# Strategic Plan

1997-2001





L'egislative Budget Board Austin, Texas



# Strategic Plan 1997-2001

Commissioners

Hometown

Term Expires

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Submission Date June 28, 1996

Texas Department of Transportation

Signed

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**Executive Director** 

Approved

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### State of Texas

In Vision Texas: The Statewide Planning Elements for Texas State Government (April, 1996) the Governor and the Legislative Budget Board developed the following statewide vision, mission, philosophy, functional goals, and benchmarks which serve as a foundation for the strategic planning process:

### Vision

Together we can make Texas a beacon state. A state where our laws encourage jobs and justice. A state that frees our greatest resource--our people--to achieve their highest potential. A state where our children receive an excellent education so they have skills to compete in the next century. A state where people feel safe in their communities, and all people know the consequences of committing a crime are swift, sure and outweigh any potential reward. And a state where each citizen accepts responsibility for his or her behavior. We envision a state where it continues to be true that what Texans can dream Texans can do.

### **Mission**

The mission of Texas state government is to support and promote individual and community efforts to achieve and sustain social and economic prosperity.

### **Philosophy**

State government will be ethical, accountable, and dedicated to the public being served. State government will operate efficiently and spend the public's money wisely.

### Relevant Statewide Functional Goals and Benchmarks

### **Economic Development Priority Goal**

To foster economic opportunity, job generation, and capital formation by providing quality business services, preparing the workforce for productive employment, and supporting infrastructure development.

### Benchmark

Highway system quality rating

#### Natural Resources Priority Goal

To conserve the state's environment through prudent stewardship of the state's natural resources.

\*\*Benchmarks\*\*

- Percent of Texans living in areas meeting or exceeding air quality standards
- Tonnage reduction in priority air pollutants in counties not meeting air quality standards

### General Government Priority Goal

To support effective and efficient state government operations Benchmark

Ratio of federal dollars received to federal tax dollars paid

#### Regulatory Priority Goal

To ensure that communities are served by high quality professionals and businesses by setting clear standards, maintaining compliance, and seeking market-bases solutions.

### **Texas Department of Transportation**

### **Vision**

To be a progressive state transportation agency recognized and respected by the citizens of Texas:

- Providing comfortable, safe, durable, cost-effective, environmentally sensitive, and aesthetically appealing transportation systems that work together
- Ensuring a desirable workplace which creates a diverse team of all kinds of people and professions
- Using efficient and cost-effective work methods that encourage innovation and creativity
- Promoting a higher quality of life through partnerships with the citizens of Texas and all branches of government by being receptive, responsible and cooperative.

### Mission

To work cooperatively to provide safe, effective, and efficient movement of people and goods.

### **Philosophy**

Through a diverse and well-trained workforce, we will be open, ethical, responsive, accountable and dedicated to the external and internal customers we serve.

### External/Internal Assessment

### Scope and Evolution of the Texas Department of Transportation (TxDOT)

TxDOT employees are committed to quality performance and results. When the Texas Department of Transportation was created in 1991, it merged responsibilities of two agencies and brought highways, aviation, and public transportation under one roof. Although highways play a prominent role in its transportation efforts, TxDOT is exploring options and opportunities that include all other modes of transportation. TxDOT must consider many factors and modes of transportation as the department strives to make Texas more livable and economically sound. From the research the department conducts with state-supported colleges and universities to its involvement in environmental matters, TxDOT realizes that it is responsible for and contributes significantly to the overall well-being of Texans and others who travel Texas.

TxDOT provides the people of Texas with a state highway system, operates two ferry systems, assists general aviation and public transportation through a variety of services and programs, and serves as the local sponsor for the Gulf Intracoastal Waterway. It also promotes the use of bicycles as a means of transportation.

Transportation responsibilities include planning, designing and managing highway construction projects; maintaining highways and roadsides; managing traffic and improving traffic safety; controlling outdoor advertising and junkyards along highways; inspecting and replacing bridges both on and off the state system; and working with railroads to improve the safety of railroad crossings.

Pilots, businesses and communities dependent upon general aviation airports are served by TxDOT through planning, inspection, financial assistance, and technical and engineering services. TxDOT helps small-city, rural and specialized transit operators (such as those serving the elderly and people with disabilities) through research, planning, and financial assistance. TxDOT is in the process of starting the Routine Airport Maintenance Program where airports receive the same maintenance work that is done on the highways. TxDOT coordinates with economic and environmental interests in planning for, maintaining, preserving and improving the Texas portion of the Gulf Intracoastal Waterway, thereby serving its transportation users.

Travelers are served through travel information centers, rest and picnic areas, travel literature, maps, and a toll-free travel hotline offering information on emergency road conditions as well as personalized travel counseling. Texas Highways magazine, the official travel magazine of the state, provides monthly articles and suggestions regarding travel. The growing Texas tourism industry benefits from the department's distribution of the magazine, other travel literature, and counseling services provided to tourists and potential visitors to the state.

The department issues oversize and overweight permits to trucks using the state highway system. TxDOT also registers Texas vehicles, issues certificates of title, and collects fees through the 254 county tax assessor-collectors. The department enforces the Texas Motor Vehicle Commission Code, licenses new and used-vehicle dealerships and leasing companies, and enforces the Lemon Law. Three new regulatory responsibilities added in 1995 are trucking regulation, salvage dealer regulation, and vehicle storage facility regulation.

To fulfill these varied responsibilities to its customers, TxDOT employees plan extensively with both governments and private organizations, including Mexico and neighboring states. The department is building upon existing partnerships and forming new ones. Of particular note, it has developed the Texas Transportation Plan, which addresses the total transportation picture in Texas: air, rail, highway,

private sectors. TxDOT is also striving to improve connections between the different modes of transportation.

### Historical Highlights

- ●1917 The Texas Legislature established the Texas Highway Department as a result of the 1916 Federal Highway Act.
- 1921 The act was amended to require states to take on construction and maintenance responsibilities.
- ●1945 The Texas Legislature established the Texas Aeronautics Commission, providing for the first time a state role in aviation in Texas.
- ●1956 The Texas Highway Department received additional funding to begin the Interstate highway system.
- •1975 The Legislature combined the Texas Mass Transportation Commission and the Texas Highway Department to form the State Department of Highways and Public Transportation (SDHPT). Also, responsibility as the local sponsor for the Gulf Intracoastal Waterway was placed with SDHPT.
- •1976 The Governor's Office of Traffic Safety was transferred to the SDHPT by executive order.
- ●1991 The Legislature formed the Texas Department of Transportation (TxDOT) by merging the State Department of Highways and Public Transportation, the Department of Aviation and the Texas Motor Vehicle Commission.
- •1995 The motor carrier regulatory functions of the Texas Railroad Commission were transferred to TxDOT.

### **Statutory Limitations and Requirements**

#### **State Provisions**

The Texas Constitution dedicates for public road purposes revenue in the form of motor-fuels taxes and vehicle registration fees, which provide the foundation for department operations. Various statutes regulate the department's operations and spending authority relating to highway construction, maintenance and operations; public transportation funding; traffic safety services; aviation funding and services; support for the Gulf Intracoastal Waterway; and other transportation-related services and programs.

The department's legislative appropriation includes specific requirements for transfers of funds. State law emphasizes the use of private contractors and professional services, including disadvantaged business enterprises and historically underutilized businesses. In addition, the department must consider the impact of increased trade resulting from the North American Free Trade Agreement in planning the state's transportation network.

