 281	Sunset		Proj Type: Oper
H2NE 909	4C	Reconstruct existing 4 lanes and widen to 4 with con't left turn lane			\$1,998,000
4C-STP-MM		Josephine / Grayson Route			Status: TIP-2002
915 12 341		Fr: Broadway To: New Braunfel	Via Josephine, Pine and Gra		Proj Type: Bicycle
H8DT 3043	4C02	Bike signs and shared lanes			\$22,035
4C-STP-MM		King William Area			Status: TIP-2002
915 12 330		St. Mary's to Guenther	King Williams/Guenther/Ea		Proj Type: Bicycle
H8DT 3044	4C02	Bike signs and shared lanes			\$25,935
4C-STP-MM		Kitty Hawk Rd			Status: TIP-2001
915 12 268		Miller Rd.	Converse City Limits		Proj Type: Capacity-Ot
H1NE 2051	4C00	Widen to 62' with curbs, sidewalks, driveways,			\$1,517,000
4C-STP-MM		Leon Creek Greenway Phase I			Status: TIP-2002
915 12 331		Bandera	Babcock		Proj Type: Bicycle
H8N 3045.1	4C02	Proposed bicycle project			\$222,050

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9		
CSJ		Limit From	Limit To		
MPO Number		Project Description			Project Cost
4C-STP-MM		Lockhill Selma			Status: OLD MTP
- - -		De Zavala	Blanco		Proj Type: Capacity-Ot
H1NW 864	4C	Widen existing roadway to 4 lanes			\$4,692,000
4C-STP-MM		Lockhill Selma			Status: TIP-2000
915 12 193		George Road	Whisper Path		Proj Type: Oper
H2N 864.1	4C00	Reconstruct & widen existing roadway for left turn			\$3,500,000
4C-STP-MM		Lockhill-Selma			Status: TIP-2003
915 12 362		West Avenue	N.W. Military		Proj Type: Capacity-Ot
HNC 3139.0	4C03	Reconstruct 2 lane to 4 lane w/curbs, sidewalks, drainage			\$1,889,688
4C-STP-MM		Loop 1604			Status: TIP-2003
- - -		@ FM 471 (Culebra Road)	-		Proj Type: Interchange
HNW 3128.0	4C03	Construct Interchange			\$1,687,100
4C-STP-MM		Loop 1604			Status: TIP-2002
2452 1 900		@ FM 471 (Culebra Road)	-		Proj Type: Oper
H2N 3046	4C02	Improve intersection with grade separation			\$5,950,000
4C-STP-MM		Loop 1604 (Frontage Rds)			Status: TIP-2000
2452 2 60		IH 10	US 281		Proj Type: Bicycle
H8NE 2053	4C00	Bicycle warning signs			\$4,500
4C-STP-MM		Loop 1604 (Frontage Roads)			Status: TIP-2000
2452 3 85		US 281	FM 2252 (Nacogdoches Ro		Proj Type: Bicycle
H8NE 2053.1	4C00	Bicycle warning signs			\$4,500
4C-STP-MM		Lower Seguin Road			Status: TIP-2001
915 12 180		Loop 1604	FM 1518		Proj Type: Rehab
H3NE 38	4C00	Reconstruct existing roadway & add shoulders			\$1,800,000
4C-STP-MM		Malone / Theo			Status: TIP-2001
915 12 302		Quintana	Concepcion Park		Proj Type: Bicycle
H8SW 2071	4C01	Bicycle signage and markings			\$60,000
4C-STP-MM		Mayfield			Status: TIP-2003
915 12 363		IH 35	Zarzamora		Proj Type: Rehab
H3SW 3212.0	4C03	Reconstruct road w/curbs, sidewalks and drainage			\$3,717,048
4C-STP-MM		McCullough			Status: TIP-2000
915 12 277		South City Limits	N. of Olmos Dr & El Prado		Proj Type: Oper
H2NC 2096	4C00	Construct permanant traffic roundabout and cont.			\$120,856
4C-STP-MM		McCullough			Status: TIP-2003
915 12 410		Basse	RR Tracks		Proj Type: Oper
HNC 3140.0	4C03	Reconstruct to provide left turn lane, curbs, sidewalks and drainage			\$1,546,329
4C-STP-MM		Medical Drive			Status: TIP-2000
915 12 332		IH 10	Ewing Halsell		Proj Type: Capacity-Ot
H1NW 3047	4C99	Engineering to widen and realign roadway			\$900,000

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From	Limit To	
MPO Number		Project Description		Project Cost
4C-STP-MM		Medical Drive	Status:	TIP-2003
915 12 365		Fredericksburg	Proj Type:	Other
H1NW 3209.0	4C03	Right-of-Way purchase		\$3,000,000
4C-STP-MM		Military Dr., S.E. (Loop 13)	Status:	TIP-2001
521 2 31		Padre	Mission Rd	Proj Type: Oper
H2SE 1032	4C00	Improve intersection at proposed realignment		\$350,000
4C-STP-MM		Miller Road/Crestway	Status:	TIP-2003
915 12 366		New World	0.4 mi S. of Kitty Hawk	Proj Type: Oper
HNE 3141.0	4C03	Reconstruct 4 lane to 4 lane w/cont left turn lane		\$2,300,000
4C-STP-MM		Mission Rd.	Status:	TIP-2001
915 12 247		N. of San Antonio River	Mission Parkway	Proj Type: Rehab
H6SE 1033	4C00	Widen bridge for left turn lane		\$376,000
4C-STP-MM		Mitchell St.	Status:	TIP-2000
915 12 248		Probandt	Roosevelt	Proj Type: Rehab
H3SW 1034.1	4C99	Reconstruct roadway with drainage, sidewalks		\$1,463,764
4C-STP-MM		Montana Street	Status:	TIP-2000
915 12 285		The Alamo Dome (CBD)	Walters St. (St Phillips)	Proj Type: Bicycle
H8DT 2054	4C99	Bicycle signage and markings		\$39,000
4C-STP-MM		Nacogdoches Bike Path	Status:	TIP-2003
- - -		Judson	Toepperwein	Proj Type: Bicycle
HNE 3143.0	4C03	Construct bike path		\$239,181
4C-STP-MM		Nacogdoches Road	Status:	TIP-2003
915 12 367		IH 410	Danbury	Proj Type: Oper
HNE 3142.0	4C03	Widen to 5 lanes w/curbs, sidewalks and drainage		\$1,754,880
4C-STP-MM		Nakoma	Status:	TIP-2003
915 12 368		US 281	Warfield	Proj Type: Rehab
HNC 3144.0	4C03	Reconstruct road w/curbs, sidewalks and drainage		\$288,081
4C-STP-MM		New World	Status:	TIP-2002
915 12 333		Crestway	Miller Road	Proj Type: Rehab
H3NE 3048	4C02	Reconstruct existing 2 lanes (44') with curbs, curb ramps, sidewalks, d		\$1,160,400
4C-STP-MM		New World	Status:	TIP-2001
915 12 297		Crestway	Montgomery	Proj Type: Rehab
H3NE 2072	4C01	Reconstruct exist 42' to 44' with curbs, sidewalks,		\$1,501,000
4C-STP-MM		New World	Status:	TIP-2001
915 12 298		Montgomery Dr	Walzem Rd (FM 1976)	Proj Type: Rehab
H3NE 2073	4C01	Reconstruct exist 42' to 44' with curbs, sidewalks,		\$1,346,000
4C-STP-MM		Nogalitos (Loop 353)	Status:	TIP-2000
17 1 21		Zarzamora / New Laredo Hwy	Surrey	Proj Type: Rehab
H3SW 19.1	4C00	Reconstruct roadway w/ drainage, curbs,		\$997,000