The 72nd Texas Legislature in 1991 directed the Sunset Advisory Commission to review the feasibility of consolidating the Texas Turnpike Authority (TTA) with TxDOT. Texas voters adopted a constitutional amendment in November 1991 that authorizes TxDOT to expend highway funds for TTA toll projects, provided that all funds are repaid from toll revenues. This amendment removed a constitutional impediment to the possible merger of the two transportation agencies in 1997. In addition, the National Highway System Designation Act of 1995 authorizes the use of federal funds for up to 80% of the cost of toll projects.

### **Federal Provisions**

TxDOT uses federal funds to construct and rehabilitate highways and bridges; to provide public transportation to the elderly and people with disabilities, and to assist rural transit and municipal transit systems in cities under 200,000 population; to promote traffic safety efforts throughout the state; to assist localities in establishing and maintaining general aviation airports; and to accomplish many other tasks that help provide safe and efficient transportation systems for the citizens of Texas.

The department must comply with various federal statutes, and federal transportation funds can be withheld (or projects may not be approved) for non-compliance. These standards include the Clean Water Act; the Endangered Species Act; the National Environmental Policy Act; safety-belt laws; commercial vehicle length, size, and weight limits; outdoor advertising and junkyard controls; the zero tolerance provisions; driver's license suspension for drug offenders; commercial vehicle driver license requirements; and certification of metropolitan planning organizations.

The Intermodal Surface Transportation Efficiency Act of 1991(ISTEA) gives local governments enhanced roles in planning for and spending federal funds for transportation in cities with populations greater than 50,000. Cities with populations of more than 200,000 decide transportation investments for their respective areas in cooperation with TxDOT.

### TxDOT's Plans

There are three major long-term plans used by TxDOT, the Strategic Plan (SP), the Texas Transportation Plan (TTP) and the Unified Transportation Plan (UTP):

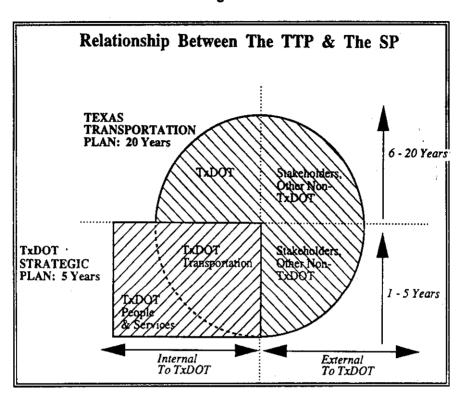


Figure 1

As Figure 1 shows, these plans have some commonality, but are fundamentally different. The Commission-approved actions in the Texas Transportation Plan which overlap with the Strategic Plan have been incorporated into the Strategic Plan to ensure consistency.

The Strategic Plan is a five-year document covering TxDOT's plans for all of its activities, its services, and its people. It is mandated for all Texas agencies by the Legislature as part of a performance-based planning and budgeting system. In addition to setting goals, objectives, and strategies, the Strategic Plan projects target results for all of its outcome measures; these projected performance measures are based on a current-funding (no new revenues) scenario for the agency overall.

The Texas Transportation Plan is a twenty-year document covering plans by both TxDOT and other transportation stakeholders in the state. It is mandated by the Texas Legislature and by ISTEA expressly to set direction for developing and preserving all modes of transportation and for ensuring connectivity between these modes. This plan provides policies and strategies that have been adopted by the Texas Transportation Commission and potential actions from which the Commission will choose to guide transportation decision making over the next twenty years. Some of the recommended actions may have to be initiated and implemented by other public and private sector entities.

The Unified Transportation Program (UTP) serves as TxDOT's internal mechanism to authorize transportation project development. The UTP includes all transportation modes and all types of construction from seal coat to new construction. The UTP is updated annually to permit timely response to new and changing economic and physical conditions. The UTP is a ten year fiscally constrained plan with two classes of projects. The Priority One projects are approved for construction in the next three years. Priority Two projects are those projects in years 4-10 being prepared for construction approval.

### Organization

### **Organizational Structure**

The Texas Transportation Commission, a three-member body appointed by the governor, develops agency policy and exercises oversight. TxDOT's executive director is appointed by and reports directly to the commission and is responsible for the day-to-day operation of the agency. An eight member Senior Management Team, headed by the executive director, oversees all department operations. These operations are divided into seven major functions: transportation planning and development, field operations, multimodal transportation, administrative services, human resource management, motorist services, and staff services. Twenty-nine divisions and special offices in Austin perform administrative and operational functions that support and strengthen the activities of twenty-five districts around the state. The current organizational structure is depicted in Appendix B.

### Workforce

The department has been as high as 17,997 full-time equivalent (FTE) allocations in 1974. Its April 1, 1996 allocations were 15,456. By the end of fiscal years 1996 and 1997 TxDOT plans to meet the Texas State legislature mandated staffing levels of 15,171 and 14,721 respectively.

In contrast, the roles and responsibilities of the department have increased in recent years as a result of legislation and court rulings along with its transition from a "Highway Department" to a "Department of Transportation" in 1991.

In view of the expanding department roles, coupled with its mandated staffing reductions, the department is pursuing a more in-depth concentration on "core" activities supplemented with an emphasis on working smarter, consolidating, and reducing some functions and transferring other operations within the department, along with privatizing/outsourcing certain work. Further, the department is striving for break-throughs in areas such as automation and organizational efficiencies.

To fulfill its mission and carry its goals forward, TxDOT places great emphasis on training and development of employees. TxDOT maintains a high-quality, motivated workforce and adheres to human resource policies that emphasize competent leadership, open and effective communication, employee participation and recognition, good working conditions, fair compensation and individual responsibility and accountability. In addition, the department is striving to achieve a diverse workforce, that mirrors the diversity of the state's population in terms of gender and ethnicity. Good results have been achieved, and with diligent and aggressive actions, diversity goals will be attained. As of November 1995, TxDOT was comprised of 22.1% females and 77.9% males. The distribution of the workforce by ethnicity was as follows:

- 71.6% White
- 19.1% Hispanic
- 7.7% Black
- 1.6% Other

### Survey of Organizational Excellence

The Survey of Organizational Excellence began at the request of Governor William Clements in 1979 and is continued in each biennium by the School of Social Work of The University of Texas. The intent of the survey is to use assessment methodologies to ascertain the attitudes of state employees toward the state as an employer. The survey conducted in 1994 found that employees of TxDOT were generally positive about their work environment, benefits, external communication, job satisfaction, the department's emphasis on employee development, affirmative action, and time/stress management. To address concerns found by the survey, TxDOT held internal focus group meetings.

### **Organizational Improvements**

To allow the department to do more with less, several major initiatives are under way to improve the efficiency and effectiveness of the department:

**Retooling TxDOT** - This reengineering initiative is a strategy for fundamental change which examines TxDOT's business processes in 14 business areas covering all of the department, determines processes needing improvement and the associated information needs, recommends business changes, redesigns business processes, and implements new processes.

Continuous Improvement (CI) - This is a strategy to promote incremental improvement of programs and projects throughout the department. This is being led by a Continuous Improvement (CI) Office which conducts internal training in problem-solving skills, provides facilitation support for teams, assists in customer-focused measurement and evaluation, facilitates partnering efforts, and provides guidance for CI implementation efforts.

Partnering - This is a project-specific initiative that seeks to build cohesive working relationships between TxDOT personnel and outside contractors, suppliers, and consultants.

Scrub the Budget - Budget scrubbing teams coordinated by the Budget and Finance Division were formed in 1994 to make department activities more efficient and identify potential cost savings. The teams use continuous improvement techniques, process re-engineering, and performance auditing. The teams have looked at overtime policy, inventory management, and the utilization of the equipment fleet. New reviews are looking at materials and testing procedures, budgeting, and building and equipment needs and policies.

Staffing Optimization - The Optimum Department Staffing Task Force examined divisions and special offices as well as district staff allocations to allocate FTEs among functions to maximize overall effectiveness within the fixed total staffing level targets set in the General Appropriations Act directed by the Texas Legislature. The Task Force provided staffing targets and ideas to explore to achieve those staffing levels. As part of this process, the task force also examined staffing models for validity. TxDOT is in the process of exploring ideas of the Optimum Department Staffing Task Force, including privatization, to implement recommendations for staffing administrative support and regulatory functions, mostly in the Austin area.

### Demographic/Economic Variables

Several major trends set the stage for future Texas transportation needs.

### Expanding Population

The Texas population is steadily increasing. By 2001, the population will be about 21 million, up from an estimated 19.4 million in 1997. The population is also aging. Texas' population greater than 65 years old is 10.3 percent and will be 13 percent by 2015. Both the volume and age of drivers will increasingly affect transportation design and services.

### Growing Travel Demand

Texas population is also growing more urban. About 82 percent of the population lives in the state's 25 urbanized areas. Almost 56 percent of the miles driven each day are on the 20 percent of the state road miles located in urban areas. The vehicle miles traveled are growing at an even faster rate than population, reflecting a more transportation-intensive state. See Figure 2.

**Cumulative Increase** in Population and Travel 250 Percent 100 2015 2005 1995 1985 1975 2010 1990 2000 1980 1970 State Population Annual VMT Sources: U. S. Bureau of the Census (1969-1995), Texas Comptroller of Public Accounts, and TxDOT's Transportation Planning and Programming Division

Figure 2

### Competitive Economy

There is intensive economic competition among states and among nations. This competition includes the scope and quality of transportation. Transportation is a vital component of the Texas economy. State Comptroller data shows that in 1995, an estimated \$56.6 billion was spent on transportation of goods, services and people. This represents 11.4 percent of the Texas gross state product.

### Increasing International Trade

International trade is an important factor in the Texas economy. U.S. trade with Canada and Mexico reached record levels in 1994, jumping 17 percent to \$348 billion. This trade is producing an increasing demand on Texas' transportation facilities. Approximately 75 percent of the United States-Mexico trade passes through Texas. These goods travel to all of the continental United States and Canada, yet Texas is bearing the burden of the impact on the transportation infrastructure.

### **Declining Air Quality**

Texas has four areas that do not meet federal standards for quality air. According to the Environmental Protection Agency these areas are Houston, Beaumont, Dallas-Fort Worth and El Paso. Austin, San Antonio, Victoria, Corpus Christi and Tyler are bordering on non-attainment status for air quality. Clean air will continue to be a major factor in planning transportation options.

### Thriving Tourism

Tourism is Texas' third largest industry and is expected to continue as a major factor in the Texas economy. The quality of transportation is a catalyst for the tourist industry. Texas already is the second most popular destination for U.S. tourists. Tourism is a \$24.5 billion industry in the state of Texas and supports 435,000 jobs.

### **Fiscal Aspects**

Figure 3 shows the department's historical and forecasted revenues for 1985 to 2001. Forecasts do not account for the effects of inflation. Automobile fuel efficiency increases are expected to offset increases in driving, producing essentially no increase in revenues through 2001.

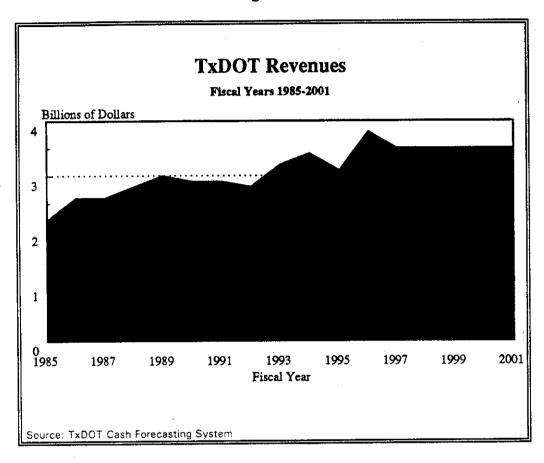


Figure 3

As shown in Figure 4, ninety-five percent of TxDOT's revenue, is derived from three major sources. Fuel consumption is not expected to change substantially over the five year span of this Strategic Plan.

- Almost one-half (48 percent) is derived from the state's motor-fuel tax. The motor fuel tax is one of the largest sources of tax revenue for the state, second only to the sales tax. Most fuel-tax revenue derives from the 20-cent per gallon state gasoline tax and from diesel and special fuels taxes, of which the department receives about 75 percent (the school fund receives 25 percent).
- Federal reimbursements provide 29 percent of the department's revenue, and
- Vehicle registration (license) fees comprise 18 percent of TxDOT's revenue.
- Other revenue (5 percent) includes reimbursements from cities and counties, sales tax on lubricants, title fees, interest and other sources.

Figure 4

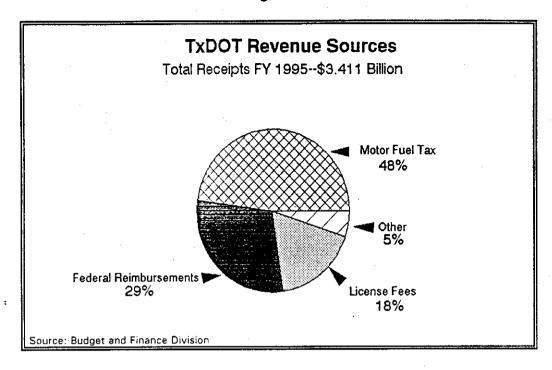
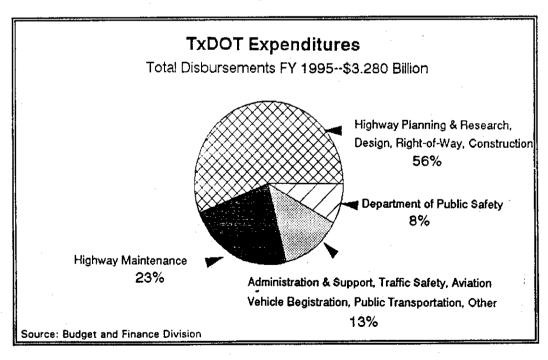


Figure 5 shows 1995 expenditures for major department programs. Construction and maintenance program expenditures averaged 79 percent of all expenditures for this period.

Figure 5



Uncertain further effects on expenditures for construction and maintenance programs are expected for fiscal years 1997 through 2001 because of the proposed National Highway System and full implementation of ISTEA.

### **Funding Requirements**

TxDOT is committed to delivering maximum transportation value to Texans and visitors to Texas. The department has embarked on major efficiency-enhancing initiatives in the areas of automation, organizational reengineering, staffing optimization, and continuous improvement. All of these will help increase the ability of the department to deliver a higher level of service for the taxpayer's dollar. In addition, TxDOT is working actively to use partnering and other innovative financing methods such as toll roads to leverage the transportation-buying power of revenues collected.

However, there are also external forces which act to *diminish* this level of service: unfunded federal mandates, inflation, and growth in transportation demand. Unfunded mandates divert resources from direct transportation uses. Highway cost inflation reduces the transportation buying power of tax revenues just as general inflation decreases the buying power of the consumer's dollar. Finally, increasing demand for transportation due to increasing population and economic development places further pressure on what the tax dollar can continue to provide in terms of safety, system preservation, and mobility.