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From	Limit To	
MPO Number		Project Description		Project Cost
4C-STP-MM		Old Cimmarron Trail (Ph 1)	Status:	TIP-2000
915 12 279		Kitty Hawk	Guilford Forge	Proj Type: Rehab
H3N 2055	4C00	Reconstruct existing to 46' with center turn lane,		\$788,850
4C-STP-MM		Old Cimmarron Trail (Ph 2)	Status:	TIP-2000
915 12 296		Guilford Forge	FM 1976	Proj Type: Rehab
H3N 2074	4C01	Reconstruct existing to 46' with center turn lane		\$1,155,905
4C-STP-MM		Old Hwy 90	Status:	OLD MTP
- - -		San Felipe	Acme	Proj Type: Rehab
H3N 1039	4C	Reconstruct thoroughfare, curbs, sidewalks,		\$4,363,000
4C-STP-MM		Pecan St.	Status:	TIP-2000
915 12 272		Broadway	Soledad	Proj Type: Maint
H3DT 2056	4C99	Base repair, mill and overlay		\$191,903
4C-STP-MM		Pecan Valley Dr	Status:	TIP-2001
915 12 269		"J" St.	110' west of Morningview D	Proj Type: Rehab
H1SE 2057	4C00	Reconstruct roadway to 4 lanes w/ curbs,		\$1,200,000
4C-STP-MM		Pleasanton Rd.	Status:	TIP-2001
915 12 228		Southcross	MayField	Proj Type: Rehab
H3SW 18.1	4C00	Reconstruct roadway to include center left turn lane, provide sidewalks		\$1,700,000
4C-STP-MM		Pleasanton Rd.	Status:	TIP-2002
915 12 334		Moursund	Gillette	Proj Type: Rehab
H3SE 3049	4C02	Reconstruct roadway to existing 2 lanes (40') with curbs and sidewalks		\$1,436,440
4C-STP-MM		Pleasanton Rd.	Status:	OLD MTP
- - -		S. Flores	Loop 13 (SW Military Dr.)	Proj Type: Rehab
H3SW 18	4C	Reconstruct Arterial and Sidewalks		\$3,840,000
4C-STP-MM		Probandt St.	Status:	TIP-2000
915 12 243		US 90	Mitchell	Proj Type: Rehab
H3SW 1041	3E00	Reconstruct roadway w/ drainage and sidewalks		\$285,081
4C-STP-MM		Prue Road	Status:	OLD MTP
- - -		Babcock	Fredericksburg	Proj Type: Capacity-Ot
H1NW 294	4C	Street widening thoroughfare		\$5,338,000
4C-STP-MM		Prue Road	Status:	TIP-2000
915 12 267		Laureate	Fredericksburg	Proj Type: Capacity-Ot
H1NW 2058	4C00	Widen to 44' (4 lanes) w/ curbs,		\$731,544
4C-STP-MM		Prue Road Extension	Status:	TIP-2003
915 12 369		Prue	Huebner	Proj Type: Capacity-Ot
H1NW 3215.0	4C03	Extend roadway on new alignment w/curbs, sidewalks and drainage		\$1,643,905
4C-STP-MM		Rice	Status:	TIP-2002
915 12 335		WW White S.	Semlinger	Proj Type: Oper
H3SE 3050	4C02	Reconstruct existing 2 lanes (27') with curbs, sidewalks and drainage		\$1,937,880

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From	Limit To	
MPO Number		Project Description		Project Cost
4C-STP-MM		Rideshare Prog., FY 1999	Status:	TIP-1999
9915 12 264		In San Antonio-Bexar Co. Area -	Proj Type:	Rideshare
H9AW 2033	4C99	Operational costs for ridematching		\$170,000
4C-STP-MM		Rideshare Prog., FY 2000	Status:	TIP-2000
915 12 293		In San Antonio-Bexar Co. Area -	Proj Type:	Rideshare
H9AW 2059	4C00	Operational costs for ridematching		\$178,500
4C-STP-MM		Rideshare Prog., FY 2001	Status:	TIP-2001
915 12 308		In San Antonio-Bexar Co. Area -	Proj Type:	Rideshare
H9AW 2075	4C01	Operational costs for ridematching		\$187,425
4C-STP-MM		Rideshare Prog., FY 2002	Status:	TIP-2002
915 12 263		In San Antonio-Bexar Co. Area -	Proj Type:	Rideshare
H9AW 2032	4C98	Operational costs for ridematching		\$196,796
4C-STP-MM		Rideshare/Air Quality Program, FY 2003	Status:	TIP-2003
915 12 370		San Antonio-Bexar County area	Proj Type:	Rideshare
H9AW 3146	4C03	Continuation of Rideshare Program		\$206,636
4C-STP-MM		S. Zaramora	Status:	OLD MTP
- - -		Illg Nogalitos	Proj Type:	Rehab
H3SW 1042	4C	Reconstruct, drainage, sidewalks		\$800,000
4C-STP-MM		SAC TO UTSA	Status:	TIP-2002
915 12 336		Myrtle, Flores, Martin (cont.) Medina and Buena V	Proj Type:	Bicycle
H8AW 3051	4C02	Bike signs and shared lanes		\$101,318
4C-STP-MM		San Pedro Alternate	Status:	TIP-2001
915 12 301		Dot Rd. Howard Rd.	Proj Type:	Bicycle
H8N 2076	4C01	Construct bicycle path though Olmos Basin Park		\$172,465
4C-STP-MM		Schertz/Weidner	Status:	OLD MTP
- - -		Thousand Oaks Randolph	Proj Type:	Capacity-Ot
HINE 1044	4C	Upgrade existing roadway to 4 lanes		\$2,713,200
4C-STP-MM		School Safety Program	Status:	TIP-2000
915 12 274		City Wide -	Proj Type:	Safety
H2AW 2060	4C99	School Safety Program on functionally classified		\$1,000,000
4C-STP-MM		SH 151	Status:	MTP
- - -		Loop 1604 SH 211, S of FM 471	Proj Type:	Capacity-Ot
H1SW 9530	4C	Construct 2 lane extension		\$5,300,400
4C-STP-MM		SH 151	Status:	MTP
- - -		0.48 KM E of Loop 410 0.5 KM E of IH 1604	Proj Type:	Capacity-Ot
H1SW 9528	4C	Construct 4 lane freeway		\$17,110,000
4C-STP-MM		SH 151	Status:	MTP
- - -		0.35 KM N of Callaghan Road 0.5 KM S of IH 410	Proj Type:	Capacity-Ot
3013	3A	Construct main lanes, ramps and bridges at Marbach and		\$13,849,000