As shown in Figure 6, Texas' transportation needs for all modes (as estimated by the Transportation Needs Project, June 28, 1996) are best described in terms of level of service scenarios with their associated costs. The dollar amounts are 10-year annualized needs that reflect a 3.66 percent inflation rate over the 1997-2006 period. These scenarios are:

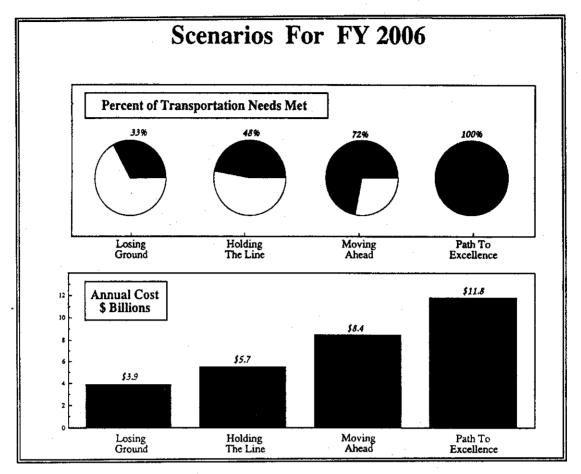
Scenario One, "Losing Ground": With current funding sources, an average of \$3.9 billion per year, adjusted for inflation, there will be a general deterioration of the transportation system resulting in meeting only 33% of identified transportation needs (100% of transportation needs is Scenario Four; Path to Excellence).

Scenario Two, "Holding the Line": If funding is increased to an average of \$5.7 billion per year, adjusted for inflation, the present level of service will be maintained, meeting 48% of identified transportation needs (as a percentage of Scenario Four; Path to Excellence which equals 100% of transportation needs).

Scenario Three, "Gaining Ground": If funding is increased to an average of \$8.4 billion per year, adjusted for inflation, the agency's internal staffing will maximize its potential for management of contracted services and the transportation system will attain 72% of identified transportation needs.

Scenario Four, "Path to Excellence": Meeting all reasonable transportation needs of the state and economy by expanding programs to an average of \$11.8 billion per year, adjusted for inflation.

Figure 6



As of FY 1996, levels of service (LOS) by mode are assessed by TxDOT as follows:

Figure 7

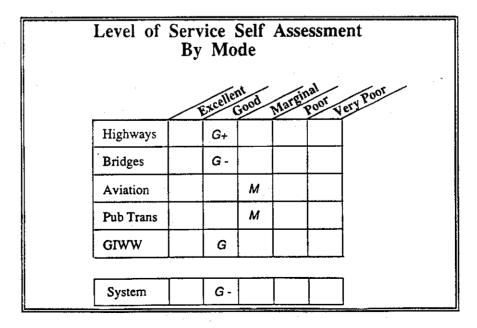


Figure 8 shows the effects of time and expenditures on the cumulative level of service provided by the Texas transportation systems; highways and bridges, public transit, aviation and the Gulf Intracoastal Waterway. "Holding the Line" shows that today the systems are in fairly good condition but the rehabilitation or reinvestment will be critical to avoid serious deterioration of the infrastructure investment. "Gaining Ground" and "Path to Excellence" show progressively improved system levels of service as expenditures are increased.:

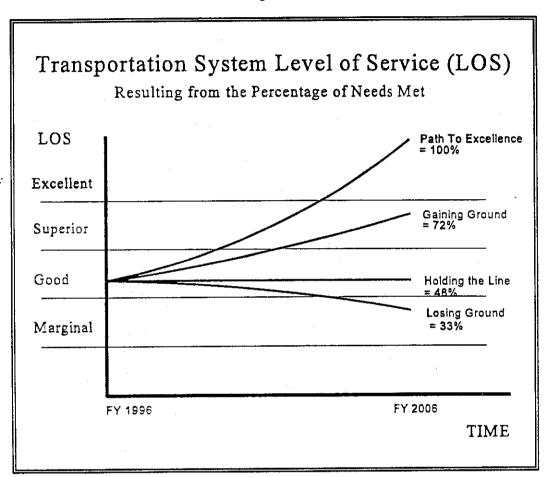


Figure 8

In Scenario One," Losing Ground", overall system condition will deteriorate from "good minus" down to a "marginal" level by FY 2006. In Scenario Two, "Holding the Line", the system will remain at "good minus". For Scenario Three, "Gaining Ground", the system will improve, reaching a "superior" level over that time period. In Scenario Four, "Path to Excellence", the system overall will attain an "excellent" level of service.

It should be noted that the Strategic Plan for 1997-2001 reflects the "Losing Ground" Scenario. The Plan's projected performance measures are based on the current-funding levels with no projected increases in rates or sources.

### **Facilities Capital Improvements Needs**

TxDOT's space utilization plan to meet the 153 sq. ft. Statute Master Plan and Condition Assessment found that of the 2,500 facilities owned by the department, 1,193 are considered to be significant structures. Over 75 percent of these structures are over 30 years of age--almost 10 percent are over 50 years old. Only 15 percent of TxDOT's significant structures have been built within the last 25 years. In order to address this problem according to the "Statewide Executive Summary Report" of the Property Condition Assessment Survey by Law Engineering and Environmental Services, Inc., October 11, 1995, approximately \$247,893,500 of repairs and replacements are needed between 1995-2005. Of this, \$62,980,000 are immediate needs that should be completed during 1995, 1996 and 1997. All "high-use" public buildings have been renovated for Americans with Disability Act compliance and the remaining structures are under contract for necessary modifications.

The priorities for the FY 1998-99 capital improvements projects are:

- Teleconferencing equipment at Greer and Riverside complexes
- · Rest area development and renovation
- Essential maintenance and repairs
- Expansion of existing or new facility site acquisition
- · Additions and renovations for new facilities

### Benchmarking

Benchmarking has been defined as "the process of comparing processes and products against the best that can be found" [William Lareau, American Samurai, p. 128]. TxDOT is a member of a number of national transportation-related organizations such as the Transportation Research Board and the American Association of State Highway and Transportation Officials, as well as discipline-related organizations such as the American Society of Civil Engineers, and the American Management Association, to name just two. These organizations furnish extensive benchmarking opportunities through meetings, publications, and E-mail networks. These avenues are routinely and extensively used for mutual problem solving and identifying best practice, which is the essence of benchmarking. For example, Retooling TxDOT evaluated right-of-way acquisition processes by benchmarking against four other states and one private company.

Performance measures are periodically reviewed by management and revised if necessary to better reflect efficiency and effectiveness of department operations. New statistical methods such as data envelopment analysis are evaluated for their utility to the department. Cost benchmarking is conducted and is reflected in the Preliminary Engineering Efficiency Report. Information from other state agencies and DOTs was used by the Optimum Department Staffing Task Force as guidelines in assessing staff allocations.