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From	Limit To	
MPO Number		Project Description		Project Cost
4C-STP-MM		SH 151 @ Military	Status:	MTP
- - -		-	Proj Type:	Interchange
	4C	Construct interchange		\$3,200,000
4C-STP-MM		SH 218 (Pat Booker Rd)	Status:	TIP-2003
465 01 51		Loop 1604	FM 78	Proj Type: Pedes
HNE 3130.0	4C03	Construct sidewalks		\$505,000
4C-STP-MM		Sidewalks - City of San Antonio	Status:	TIP-2000
915 12 292		City Wide		Proj Type: Pedes
H5AW 2061	4C00	ADA Sidewalk Improvements on functionally		\$1,000,000
4C-STP-MM		Southcross	Status:	TIP-2001
915 12 281		S. New Braunfels	S. Presa St.	Proj Type: Rehab
H3AW 2062	4C00	Widen to 44' (4 lanes) w/ curbs, sidewalks		\$2,033,980
4C-STP-MM		Southcross	Status:	TIP-2001
915 12 173		WW White (Loop 13)	IH 410	Proj Type: Capacity-Ot
H1SE 540	4C00	Widen to 4 lanes with continuous left turn lane and associated drainage		\$1,659,236
4C-STP-MM		Spur 53 (UTSA Boulevard)/BABC	Status:	OLD MTP
- - -		.6 mile West of IH 10	Loop 1604 at Babcock Road	Proj Type: Capacity-Ot
H1NW 116	4C	Widen to 4 lanes with a continuous center turn lane		\$3,735,500
4C-STP-MM		St. Mary's, North	Status:	TIP-2000
915 12 251		Huisache St.	McCullough	Proj Type: Bicycle
H8NE 1046	4C99	Install bicycle lanes and signage		\$88,000
4C-STP-MM		St. Mary's, South	Status:	TIP-2000
915 12 252		Alamo	Perida	Proj Type: Rehab
H3DT 1047	4C99	Reconstruct roadway with drainage and sidewalks		\$341,900
4C-STP-MM		Stahl	Status:	OLD MTP
- - -		Wetmore	Classen	Proj Type: Oper
H1NE 270.1	4C	Construct a 4 lane divided roadway		\$518,400
4C-STP-MM		Stahl	Status:	TIP-2002
915 12 342		@ O'Connor		Proj Type: Oper
H2NE 3052.2	4C02	Construct left turn lanes on all approaches		\$1,160,300
4C-STP-MM		Stahl	Status:	TIP-2002
915 12 337		@ Judson		Proj Type: Oper
H2NE 3052.1	4C02	Construct left turn lanes on Stahl		\$663,900
4C-STP-MM		Stahl	Status:	OLD MTP
- - -		Classen	Nacogdoches	Proj Type: Capacity-Ot
H1NE 270.2	4C	Upgrade existing roadway to 4 lanes		\$6,732,000
4C-STP-MM		Starcrest	Status:	TIP-2000
915 12 280		Stuntman	Jones Maltsberger	Proj Type: Rehab
H2N 2063	4C00	Reconstruct to 62' (4 lanes) w/ turn lanes, curbs,		\$916,000

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9		
CSJ		Limit From	Limit To		
MPO Number		Project Description			Project Cost
4C-STP-MM		Sunset			Status: TIP-2001
915 12 227		Jones Maltsberger	Broadway		Proj Type: Rehab
H3NE 985	4C00	Reconstruct existing roadway to 4 lanes w/ sidewalks			\$1,842,000
4C-STP-MM		Tezel			Status: TIP-2001
915 12 300		Timber Path	Ridge Path		Proj Type: Rehab
H2N 2078	4C01	Reconstruct to 62' (4 lanes) w/ turn lanes, curbs,			\$1,959,975
4C-STP-MM		Tezel			Status: TIP-2001
915 12 299		Ridge Path	Old Tezel		Proj Type: Rehab
H2N 2077	4C01	Reconstruct to 62' (4 lanes) w/ turn lanes, curbs,			\$2,938,463
4C-STP-MM		Thousand Oaks			Status: TIP-2000
915 12 275		At Broken Oak, Ledge View, Tur	Pebble Forest & Oak View		Proj Type: Oper
H2NE 2064	4C00	Construct turn lanes at five intersections			\$846,000
4C-STP-MM		Timber Path Bikeway			Status: TIP-2000
915 12 253		Les Harrison	Grissom Rd.		Proj Type: Bicycle
H8N 873	4C99	Spot base repair and restripe existing roadway to provide			\$87,400
4C-STP-MM		Toepperwein			Status: TIP-2003
915 12 371		at Forest Bluff	-		Proj Type: Oper
HNE 3145.0	4C03	Install Traffic Light			\$90,000
4C-STP-MM		Uhr Lane			Status: TIP-2000
915 12 271		Higgins	Thousand Oaks		Proj Type: Rehab
H1NE 2065	4C00	Reconstruct and widen to two lanes w/ center			\$2,206,413
4C-STP-MM		US 281			Status: MTP
- - -		4.023 KM N of Loop 1604	Comal CL		Proj Type: Capacity-Fw
9807	4C	Constr Interchanges at Marshall, Bulverde, Wilderness Oaks			\$12,000,000
4C-STP-MM		US 281			Status: MTP
- - -		0.6 Mi N of Loop 1604	2.5 Mi N of Loop 1604		Proj Type: Capacity-Fw
9532	3A	Widen existing freeway to 8 lanes w/frontage roads			\$22,217,000
4C-STP-MM		US 87			Status: OLD MTP
- - -		Loop 13	IH 410		Proj Type: Rehab
H1SE 1049	4C	Rehab 4 lanes divided			\$1,437,600
4C-STP-MM		US 87 (Roland)			Status: TIP-2002
143 1 52		IH 10	Rigsby Avenue		Proj Type: Rehab
H3SE 3053	4C02	Reconstruct existing 4 lanes with curb, sidewalks and drainage			\$825,700
4C-STP-MM		UTSA to OLLU Corridor			Status: TIP-2000
915 12 287		Houston St.	24th St.		Proj Type: Bicycle
H8DT 2066	4C00	Bicycle signage and markings			\$295,200
4C-STP-MM		Vandiver N.			Status: TIP-2002
915 12 343		IH 410	Rittiman		Proj Type: Bicycle
H8NE 3054	4C02	Bike signs and wide curb lane (shared bike lane south of Austin Highwa			\$44,850

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9		
CSJ		Limit From	Limit To		
MPO Number		Project Description			Project Cost
4C-STP-MM		Various Locations			Status: MTP
- - -		-			Proj Type: Lump Sum
HAW 9800	4C	2025 Lump Sum: Mobility, Rehabilitation and Operational			\$74,695,597
4C-STP-MM		Various Locations			Status: MTP
- - -		-			Proj Type: Rideshare
HAW 9814	4C	2025 Lump Sum: Rideshare Program			\$4,000,000
4C-STP-MM		Various Locations			Status: MTP
- - -		-			Proj Type: Pedes
HAW 9815	4C	2025 Lump Sum: Pedestrian Projects			\$22,000,000
4C-STP-MM		Various Locations			Status: MTP
- - -		-			Proj Type: Bicycle
HAW 9804	4C	2025 Lump Sum: Bicycle Projects			\$22,000,000
4C-STP-MM		Villaret			Status: TIP-2002
915 12 344		Zarzamora	Hwy 16		Proj Type: Bicycle
H8SW 3055	4C02	Bike signs and shared lanes			\$38,850
4C-STP-MM		W.W. White Rd. (Loop 13)			Status: TIP-2001
521 1 40		Seale Road	IH 10		Proj Type: Oper
H2NE 1050	4C99	Widen existing 4 lane rd to 4 lanes w/ cont.			\$1,512,000
4C-STP-MM		W.W. White-Hildebrandt Rd.			Status: OLD MTP
- - -		Loop 13	IH 410		Proj Type: Capacity-Ot
H1SE 2027	4C	Widen to 4 lanes			\$1,040,400
4C-STP-MM		Walters			Status: TIP-2002
915 12 338		Rigsby	Fair Avenue		Proj Type: Bicycle
H8SW 3056	4C02	Bike signs and wide curb lanes			\$19,500
4C-STP-MM		Weidner Road			Status: OLD MTP
- - -		San Antonio City Limits	I H 35		Proj Type: Rehab
H1NE 42.3	4C	Reconstruct exist 2 ln. rdwy to 44' pavement w/ curbs & sidewalks			\$2,053,000
4C-STP-MM		Weidner Road			Status: TIP-2002
915 12 254		0.6 Mi N of Crestway	1.2 Mi N of Crestway		Proj Type: Capacity-Ot
H1NE 42.2	4C99	Widen to 4 lanes			\$726,000
4C-STP-MM		Wetmore			Status: TIP-2000
915 12 202		At Broadway	-		Proj Type: Oper
H2N 330	4C99	Add left turn lane on SB Wetmore			\$527,979
4C-STP-MM		Wetmore Rd.			Status: OLD MTP
- - -		Broadway	Thousand Oaks		Proj Type: Capacity-Ot
H1NE 2025	4C	Upgrade existing roadway to 6 lanes			\$9,600,000
4C-STP-MM		Wiederstein Dr.			Status: OLD MTP
- - -		FM 1518	FM 1103		Proj Type: Capacity-Ot
H1NE 2024	4C	Upgrade existing roadway to 4 lanes			\$10,404,000

Funding Category		Project Name		PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From		Limit To	
MPO Number		Project Description		Project Cost	
4C-STP-MM		Woodlawn		Status:	TIP-2003
915 12 372		Bandera	Maiden	Proj Type:	Rehab
H3N 3216.0	4C03	Reconstruct road w/curbs, sidewalks and drainage			\$3,123,684
4C-STP-MM		Woodlawn		Status:	TIP-2002
915 12 339		Maiden to Camino Santa Maria	C.S.Maria -Woodlawn to Cin	Proj Type:	Bicycle
H8N 3057	4C02	Bike signs and wide curb lanes			\$35,100
4C-STP-MM		Wurzbach		Status:	TIP-2001
915 12 162		0.2 mi E. of IH10	0.2 mi W. of IH10	Proj Type:	Oper
H2N 650	4C99	Widen existing street to lenghen left turn lanes			\$971,113
4C-STP-MM		Wurzbach		Status:	TIP-2001
915 12 196		at Ironside Dr.	-	Proj Type:	Oper
H2N 876.5	4C99	Widen NB approach for right turn lane			\$80,000
4C-STP-MM		Wurzbach Parkway		Status:	TIP-2000
915 12 223		FM 1535 (NW Military Hwy)	Blanco Road	Proj Type:	Capacity-Ot
H1NW 138.4	4C00	Construct four lane divided roadway			\$6,821,750
4C-STP-MM		Wurzbach Parkway		Status:	MTP
- - -		Jones Maltsberger	0.8 KM W of Wetmore	Proj Type:	Capacity-Ot
9518	4C	Construct new four lane roadway on new alignment			\$18,226,600
4C-STP-MM		Zarzamora		Status:	TIP-2001
915 12 304		IH 35	IH 410	Proj Type:	Bicycle
H8SW 2079	4C01	Bicycle signage and markings			\$26,000
4C-STP-MM		Zarzamora		Status:	TIP-2001
915 12 305		New Laredo Highway	Theo/Malone	Proj Type:	Bicycle
H8SW 2080	4C01	Bicycle signage and markings			\$24,960
Funding Category Sum					\$575,547,000
Funding Category Percent of Total					5.96%
4E-STP-RM		Loop 1604		Status:	TIP-2002
2452 4 8		IH 10	FM 1518	Proj Type:	Oper
H1NE 3156	4E00	Add Shoulders			\$1,687,100
4E-STP-RM		Various Locations		Status:	MTP
- - -		-	-	Proj Type:	Lump Sum
HAW 9850	4E	2025 Lump Sum: Rehab, Mobility, Operations, Safety			\$19,712,900
Funding Category Sum					\$21,400,000
Funding Category Percent of Total					0.22%
4F-STP Rehab		FM 476		Status:	TIP-2002
1740 1 6		Atascosa CL	FM 2790	Proj Type:	Rehab
H SW 3113	4F02	Reconstruct existing roadway			\$263,400
4F-STP Rehab		Various Locations		Status:	MTP
- - -		-	-	Proj Type:	Lump Sum
HAW 9860	4F	2025 Lump Sum: Rehab, Operations, Safety			\$1,336,600

Funding Category	Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ	Limit From	Limit To	
MPO Number	Project Description		Project Cost
Funding Category Sum			\$1,600,000
Funding Category Percent of Total			0.02%
6A-Bridge-On System	FM 3502	Status:	OLD MTP
- - -	East Branch Salatrillo Draw	Proj Type:	Rehab
414 6A	Rehabilitate bridge and approaches		\$153,000
6A-Bridge-On System	IH 10	Status:	TIP-2003
25 2 155	On South Frontage Road @ Mar	Proj Type:	Rehab
H3SW 3197 6A03	Rehabilitate bridge and approaches		\$127,500
6A-Bridge-On System	IH 35	Status:	TIP-2003
17 2 61	NB Collector Road @ IH 410 (SW of San Antonio)	Proj Type:	Rehab
H3SW 3195 6A03	Replace bridge and approaches		\$195,000
6A-Bridge-On System	IH 35	Status:	TIP-2003
17 9 83	Northbound mainlanes@ IH 10 (SW of San Antonio)	Proj Type:	Rehab
H3SW 3196 6A03	Rehabilitate bridge and approaches		\$270,000
6A-Bridge-On System	IH 35	Status:	TIP-2003
17 2 59	SB Collector Road @ IH 410 (SW of San Antonio)	Proj Type:	Rehab
H3SW 3193 6A03	Replace bridges and approaches		\$633,751
6A-Bridge-On System	IH 35 - SB and NB Mainlanes	Status:	TIP-2002
17 9 72	@ Theo/Malone	Proj Type:	Rehab
H SE 3105 6A02	Rehabilitate bridges and approaches		\$1,438,750
6A-Bridge-On System	IH 35 - SB and NB Mainlanes	Status:	TIP-2002
17 9 74	@ Southcross	Proj Type:	Rehab
H SE 3107 6A02	Rehabilitate bridge and approaches		\$1,200,000
6A-Bridge-On System	IH 35 Northbound Mainlanes	Status:	TIP-2002
17 9 80	@ Division	Proj Type:	Rehab
H SE 3108 6A02	Rehabilitate bridge and approaches		\$600,000
6A-Bridge-On System	IH 35 Southbound Mainlanes	Status:	TIP-2002
17 9 81	@ IH 10 (SW)	Proj Type:	Rehab
H SE 3109 6A02	Rehabilitate bridge and approaches		\$20,000
6A-Bridge-On System	IH 35 Southbound Mainlanes	Status:	TIP-2002
17 9 73	@ Division	Proj Type:	Rehab
H SE 3106 6A02	Rehabilitate bridge and approaches		\$600,000
6A-Bridge-On System	IH 35 Southbound Mainlanes	Status:	TIP-2002
17 10 205	@ Coliseum	Proj Type:	Rehab
H NE 3110 6A02	Rehabilitate bridge and approaches		\$40,000
6A-Bridge-On System	US 281	Status:	TIP-2003
253 4 104	Mainlanes @ Salado Creek	Proj Type:	Maint
H3NE 3198 6A03	Rehabilitate bridge and approaches		\$500,000