## Texas Department of Transportation Goals and Primary Statutory Citations

### Goal I

To provide the State of Texas with transportation services and systems that

- · work together;
- are safe, comfortable, durable, and affordable;
- are environmentally sensitive; and
- support economic and social prosperity

[Transportation Code, ch. 21-22, ch. 201, ch. 455, ch. 456, ch. 201, §§472.011-472.014, §§223.006-223.007, §§224.031-224.032, ch. 203, ch. 723, ch. 501, 4413(36), ch. 502 and ch. 503] [23 US Code Secs. 109, 116 and 119 (b), 133, 135 138, 149, 152, and 402] [US Code Sec. 142 and 49 U.S.C., ch. 471]

#### Goal II

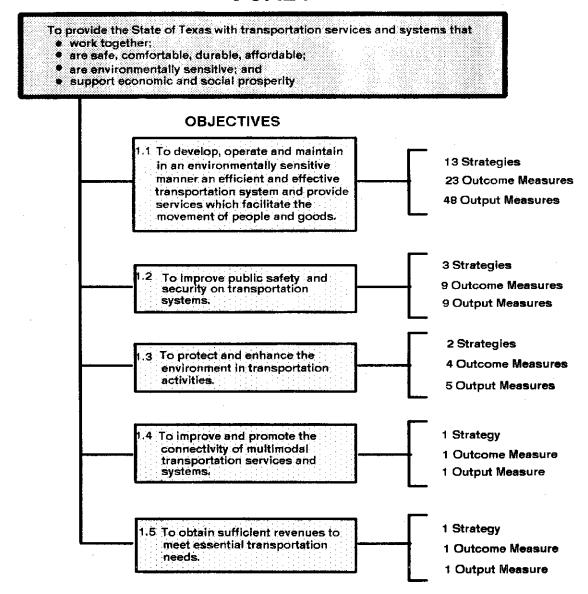
To achieve the highest level of external and internal customer satisfaction (External customers include the general public, private businesses, transportation users and government entities; internal customers include all TxDOT employees.)

#### Goal III

To ensure equitable involvement by historically underutilized businesses (HUBs) to provide goods and services to the department

[Government Code ch. 2151-2176 and T.C. 201.702]

### **GOALI**



### Transportation—Goal I

Transportation facilitates economic prosperity by making the entire economy of the state more efficient. It also fosters social prosperity by making travel more comfortable, affordable, safe, and aesthetically appealing. The Texas transportation system is significant not only to the state's citizens and existing businesses, especially those related to tourism, but also to out-of-state businesses considering relocation in Texas. While working to foster economic and social prosperity in the state, an important component of the goal is have a transportation system that allows Texas to preserve its wealth of environmental, cultural and historical resources.

Texas expects to grow in population and to see increased domestic and international trade—all of which place increasing demands on the transportation system, especially on the highways. In many locations there is simply no space left to add additional highways or highway lanes. Several large metropolitan areas already suffer from poor air quality due to automobile traffic and congestion. With the exception of Houston, congestion in the state's seven major urban areas has increased steadily since the early 1980s. Even though Houston's congestion index has been declining, that city still has the highest congestion index in the state. TxDOT is in the process of developing computerized traffic management centers (such as Houston's TranStar and San Antonio's TransGuide systems) as a strategy for decreasing congestion through better traffic management. Other innovative strategies such as Intelligent Transportation Systems, traffic management, high-occupancy vehicle lanes, and alternative funding methods will be required to solve the congestion problem.

Ultimately, the state's current highway-intensive transportation system will have to become both multimodal and intermodal, i.e., a system of multiple modes with "seamless" connections, so that passengers and freight can travel by the most effective and efficient modes and transfer between the modes quickly and easily. To support the transportation system policies and strategies of the Texas Transportation Plan (TTP) along these lines, the TxDOT retooling effort is developing a process to identify transportation system needs based on Goal I, performance measures, and system conditions. TTP actions that support this overall Goal I are as follows:

- Investigate the feasibility of a statewide economic development plan with the Texas Department of Commerce and others which
  would provide a working linkage between transportation and economic development strategies. [TTP 13.1.4]
- Provide a forum for government officials and private transportation managers to identify and discuss statewide freight and
  passenger flows. [TTP 13.1.1] The forum would be used to coordinate statewide economic development and transportation
  policy as a foundation for industry- and corridor-specific traffic management. [TTP 13.1.2] The forum would also identify
  information and data required to effectively plan and implement transportation programs and projects and to inventory current
  and emerging transportation deficiencies and bottlenecks by industry and region. [TTP 13.1.3]
- Supplement the statewide plan with corridor-level plans tying transportation investment to the state's economic development goals, and target transportation investments to the economic development needs of specific industries and regions. [TTP 13.1.5, 13.1.6, 13.1.7]
- To improve planning for Goal I, TxDOT will develop better methods of measuring transportation system performance. [TTP 10.1.4.]

<sup>&</sup>lt;sup>1</sup> "Actions" **are** *TTP* "potential actions" which have been adopted by the Texas Transportation Commission. The three numbers separated by dots indicate the *TTP* policy, strategy, and action number, respectively. Some *TTP* actions will be initiated and implemented by TxDOT while others will be the responsibility of other public entities, the private sector, or public/private partnerships.

### Highway Projects - Strategy 1.1.1

TxDOT maintains and operates a state highway system of 76,765 miles with 183,334 lane miles and inspects and maintains 33,691 bridges. TxDOT also inspects, administers federal funds for, and supervises replacement and rehabilitation of another 14,522 bridges not on the state system. Vehicle usage on the system is expected to increase approximately 8 percent, from about 127 billion vehicle miles traveled annually to about 137 billion vehicle miles between 1997-2001. Dallas, Houston, Fort Worth and Austin rank in the top 20 cities in the United States for average daily travel per capita on freeways. Dallas and Houston rank in the top 20 in average daily traffic per freeway lane mile.

With current revenues, TXDOT is funding less than half of the needed highway improvements. Erosion of TxDOT funding and uncertainty about continuation of federal funding could lower this percentage. Guidelines for evaluating viable transportation alternatives to meet identified transportation needs are being developed through the Retooling TxDOT Program. In both urban and rural areas, TxDOT generally emphasizes improvement of existing highways rather than construction of new highways. Construction priority is given to projects included in the State Transportation Improvement Program, which includes individual Metropolitan Planning Organization (MPO) projects and district rural projects.

TxDOT's Transportation Planning and Programming Division is responsible for the development of (1) the Texas Transportation Plan, which sets direction and policies for transportation and (2) the Unified Transportation Program, which reflects projects based on comprehensive planning and available funding. TxDOT's Design Division supports project planning and plan specification/estimate development, evaluates project design for consistency with TxDOT design policy, and identifies improved design criteria and roadside safety features.

Maintaining and enhancing air quality is an important consideration for TxDOT's highway planning and project development function. The federal Clean Air Act and its 1990 amendments require areas not attaining air quality standards to provide transportation that assists in reducing vehicular emissions. Some measures used to accomplish this include traffic signal improvements, restricted lanes, and pedestrian improvements. Specific measures must be taken in the nonattainment areas Houston/Galveston, Beaumont/Port Arthur, Dallas/Fort Worth, and El Paso. More than half of all Texans live in these areas. As a result, transportation systems need to move people and goods efficiently while being environmentally sound. In addition, there are areas of the state where, though air quality standards are currently met, they may not be attained in the near future, so that emission reductions are needed in these cities too. These areas include Austin, San Antonio, Corpus Christi, Tyler/Longview/Marshall, Victoria and the Brownsville area.

The Environmental Affairs Division develops and implements environmental policies (such as TxDOT's environmental regulations and various memoranda of understanding with other state agencies) and complies with an increasing volume of federal and state environmental regulations, such as the Clean Water Act, the Endangered Species Act, National Historic Preservation Act, and the National Environmental Policy Act. The Department identifies and evaluates the environmental impacts of proposed transportation projects. TxDOT develops hazard mitigation plans for hazardous material sites and encourages the use of environmentally friendly construction materials. TxDOT personnel survey potential construction areas for cultural resources, develop mitigation plans for projects that affect historic properties, prepare documentation on affected sites and structures, and coordinate with districts and contractors to minimize adverse impacts.