Funding Category	Project Name	PROJECT LIST ADOPTED ON 12/6/99	
CSJ	Limit From	Limit To	
MPO Number	Project Description	Project Cost	
6A-Bridge-On System	Various Locations	Status:	MTP
- - -	- - -	Proj Type:	Lump Sum
HAW 9870 6A	2025 Lump Sum: Bridge Rehab. or Replacement		\$16,821,999
Funding Category Sum			\$22,600,000
Funding Category Percent of Total			0.23%
6B-Bridge-Off System	Somerset Rd.	Status:	TIP-2001
915 12 218	At Leon Creek	Proj Type:	Rehab
H3SW 1084 6B99	Replace bridge and approaches		\$450,000
6B-Bridge-Off System	Various Locations	Status:	MTP
- - -	- - -	Proj Type:	Lump Sum
HAW 9880 6B	2025 Lump Sum: Bridge Rehab. or Replacement		\$1,250,000
Funding Category Sum			\$1,700,000
Funding Category Percent of Total			0.02%
7-Prev. Maint.	Districtwide	Status:	TIP-2002
915 0 919	Varies	Proj Type:	Maint
HAW 3180.0 702	Preventive Maintenance (2002)		\$10,015,000
7-Prev. Maint.	Districtwide	Status:	TIP-2003
915 0 901	Varies	Proj Type:	Maint
HAW 3199.0 703	Districtwide Preventive Maintenance (2003)		\$18,190,666
7-Prev. Maint.	Districtwide	Status:	TIP-2001
915 0 902	Varies	Proj Type:	Maint
H7AW 3062.0 701	Districtwide Preventive Maintenance (2001)		\$10,015,000
7-Prev. Maint.	Loop 1604	Status:	TIP-2003
2452 4 902	FM 1516 US 87	Proj Type:	Maint
HNW 3205.0 14_03	Widen shoulders, seal coat and overlay		\$565,900
7-Prev. Maint.	Various Locations	Status:	MTP
- - -	- - -	Proj Type:	Maint
HAW 9890 7	2025 Lump Sum: Preventive Maintenance		\$361,413,434
Funding Category Sum			\$400,200,000
Funding Category Percent of Total			4.14%
8A, 14 - State Rehab	Various Locations	Status:	MTP
- - -	- - -	Proj Type:	Lump Sum
HAW 9900 8A	2025 Lump Sum: State Rehab, Operations, Safety		\$20,800,000
Funding Category Sum			\$20,800,000
Funding Category Percent of Total			0.22%
9-Park	Park Road	Status:	TIP-2002
915 12 309	- - -	Proj Type:	Capacity-Ot
HNW 3116 9P02	in Government Canyon State Park		\$1
Funding Category Sum			\$1
Funding Category Percent of Total			0.00%

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/99	
CSJ		Limit From	Limit To	
MPO Number		Project Description		Project Cost
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	MTP
- - -		- - -	Proj Type:	Transit-Bldg
T AW 9005		Lump Sum: FY 2021-FY 2025 Bus Transit Buildings/Equipment		\$7,166,000
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2000
- - -		- - -	Proj Type:	Passenger Fa
T AW 3145		Electronic Message Signs - Pilot Program		\$125,000
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2000
- - -		- - -	Proj Type:	Passenger Fa
T DT 3143		Downtown-S. Central-PE, Fin Des, Land Acq., Constr, Mgmt		\$1,000,000
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2000
- - -		- - -	Proj Type:	Passenger Fa
T AW 3146		Passenger Shelters Acq/Construction		\$600,000
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2000
- - -		- - -	Proj Type:	Passenger Fa
T4SE 2809.3	S 998	McCreeless-PE, Fin Des, Land Acq, Constr, Mgmt		\$60,000
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2000
- - -		- - -	Proj Type:	Passenger Fa
T4SW 3022	S 998	Kel-Lac P&R-PE, Fin Des, Land Acq, Constr, Mgmt		\$1,360,000
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2000
- - -		- - -	Proj Type:	Equipment
T AW 3117		MIS Software		\$1,615,315
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2001
- - -		- - -	Proj Type:	Passenger Fa
T4SE 2809.4	S 998	McCreeless-PE, Fin Des, Land Acq, Constr, Mgmt		\$1,040,000
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2000
- - -		- - -	Proj Type:	Equipment
T AW 3104		MIS Hardware		\$1,172,774
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2001
- - -		- - -	Proj Type:	Passenger Fa
T4SW 3022.1	S 998	Kel-Lac P&R-PE, Fin Des, Land Acq, Constr, Mgmt		\$1,040,000
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2003
- - -		- - -	Proj Type:	Equipment
TAW 3130		MIS Hardware		\$57,000
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2000
- - -		- - -	Proj Type:	Facility Reha
T 3142		Rehab/Renovation of Admin & Maint Fac (PE,Fin Des, Constr, Mgmt, St		\$4,129,320
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2000
- - -		- - -	Proj Type:	Passenger Fa
T 3147		Passenger Amenities Carts Acquisition		\$56,000

Funding Category	Project Name	PROJECT LIST ADOPTED ON 12/6/9
CSJ	Limit From	Limit To
MPO Number	Project Description	Project Cost
FTA - Sec 5307	Bus Transit Bldgs/Equipment	Status: TIP-2002
- - -	-	Proj Type: Passenger Fa
T DT 3076.2	Downtown West-PE, Fin Des, Land Acq, Constr, Mgmt	\$4,003,000
FTA - Sec 5307	Bus Transit Bldgs/Equipment	Status: TIP-2002
- - -	-	Proj Type: Facility Reha
3162	Rehab/Renovation of Admin & Maint Fac (PE,Fin Des, Constr, Mgmt)	\$151,000
FTA - Sec 5307	Bus Transit Bldgs/Equipment	Status: TIP-2002
- - -	-	Proj Type: Equipment
T AW 3163	MIS Software	\$95,815
FTA - Sec 5307	Bus Transit Bldgs/Equipment	Status: TIP-2002
- - -	-	Proj Type: Equipment
T AW 3125	MIS Hardware	\$57,000
FTA - Sec 5307	Bus Transit Bldgs/Equipment	Status: TIP-2002
- - -	-	Proj Type: Equipment
T6AW 3073	Furniture and Equipment	\$50,000
FTA - Sec 5307	Bus Transit Bldgs/Equipment	Status: MTP
- - -	Excludes 2001-2003 TIP Projec	Proj Type: Transit-Bldg
T AW 9001	Lump Sum: FY 2001-FY 2005 Bus Transit Buildings/Equipment	\$12,230,855
FTA - Sec 5307	Bus Transit Bldgs/Equipment	Status: MTP
- - -	-	Proj Type: Transit-Bldg
T AW 9004	Lump Sum: FY 2016-FY 2020 Bus Transit Buildings/Equipment	\$6,824,000
FTA - Sec 5307	Bus Transit Bldgs/Equipment	Status: TIP-2000
- - -	-	Proj Type: Passenger Fa
T4DT 3088	Downtown-Central-PE, Fin Des, Land Acq, Constr, Mgmt	\$60,000
FTA - Sec 5307	Bus Transit Bldgs/Equipment	Status: MTP
- - -	-	Proj Type: Transit-Bldg
T AW 9003	Lump Sum: FY 2011-FY 2015 Bus Transit Buildings/Equipment	\$6,500,000
FTA - Sec 5307	Bus Transit Bldgs/Equipment	Status: TIP-2001
- - -	-	Proj Type: Passenger Fa
T4DT 3076.1	Downtown West-PE, Fin Des, Land Acq, Constr, Mgmt	\$3,900,000
FTA - Sec 5307	Bus Transit Bldgs/Equipment	Status: TIP-2000
- - -	-	Proj Type: Passenger Fa
T4DT 3076	Downtown West-PE, Fin Des, Land Acq, Constr, Mgmt	\$200,000
FTA - Sec 5307	Bus Transit Bldgs/Equipment	Status: TIP-2001
- - -	-	Proj Type: Equipment
T6AW 3072	Fare Collection Equipment	\$3,600,000
FTA - Sec 5307	Bus Transit Bldgs/Equipment	Status: TIP-2001
- - -	-	Proj Type: Equipment
T AW 3113	MIS Hardware	\$845,000

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From	Limit To	
MPO Number		Project Description		Project Cost
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2001
- - -		-	Proj Type:	Equipment
T AW 3158		MIS Software		\$1,400,000
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2001
- - -		-	Proj Type:	Facility Reha
T 3156		Rehab/Renovation of Admin & Maint Fac (PE,Fin Des, Constr, Mgmt)		\$1,377,430
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2000
- - -		-	Proj Type:	Equipment
T6AW 3032	S 900	Furniture and Equipment		\$278,763
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	MTP
- - -		-	Proj Type:	Transit-Bldg
T AW 9002		Lump Sum: FY 2006-FY 2010 Bus Transit Buildings/Equipment		\$11,310,000
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2003
- - -		-	Proj Type:	Equipment
T AW 3129		Furniture and Equipment		\$50,000
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2001
- - -		-	Proj Type:	Equipment
T AW 3074		Furniture and Equipment		\$50,000
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2003
- - -		-	Proj Type:	Facility Reha
T 3168		Rehab/Renovation of Admin & Maint Fac (PE,Fin Des, Constr, Mgmt)		\$619,800
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2001
- - -		-	Proj Type:	Passenger Fa
T DT 3157		Renovation of Airport South Historic Homes - Phase III		\$296,800
FTA - Sec 5307		Bus Transit Bldgs/Equipment	Status:	TIP-2001
- - -		-	Proj Type:	Passenger Fa
T DT 3088.1		Downtown-Central-PE, Fin Des, Land Acq, Constr, Mgmt		\$1,040,000
FTA - Sec 5307		Bus Transit Non-Revenue Vehicles	Status:	TIP-2001
- - -		-	Proj Type:	Transit-Non-
T2AW 3120		Purchase 1 LE Supervisory Van		\$40,960
FTA - Sec 5307		Bus Transit Non-Revenue Vehicles	Status:	MTP
- - -		-	Proj Type:	Transit-Non-
T AW 9010		Lump Sum: FY 2021-FY 2025 Bus Transit Non-Revenue Vehicles		\$445,000
FTA - Sec 5307		Bus Transit Non-Revenue Vehicles	Status:	MTP
- - -		-	Proj Type:	Transit-Non-
T AW 9009		Lump Sum: FY 2016-FY 2020 Bus Transit Non-Revenue Vehicles		\$423,000
FTA - Sec 5307		Bus Transit Non-Revenue Vehicles	Status:	MTP
- - -		-	Proj Type:	Transit-Non-
T AW 9008		Lump Sum: FY 2011-FY 2015 Bus Transit Non-Revenue Vehicles		\$403,000

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From	Limit To	
MPO Number		Project Description		Project Cost
FTA - Sec 5307		Bus Transit Non-Revenue Vehicles	Status:	MTP
- - -		- - -	Proj Type:	Transit-Non-
T AW 9007		Lump Sum: FY 2006-FY 2010 Bus Transit Non-Revenue Vehicles		\$384,000
FTA - Sec 5307		Bus Transit Non-Revenue Vehicles	Status:	TIP-2003
- - -		- - -	Proj Type:	Transit-Non-
T2AW 3166		Purchase 3 Sedans		\$75,126
FTA - Sec 5307		Bus Transit Non-Revenue Vehicles	Status:	TIP-2003
- - -		- - -	Proj Type:	Transit-Non-
T AW 3167		Purchase 6 Trucks		\$267,095
FTA - Sec 5307		Bus Transit Non-Revenue Vehicles	Status:	TIP-2001
- - -		- - -	Proj Type:	Transit-Non-
T AW 3154		Purchase 13 Trucks		\$290,277
FTA - Sec 5307		Bus Transit Non-Revenue Vehicles	Status:	TIP-2000
- - -		- - -	Proj Type:	Transit-Non-
T2AW 3000	S 998	Purchase 7 LE Supervisory Vans		\$286,720
FTA - Sec 5307		Bus Transit Non-Revenue Vehicles	Status:	TIP-2001
- - -		- - -	Proj Type:	Transit-Non-
T AW 3153		Purchase 10 Sedans		\$238,820
FTA - Sec 5307		Bus Transit Non-Revenue Vehicles	Status:	MTP
- - -		Excludes 2001-2003 TIP Projec -	Proj Type:	Transit-Non-
T AW 9006		Lump Sum: FY 2001-FY 2005 Bus Transit Non-Revenue Vehicles		\$462,431
FTA - Sec 5307		Bus Transit Non-Revenue Vehicles	Status:	TIP-2000
- - -		- - -	Proj Type:	Transit-Non-
T2AW 3037	S 900	Purchase 19 Trucks		\$494,853
FTA - Sec 5307		Bus Transit Non-Revenue Vehicles	Status:	TIP-2001
- - -		- - -	Proj Type:	Transit-Non-
T AW 3155		Purchase 4 Supervisory Pick-ups		\$92,000
FTA - Sec 5307		Bus Transit Non-Revenue Vehicles	Status:	TIP-2000
- - -		- - -	Proj Type:	Transit-Non-
T AW 3141		Purchase 16 Sedans		\$373,152
FTA - Sec 5307		Bus Transit Non-Revenue Vehicles	Status:	TIP-2002
- - -		- - -	Proj Type:	Transit-Non-
T2AW 3097		Purchase 6 Sedans		\$146,730
FTA - Sec 5307		Bus Transit Non-Revenue Vehicles	Status:	TIP-2002
- - -		- - -	Proj Type:	Transit-Non-
T2AW 3161		Purchase 11 Trucks		\$271,561
FTA - Sec 5307		Bus Transit Other Programs	Status:	TIP-2000
- - -		- - -	Proj Type:	Enhancemen
T AW 3135		Enhancements to mass transportation service		\$390,750