### Highway Projects - Strategy 1.1.1 (Continued)

TxDOT area engineers, transportation planning and development engineers, and maintenance supervisors participate in public meetings with county and city officials and the general public to gain insight into local needs and desires for transportation improvements. Opportunities for public involvement within the transportation planning process will be enhanced by the Retooling TxDOT Program.

TTP actions that support this Strategy 1.1.1 are as follows:

- Additions to the Texas Trunk System that link additional future urban centers will be identified. [TTP 1.1.4]
- The rural areas of the state will be assured an adequate level of service. [TTP 5.1.1, 5.1.2, 5.1.6]
- TxDOT plans to streamline the project development process and establish time limitations for regulatory decisions. [TTP 19.1.4, 19.1.6] A more user-friendly project development guide will be published to assist planning and improve communication between policy makers and the public. [TTP 19.1.7]
- When using federal matching funds, roadways are built in accordance with the Federal Aid Policy Guide. When the Department
  finances local projects, the projects are designed in accordance with state standards. [TTP 18.1.1]
- TxDOT plans to establish environmental design guidelines [TTP 15.1.1, 15.2.3] and to communicate information on the different environmental costs of transportation alternatives to decision makers and the public. [TTP 15.2.2] The Department also plans to use Geographic Information Systems (GIS) to help identify environmentally sensitive areas. [TTP 15.2.1] TxDOT's environmental regulations provide for equal environmental reviews regardless of funding.
- The Department assesses various technologies to increase productivity. TxDOT will be using computer-aided design, GIS, ISTEA management systems, telecommunications, and Intelligent Transportation Systems (ITS)to increase efficiency. [TTP 4.1.1, 4.1.2, 4.1.4, 4.1.5, 4.1.7, 10.1.3]
- The agency will continue to work with MPOs, cities, counties, councils of government, and transportation stakeholders (elected officials, truckers, local officials and consultants) to conduct transportation planning and to coordinate development of the state multimodal transportation plan. [TTP 21.1.2, 21.1.4]

### Highway Projects - Strategy 1.1.1 (Continued)

In the related area of traffic operations, the greatest overall challenge will be to fulfill the expectations of the general public for a safe and efficient operational environment. This includes the development of statewide standards for ITS technology, implementation of ITS to increase the efficiency of the roadway system, maintaining reasonable rehabilitation cycles for ITS-related systems, new materials, accommodating the needs of the older driver whenever possible, maintaining and operating the state's signalized intersections, and conducting and implementing research related to operational items. TxDOT has built computerized traffic management centers, such as Houston's TranStar and San Antonio's TransGuide systems, as a strategy for decreasing nonrecurring congestion through better traffic management. Traffic management systems are also operational in Dallas, El Paso and Fort Worth, with new centers under development in those cities. ITS will facilitate law enforcement and emergency response by diverting traffic from incidents, promoting a faster response to emergency situations, and synchronizing traffic signals for the more efficient use of existing roadway facilities. Courtesy patrols exist in Houston, San Antonio, Dallas, El Paso, and Fort Worth to assist stranded motorists, thereby lowering the probability of secondary accidents, thereby reducing delay on congested corridors. A courtesy patrol is under development in Austin and should be operational by FY 1997.

TTP actions that support highway traffic operations are as follows:

- Utilization of the state's Congestion Management System and metro area traffic management centers to increase mobility [TTP 3.2.1, 13.1.8]
- Evaluation and application of new technology for freight, personal travel [TTP 4.1.1, 4.1.3] and border clearance [TTP 14.2.5]
- Provision of improved signage on the state highway routes that provide access to intermodal terminals [TTP 12.3.1]
- Evaluation of traffic control devices for non-English speaking users of the transportation system [TTP 18.4.3]

### GOAL I: To provide the State of Texas with transportation services and systems that

- work together;
- are safe, comfortable, durable, and affordable;
- are environmentally sensitive; and
- support economic and social prosperity

OBJECTIVE 1.1: To develop, operate and maintain in an environmentally sensitive manner an efficient and effective transportation system and provide services which facilitate the movement of people and goods.

STRATEGY 1.1.1: Plan, design and manage highway projects	Where we are now		Where we plan to be					
	1995	1996	1997	1998	1999	2000	2001	
Outcome Measures:								
Percent of state highway system mainlane pavement mileage rated good or better based on the Pavement Management Information System condition score	85.5	87.0	86.5	85.5	85.0	84.0	83.5	
Percent of contracted federal project dollars jointly planned with Metropolitan Planning Organizations	100	100	100	100	100	100		
Percent of state maintained bridges structurally deficient or functionally obsolete	19.7	19.8	20.1	20.3	20.4	20.7	20.9	
Output Measures:			Efficiency Measure:					
Number of construction project preliminary engineering plans completed  Dollar volume of construction contracts awarded in fiscal year				Highway construction dollars contracted in fiscal year as a percent of dollars scheduled  Explanatory Measures:				
Number of highway construction projects contracted  Number of highway construction contracts completed				Highway construction preliminary engineering costs as a percent of highway construction contract cost				
			Number of highway construction contract proposals received per project					

### Right-of-Way -- Strategy 1.1.2

Utility adjustments and right-of-way acquisitions are complex tasks involving appraisals, negotiations, eminent domain proceedings, relocation, asset management, sale of improvements, surplus property, and leasing. TxDOT's Right-of-Way Division functions as the central focus of all utility and acquisition activities. The perennial difficulty of right-of-way acquisition is to obtain the property at a fair market value in time to meet the construction schedule. The right-of-way acquisition process was one of the first to be retooled by TxDOT's Information Resources Management Office. The implementation of retooling improvements to minimize administrative cost and acquisition time is now underway.

Lately, however, the present and future efficiencies gained through retooling are threatened by court allegations that property owners have suffered financially due to the side effects of highway construction (circuity of travel, diversion of traffic, loss of visibility, disruptions associated with construction activities) and to unreasonable delays in the property acquisition process itself. While all suits based on such allegations have been rejected by the courts, the laws could be changed. If they are, the likelihood of successful suits could increase, raising the expected cost and time of right-of-way acquisition.

TTP actions that support this overall strategy are as follows:

- In addition to moving people and goods, TxDOT is investigating the use of state-owned rights-of-way as corridors to transmit information via fiber-optic cables and other advanced telecommunications technologies. [TTP 4.1.6, 9.1.2]
- The Department is also exploring the possibility of TxDOT's purchasing right-of-way and property for rail, airport, and transit facilities, including highway/fixed guideway corridors and intermodal transfer facilities. TxDOT could then sell, lease, or license these properties for operation by private enterprise. Such arrangements would represent a potential revenue source for the Department. [TTP 9.1.1]

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STRATEGY 1.1.2: Optimize timing of highway right-of- way acquisition and utility adjustment	Where we are now		Where we plan to be						
	1995	1996	1997	1998	1999	2000	2001		
Outcome Measures:  Percent of projects for which right-of-way acquisition is completed in compliance with current scheduled contracting date.	85	87	87	87	87	87	87		
Output Measures:				Efficiency Measure:					
Number of parcels of right-of-way acquired on schedule to meet contract letting				Average cost per acre of right-of-way acquired					
Number of highway right-of-way utility facilities adjusted				Explanatory Measure:					
Number of construction projects where contract lettings were delayed because of right-of-way purchases				Number of eminent domain proceedings initiated to acquire highway right-of-way					

### Contracts for Construction—Strategy 1.1.3

TxDOT is continually working to maintain the quality of the Texas highway system and protect the public's investment in that system. One way to do this is to streamline contract processes and procedures. Contract lettings represent the majority of TxDOT's budget. The Department remains committed to continually improving contract implementation and management. The search for improvement has led to the automation of the Notice to Contractors process, the uploading of letting information to the TxDOT electronic bulletin board, and exploration of the possibilities of electronic bidding.

The contract process must be kept open for all qualified applicants to participate. TxDOT conducts pre-proposal and pre-bid conferences to explain how it conducts business, describe the desired work, answer questions, and assist participants. TxDOT also encourages Disadvantaged Business Enterprises and Historically Underutilized Businesses to take advantage of contracting opportunities.

The Design Division (DES) and the Construction and Maintenance Division (CMD) administer construction contracts for the Department. DES supports project development, maintains the schedules for construction project letting, and advertises for bids. CMD receives, monitors and analyzes the bids. CMD also prepares construction project award recommendations to the Transportation Commission, monitors contract compliance, and reviews contract claims.

### GOAL 1: To provide the State of Texas with transportation services and systems that

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OBJECTIVE 1.1: To develop, operate and maintain in an environmentally sensitive manner an efficient and effective transportation system and provide services which facilitate the movement of people and goods.

STRATEGY 1.1.3: Contract for the construction of the highway system and facilities		e are now	Where we plan to be					
		1996	1997	1998	1999	2000	2001	
Outcome Measures:  Percent of change in highway emission levels within areas not attaining air quality standards	-11	-5	-3	-3	-3	-3	-3	
Output Measures:			Efficiency Measure:					
Number of new location lane miles contracted  Number of lane miles contracted to increase capacity  Percent change in Roadway Congestion Index  Number of lane miles contracted for rehabilitation  Number of bridge inspections on the state system  Number of bridge inspections off the state system  Percent of deficient/obsolete bridges on the state highway system contracted for replacement or rehabilitation  Percent of deficient/obsolete bridges off the state highway system contracted for replacement or rehabilitation				phway conscosts  ory Measure es of highway ection, or re of on-system ent or rehal of off-system ent or rehal	es:  ay requiring habilitation  n bridges in bilitation  m bridges in	constructi		

### Preventive Maintenance—Strategy 1.1.4

Contracting for maintenance promotes the preservation of existing transportation system facilities and corridors. TxDOT has a legislative requirement to contract at least 50 percent of the routine and preventive maintenance expenditures when it is cost effective to do so. In the past, TxDOT met legislative goals and exceeded them in some cases. Currently, 47 percent of all maintenance activity is contracted out to the private sector. Litter pickup, mowing, rest area and picnic area maintenance, road base repair, ongoing maintenance of pavement, bridge beam repair, bridge painting, and bridge inspection are examples of work that is frequently contracted.

TxDOT's Construction and Maintenance Division (CMD) advertises, receives, monitors and analyzes bids for routine maintenance contracts over \$100,000. The districts may let routine maintenance contracts if less than \$100,000. CMD also prepares maintenance contract award recommendations to the Transportation Commission. TxDOT personnel are responsible for preparing and managing contracts and inspecting contract work.

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STRATEGY 1.1.4: Provide a preventive maintenance program.	Where we are now		Where we plan to be						
	1995	1996	1997	1998	1999	2000	2001		
Outcome Measures: Percent of routine and preventive highway system maintenance contracted		50	50	50	50	50	50		
Output Measures:			Efficiency Measures:						
Number of lane miles contracted for asphaltic seal-coat surfacing			Average cost per lane mile contracted for asphaltic seal coat surfacing						
Number of lane miles contracted for asphaltic concrete pavement overlay			Average cost per lane mile contracted for asphaltic concrete pavement overlay						
				Explanatory Measure:					
				Number of preventive maintenance project contracts awarded					

### Routine Maintenance and Operation - Strategy 1.1.5

A large proportion of the total TxDOT workforce is dedicated to maintaining the state's investment in transportation infrastructure. Routine maintenance and operation of the existing system are primary responsibilities of the districts. Routine maintenance involves prioritizing highway and bridge maintenance funding to preserve existing corridors.<sup>2</sup> Various means are employed, including roadway repair, airport facility improvements, and rail replanking.<sup>3</sup> Routine operations require increased truck inspection and enforcement of weight limits by the Department of Public Safety to protect Texas' approximate \$100 billion highway infrastructure investment.<sup>4</sup>

Routine highway and bridge maintenance and operations performed by TxDOT personnel include pavement and bridge repair, erosion repair, inspection and evaluation of infrastructure, and machinery repair. Responsibility for most maintenance activities is divided between the TxDOT workforce and private contractors. The results of the inspection and evaluation of infrastructure are used in the various management systems for planning.

TxDOT's Motor Carrier Division (MCD) exercises responsibilities under this strategy. MCD is responsible for providing required credentials to motor carriers in order to ensure public safety. These credentials consist of motor carrier insurance filings, motor carrier operating registrations, oversize/overweight permits, temporary registrations (72-hour, 144-hour, and one-trip), vehicle storage facility licenses, operating registrations to international motor carriers, and performance bonds for transportation brokers. The MCD also assesses administrative penalties for violations of motor carrier laws and Departmental rules.

<sup>&</sup>lt;sup>2</sup>TTP, Action 1.1.1, 7.1.1.

<sup>&</sup>lt;sup>3</sup>TTP, Action 7.1.2.

<sup>&</sup>lt;sup>4</sup>TTP, Action 9.2.1.

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- support economic and social prosperity

OBJECTIVE 1.1: To develop, operate and maintain in an environmentally sensitive manner an efficient and effective transportation system and provide services which facilitate the movement of people and goods.

STRATEGY 1.1.5: Provide for routine maintenance and	Where w	e are now	Where we plan to be						
operation of the state highway system	1995	1996	1997	1998	1999	2000	2001		
Outcome Measures:  Percent of state highway system mainlane pavement mileage rated good or better based on the Pavement Management Information System condition score	85.5	87.0	86.5	85.5	85.0	84.0	83.5		
Percent of routine and preventive highway system maintenance contracted  Number of centerline miles that are operational under Traffic Management Systems	153	186	287	397	512	617	755		
Output Measures:			Efficiency	/ Measures:					
Number of highway lane-miles resurfaced with seal-coat				cost to issu overweight		nway syste	m		
Number of lane miles resurfaced with overlays			Explanate	ory Measure	es:		-		
Number of oversize/overweight permits issued  Number of bridges contracted for painting			Number of awarded	of routine hi	ghway mai	ntenance c	ontracts		
Total cumulative number of roadside acres mowed		·	Number o	of roadside	acres .				

#### General Aviation—Strategy 1.1.6

The Texas airport system is the largest system in the nation with 307 airports. Of these, 256 are smaller general aviation airports, for which TxDOT has oversight responsibility. Of the remaining 51 airports, 27 are commercial airports and 24 are reliever airports, so-called because they function to relieve congestion and expedite traffic at nearby commercial service airports.

General aviation airports function as an essential infrastructure component to attract and service business and industry. By the year 2005, registered single-engine aircraft in Texas will account for 8.1 percent of the total U.S. general aviation fleet. Texas also anticipates increasing its share of U.S. pilots, reflecting the importance of the aviation industry in the state. Moreover, as the Texas economy continues to rebound, and with the continued use of business aircraft, Texas is expected to become the home of one-seventh of the total turbine-engine business aircraft in the nation.