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From	Limit To	
MPO Number		Project Description		Project Cost
FTA - Sec 5307		Bus Transit Other Programs	Status:	TIP-2000
- - -		-	Proj Type:	Transit-Oth
T AW 3152		Vehicle Overhaul		\$2,414,703
FTA - Sec 5307		Bus Transit Other Programs	Status:	TIP-2000
- - -		-	Proj Type:	Enhancemen
T AW 3150		Transit Travel Time Enhancement		\$100,000
FTA - Sec 5307		Bus Transit Other Programs	Status:	TIP-2001
- - -		-	Proj Type:	Enhancemen
T AW 3159		Transit Travel Time Enhancement		\$200,000
FTA - Sec 5307		Bus Transit Other Programs	Status:	TIP-2003
- - -		-	Proj Type:	Enhancemen
T AW 3138		Enhancements to mass transportation service		\$45,675
FTA - Sec 5307		Bus Transit Other Programs	Status:	TIP-2002
- - -		-	Proj Type:	Enhancemen
T AW 3137		Enhancements to mass transportation service		\$249,426
FTA - Sec 5307		Bus Transit Other Programs	Status:	TIP-2000
- - -		-	Proj Type:	Enhancemen
T AW 3148		(STEP) Bicycle Amenities		\$43,600
FTA - Sec 5307		Bus Transit Other Programs	Status:	TIP-2001
- - -		-	Proj Type:	Enhancemen
T AW 3136		Enhancements to mass transportation service		\$157,604
FTA - Sec 5307		Bus Transit Other Programs	Status:	TIP-2000
- - -		-	Proj Type:	Enhancemen
T DT 3149		(STEP) Ellis Alley Transit Center Adaptive Reuse		\$1,195,310
FTA - Sec 5307		Bus Transit Revenue Vehicles	Status:	TIP-2003
- - -		-	Proj Type:	Transit-Reve
T AW 3128		Purchase 35 LE R Paratransit Vans		\$2,886,205
FTA - Sec 5307		Bus Transit Revenue Vehicles	Status:	TIP-2000
- - -		-	Proj Type:	Transit-Reve
TIAW 3093	S 900	Rehab 32 Paratransit Vehicles		\$358,400
FTA - Sec 5307		Bus Transit Revenue Vehicles	Status:	MTP
- - -		-	Proj Type:	Transit-Reve
T AW 9012		Lump Sum: FY 2006-FY 2010 Bus Transit Revenue Vehicles		\$43,288,000
FTA - Sec 5307		Bus Transit Revenue Vehicles	Status:	MTP
- - -		-	Proj Type:	Transit-Reve
T AW 9013		Lump Sum: FY 2011-FY 2015 Bus Transit Revenue Vehicles		\$40,620,000
FTA - Sec 5307		Bus Transit Revenue Vehicles	Status:	TIP-2001
- - -		-	Proj Type:	Transit-Reve
T AW 3065		Rev Veh Rehab - Preventative Maintenance		\$509,120

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ		Limit From	Limit To	
MPO Number		Project Description		Project Cost
FTA - Sec 5307		Bus Transit Revenue Vehicles	Status: MTP	
- - -		Excludes 2001-2003 TIP Projec -	Proj Type: Transit-Reve	
T AW 9011		Lump Sum: FY 2001-FY 2005 Bus Transit Revenue Vehicles		\$35,356,582
FTA - Sec 5307		Bus Transit Revenue Vehicles	Status: MTP	
- - -		- -	Proj Type: Transit-Reve	
T AW 9014		Lump Sum: FY 2016-FY 2020 Bus Transit Revenue Vehicles		\$51,860,000
FTA - Sec 5307		Bus Transit Revenue Vehicles	Status: TIP-2000	
- - -		- -	Proj Type: Transit-Reve	
T1AW 3066		Rev Veh Rehab - Preventative Maintenance		\$1,508,136
FTA - Sec 5307		Bus Transit Revenue Vehicles	Status: TIP-2002	
- - -		- -	Proj Type: Transit-Reve	
T AW 3160		Rev Veh Rehab - Preventative Maintenance		\$200,000
FTA - Sec 5307		Bus Transit Revenue Vehicles	Status: TIP-2002	
- - -		- -	Proj Type: Transit-Reve	
T1AW 2843		Purchase 74 LE R Paratransit Vans		\$4,568,760
FTA - Sec 5307		Bus Transit Revenue Vehicles	Status: TIP-2003	
- - -		- -	Proj Type: Transit-Reve	
T AW 3164		Purchase 5 LE E Paratransit Vans		\$412,315
FTA - Sec 5307		Bus Transit Revenue Vehicles	Status: TIP-2000	
- - -		- -	Proj Type: Transit-Reve	
T1AW 2834	S 900	Purchase 68 R & 12 E 40' Low Floor Buses		\$20,426,120
FTA - Sec 5307		Bus Transit Revenue Vehicles	Status: TIP-2002	
- - -		- -	Proj Type: Transit-Reve	
T1AW 3090	S 901	Purchase 52 R & 5 E 40' Low Floor Buses		\$15,079,578
FTA - Sec 5307		Bus Transit Revenue Vehicles	Status: TIP-2003	
- - -		- -	Proj Type: Transit-Reve	
T AW 3165		Rev Veh Rehab - Preventative Maintenance		\$200,000
FTA - Sec 5307		Bus Transit Revenue Vehicles	Status: TIP-2002	
- - -		- -	Proj Type: Transit-Reve	
T1AW 3094	S901	Purchase 6 LE E Paratransit Vans		\$370,440
FTA - Sec 5307		Bus Transit Revenue Vehicles	Status: MTP	
- - -		- -	Proj Type: Transit-Reve	
T AW 9015		Lump Sum: FY 2021-FY 2025 Bus Transit Revenue Vehicles		\$70,624,000
FTA - Sec 5307		Capital Cost of Contracting	Status: TIP-2000	
- - -		- -	Proj Type: Transit-Oth	
TAW 3151		Capital Cost of Contracting		\$2,555,746
Funding Category Sum				\$374,676,067
Funding Category Percent of Total				3.88%

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ	Limit From	Limit To		
MPO Number	Project Description		Project Cost	
FTA - Sec 5310	Air Force Village Foundation	Status:	TIP-2000	
- - -	- - -	Proj Type:	Veh Proc-53	
3134	One 9-25 Passenger Van (Type III)		\$48,040	
FTA - Sec 5310	Mission Road Development Center	Status:	TIP-2000	
- - -	- - -	Proj Type:	Veh Proc-53	
3132	One Lowered Mini-Van (Type VII - ADA)		\$38,800	
FTA - Sec 5310	Presa Community Center	Status:	TIP-2000	
- - -	- - -	Proj Type:	Veh Proc-53	
3131	One 5-9 Passenger Van (Type II - ADA)		\$41,160	
FTA - Sec 5310	St. Vincent DePaul	Status:	TIP-2000	
- - -	- - -	Proj Type:	Veh Proc-53	
3133			\$41,320	
FTA - Sec 5310	Various Projects	Status:	MTP	
- - -	- - -	Proj Type:	Sec 5310	
T AW 9950	2025 Lump Sum: Section 5310		\$4,180,680	
Funding Category Sum			\$4,350,000	
Funding Category Percent of Total			0.05%	
Transit-Local	Bus Transit Depreciation (Non Federal Share)	Status:	MTP	
- - -	- - -	Proj Type:	Transit-Depr	
T AW 9032	Lump Sum: FY 2006-FY 2010 Depreciation (Non Federal Share)		\$47,297,000	
Transit-Local	Bus Transit Depreciation (Non Federal Share)	Status:	MTP	
- - -	- - -	Proj Type:	Transit-Depr	
T AW 9031	Lump Sum: FY 2001-FY 2005 Depreciation (Non Federal Share)		\$31,811,000	
Transit-Local	Bus Transit Depreciation (Non Federal Share)	Status:	MTP	
- - -	- - -	Proj Type:	Transit-Depr	
T AW 9034	Lump Sum: FY 2016-FY 2020 Depreciation (Non Federal Share)		\$80,072,000	
Transit-Local	Bus Transit Depreciation (Non Federal Share)	Status:	MTP	
- - -	- - -	Proj Type:	Transit-Depr	
T AW 9035	Lump Sum: FY 2021-FY 2025 Depreciation (Non Federal Share)		\$96,460,000	
Transit-Local	Bus Transit Depreciation (Non Federal Share)	Status:	MTP	
- - -	- - -	Proj Type:	Transit-Depr	
T AW 9033	Lump Sum: FY 2011-FY 2015 Depreciation (Non Federal Share)		\$63,685,000	
Transit-Local	Bus Transit Line Service Operating Expenses	Status:	MTP	
- - -	- - -	Proj Type:	Transit-Ope	
T AW 9017	Lump Sum: FY 2006-FY 2010 Bus Transit Line Service Operating Expen		\$430,447,000	
Transit-Local	Bus Transit Line Service Operating Expenses	Status:	MTP	
- - -	- - -	Proj Type:	Transit-Ope	
T AW 9018	Lump Sum: FY 2011-FY 2015 Bus Transit Line Service Operating Expen		\$488,685,000	

Funding Category	Project Name	PROJECT LIST ADOPTED ON 12/6/9
CSJ	Limit From	Limit To
MPO Number	Project Description	Project Cost
Transit-Local	Bus Transit Line Service Operating Expenses	Status: MTP
- - -	- - -	Proj Type: Transit-Ope
T AW 9020	Lump Sum: FY 2021-FY 2025 Bus Transit Line Service Operating Expen	\$609,240,000
Transit-Local	Bus Transit Line Service Operating Expenses	Status: MTP
- - -	- - -	Proj Type: Transit-Ope
T AW 9019	Lump Sum: FY 2016-FY 2020 Bus Transit Line Service Operating Expen	\$548,143,000
Transit-Local	Bus Transit Line Service Operating Expenses	Status: MTP
- - -	- - -	Proj Type: Transit-Ope
T AW 9016	Lump Sum: FY 2001-FY 2005 Bus Transit Line Service Operating Expen	\$369,595,000
Transit-Local	Bus Transit Non-Operating Expenses	Status: MTP
- - -	- - -	Proj Type: Transit-Non-
T AW 9038	Lump Sum: FY 2011-FY 2015 Non-Operating Expenses	\$23,425,000
Transit-Local	Bus Transit Non-Operating Expenses	Status: MTP
- - -	- - -	Proj Type: Transit-Non-
T AW 9036	Lump Sum: FY 2001-FY 2005 Non-Operating Expenses	\$19,635,000
Transit-Local	Bus Transit Non-Operating Expenses	Status: MTP
- - -	- - -	Proj Type: Transit-Non-
T AW 9040	Lump Sum: FY 2021-FY 2025 Non-Operating Expenses	\$27,183,000
Transit-Local	Bus Transit Non-Operating Expenses	Status: MTP
- - -	- - -	Proj Type: Transit-Non-
T AW 9039	Lump Sum: FY 2016-FY 2020 Non-Operating Expenses	\$25,304,000
Transit-Local	Bus Transit Non-Operating Expenses	Status: MTP
- - -	- - -	Proj Type: Transit-Non-
T AW 9037	Lump Sum: FY 2006-FY 2010 Non-Operating Expenses	\$21,546,000
Transit-Local	Bus Transit Other Operating Expenses	Status: MTP
- - -	- - -	Proj Type: Transit-Ope
T AW 9021	Lump Sum: FY 2001-FY 2005 Bus Transit Other Operating Expense	\$9,443,000
Transit-Local	Bus Transit Other Operating Expenses	Status: MTP
- - -	- - -	Proj Type: Transit-Ope
T AW 9025	Lump Sum: FY 2021-FY 2025 Bus Transit Other Operating Expense	\$14,861,000
Transit-Local	Bus Transit Other Operating Expenses	Status: MTP
- - -	- - -	Proj Type: Transit-Ope
T AW 9024	Lump Sum: FY 2016-FY 2020 Bus Transit Other Operating Expense	\$13,510,000
Transit-Local	Bus Transit Other Operating Expenses	Status: MTP
- - -	- - -	Proj Type: Transit-Ope
T AW 9023	Lump Sum: FY 2011-FY 2015 Bus Transit Other Operating Expense	\$12,159,000
Transit-Local	Bus Transit Other Operating Expenses	Status: MTP
- - -	- - -	Proj Type: Transit-Ope
T AW 9022	Lump Sum: FY 2006-FY 2010 Bus Transit Other Operating Expense	\$10,808,000

Funding Category		Project Name	PROJECT LIST ADOPTED ON 12/6/9	
CSJ	Limit From	Limit To		
MPO Number	Project Description		Project Cost	
Transit-Local	Bus Transit VIAtrans Operating Expenses		Status:	MTP
- - -	-	-	Proj Type:	Transit-Ope
T AW 9026	Lump Sum: FY 2001-FY 2005 Bus Transit VIAtrans Operating Expense			\$108,760,000
Transit-Local	Bus Transit VIAtrans Operating Expenses		Status:	MTP
- - -	-	-	Proj Type:	Transit-Ope
T AW 9030	Lump Sum: FY 2021-FY 2025 Bus Transit VIAtrans Operating Expense			\$203,364,000
Transit-Local	Bus Transit VIAtrans Operating Expenses		Status:	MTP
- - -	-	-	Proj Type:	Transit-Ope
T AW 9029	Lump Sum: FY 2016-FY 2020 Bus Transit VIAtrans Operating Expense			\$180,073,000
Transit-Local	Bus Transit VIAtrans Operating Expenses		Status:	MTP
- - -	-	-	Proj Type:	Transit-Ope
T AW 9028	Lump Sum: FY 2011-FY 2015 Bus Transit VIAtrans Operating Expense			\$156,782,000
Transit-Local	Bus Transit VIAtrans Operating Expenses		Status:	MTP
- - -	-	-	Proj Type:	Transit-Ope
T AW 9027	Lump Sum: FY 2006-FY 2010 Bus Transit VIAtrans Operating Expense			\$133,497,000
Funding Category Sum				\$3,725,785,000
Funding Category Percent of Total				38.59%
Grand Total				\$9,655,158,268

Unfunded Transportation Projects

Project Name	Limit From	Limit To	Project Description	Project Type	Project Cost
Bandera Road (SH 16)	IH 410	Loop 1604	Construct toll road in the SH 16 corridor	Toll Road	\$280,000,000
East Corridor	Downtown	W. W. White	Construct in-street light rail; cost includes stations	Light Rail	\$330,300,000
IH 410 Corridor	Medical Center	Randolph AFB	Construct at-grade light rail; cost includes stations	Light Rail	\$694,500,000
Northcentral Corridor	Downtown	Loop 1604	Construct in-street/at-grade light rail; cost includes stations	Light Rail	\$640,900,000
Northeast Corridor	Downtown	Randolph P&R	Construct in-street/at-grade light rail; cost includes stations	Light Rail	\$293,300,000
Northwest Corridor	Downtown	UTSA	Construct in-street/at-grade light rail; cost includes stations	Light Rail	\$576,500,000
Southeast Corridor	Downtown	Brooks AFB	Construct in-street light rail; cost includes stations	Light Rail	\$303,300,000
Southwest Corridor	Downtown	Kelly AFB	Construct in-street light rail; cost includes stations	Light Rail	\$334,500,000
West Corridor	Downtown	Loop 1604	Construct in-street/at-grade light rail	Light Rail	\$545,200,000
Loop 1604	IH 10 West	IH 35 North	Add HOV Lanes to Loop 1604 capacity expansion	HOV Lanes	\$20,000,000
Military Drive	Quintana	New Braunfels	Construct busway within existing ROW	Busway	\$50,000,000
San Antonio-Austin Commuter Rail	Kelly Industrial Center	Bexar County Line	Study area portion of commuter rail line only	Commuter Rail	\$72,600,000
Wurzbach Parkway	IH 35 North	Fredericksburg Rd	Construct busway within existing ROW	Busway	\$66,000,000

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