TxDOT's Aviation Division is responsible for promoting, developing, maintaining, and preserving general aviation in the State of Texas. Full implementation of the Department's twenty-year general aviation development program would put 99 percent of the state's population, 94 percent of its oil resources, and 87 percent of its agricultural production within a 30-minute drive of a general aviation facility. However, current funding meets only 35 percent of the needs. In fact, Texas remains the only state without a state tax on aviation fuel. Revenues from the state tax on aviation products are deposited into the Texas General Revenue Fund. Despite a grim financial outlook, general aviation will remain an integral component of the Texas economy. The geographical extent of Texas and the vast distances between population centers have made general aviation coverage of the state an important for efficient business operations.

The greatest challenge facing general aviation is achieving a service quality that maintains economic competitiveness.<sup>5</sup> To position general aviation more competitively, the following measures will be undertaken: (1) determine the maintenance needs of the state airport system, (2) identify funding sources to provide an adequate and stable source of funding,<sup>6</sup> (3) provide modal alternatives for accessing airports,<sup>7</sup> and (4) support general aviation projects to enhance the economic development of specific communities and Texas as a whole. To ensure access to emergency medical care, the current air medical evacuation system will be evaluated to identify areas that are underserved or have no service at all.<sup>8</sup>

<sup>&</sup>lt;sup>5</sup>TTP, Actions 12.2.2, 12.2.3, 12.2.8, 12.2.11.

<sup>&</sup>lt;sup>6</sup> TTP, Actions 5.2.1.

<sup>&</sup>lt;sup>7</sup>TTP, Action 12.2.5.

<sup>&</sup>lt;sup>8</sup>TTP. Action 17.1.3.

- · work together;
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- · support economic and social prosperity

OBJECTIVE 1.1: To develop, operate and maintain in an environmentally sensitive manner an efficient and effective transportation system and provide services which facilitate the movement of people and goods.

Where we	are now	Where we plan to be						
1995	1996	1997	1998	1999	2000	2001		
33	35	39	39	39	39	39		
Not Available	68	66	64	62	60	58		
I		Efficiency	Measure:	<u> </u>	<u> </u>			
sistance					ts as a perc	ent of		
		Explanato	ory Measure	es:				
		Number o	of general a	viation airp	orts in Texa	3S		
		Number o	of licensed	pilots in Te	xas			
	1995 33 Not Available	33 35 Not 68 Available	1995 1996 1997  33 35 39  Not Available 68 66  Efficiency Administr facility gr  Explanate Number of	1995 1996 1997 1998  33 35 39 39  Not Available 68 66 64  Efficiency Measure: Administrative and s facility grant funds explanatory Measure Number of general a	1995 1996 1997 1998 1999  33 35 39 39 39  Not Available 68 66 64 62  Efficiency Measure:  Administrative and support cost facility grant funds expended Explanatory Measures:  Number of general aviation airp	1995         1996         1997         1998         1999         2000           33         35         39         39         39         39           Not Available         68         66         64         62         60           Efficiency Measure:           Administrative and support costs as a perdiculty grant funds expended		

#### Public Transportation — Strategy 1.1.7

The Texas public transit system consists of 7 metropolitan, 22 municipal and 41 rural providers, as well as numerous providers of transportation for elderly and disabled individuals. These provide about 250 million passenger trips each year. Despite this record, the lack of dedicated state funding for public transit and looming federal cutbacks raise serious concerns about the future. In 1995, the Texas transit system (exclusive of the seven metropolitan systems, which enjoy taxing authority) had revenues to meet only 61 percent of its needs. Also, at some point in the current planning period a crisis point for transit programs is likely to develop as the many buses purchased between FYs 1989 and 1992 with funds from the now defunct Oil Overcharge Program wear out and require replacement. This will happen at roughly the same the federal transit program is expected to diminish. For the 1997-2001 planning period, this adds up to serious fiscal pressures on state and local governments. Moreover, by the year 2014 the population base for transit services is expected to increase by 25 percent.

In such an environment, TxDOT's Public Transportation Division will be challenged to achieve two major goals: increase public awareness of transit® and assume a leadership role in promoting and facilitating new directions and innovations. This leadership role would cover a wide range of activities: (1) retention and expansion of public and public/private transit service and ridership in all areas of Texas, (2) new routes or extensions of existing routes and higher service frequencies for buses, (3) adequacy of public transit during public health and safety emergencies, (4) transit for the elderly and people with disabilities, (5) rapid transit, (6) commuter rail, and (7) other appropriate public transit modes such as remote or fringe parking facilities (e.g., park-and-ride lots) at major freeway interchanges and other appropriate locations. The Public Transportation Division is currently promoting and supporting expansion of alternative fuel transit fleets and high-occupancy vehicle (HOV) lanes, through ongoing transit capital and operations planning and programming, first in nonattainment areas, and then in the near-nonattainment areas.

<sup>&</sup>lt;sup>9</sup>TTP, Action 2.1.5.

<sup>&</sup>lt;sup>10</sup>TTP, Actions 2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.2.5, 5.3.1, 5.3.4, 9.1.5, 17.1.4.

<sup>&</sup>lt;sup>11</sup>TTP, Actions 2.2.3, 15.1.2, 15.1.3.

- · work together;
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- · support economic and social prosperity

OBJECTIVE 1.1: To develop, operate and maintain in an environmentally sensitive manner an efficient and effective transportation system and provide services which facilitate the movement of people and goods.

STRATEGY 1.1.7: Support and promote public	Where we	are now	Where we plan to be						
transportation	1995	1996	1997	1998	1999	<b>20</b> 00	2001		
Outcome Measures:	ļ	i							
Percent change in the number of public transportation trips	-2.24	-0.59	-0.33	-0.07	0.19	0.25	0.25		
Percent of transit demand-response trip requests met	Not Available	Not Available	66	66	66	66	66		
Percent of urbanized population with access to fixed route transit services	Not Available	Not Available	40	42	42	44	44		
·									

### **Output Measures:**

Number of one-way passenger trips

Number of training and technical assistance sessions provided small transit operators

Number of rural public transportation grant projects managed

Number of elderly and disabled transportation grants managed

Number of urbanized public transportation grant projects managed

Number of transit projects funded with state dollars only.

Number of transit projects funded with federal dollars only.

Number of transit projects funded with both state and federal dollars

## Strategy 1.1.7 (Continued)

### Efficiency Measures:

Administrative and support costs as percent of state and federal grant funds expended

## **Explanatory Measures:**

Number of elderly citizens and persons with disabilities with transportation services available

Number of coordinated systems and services for elderly and/or persons with disabilities

Number of public transportation systems in operation

Number of citizens in rural areas

#### Gulf Intracoastal Waterway - Strategy 1.1.8

The State of Texas is the nonfederal sponsor of the Gulf Intracoastal Waterway (GIWW) in Texas. The Texas Transportation Commission acts through TxDOT as administrator of that sponsorship. The Texas portion of the GIWW stretches 423 miles from the mouth of the Sabine River to Brownsville. Through dredging, the main channel is maintained to a congressionally authorized minimum depth of 12 feet, with a bottom width of 125 feet. As of 1992, eighty-six percent of GIWW tonnage was related to petroleum and chemicals; the remainder consisted of minerals, metals, grain, shell, and other materials. The decade 1982-1992 saw an average annual 72.5 million short tons (33,721 full barge-equivalents) transported on the Texas portion. That same amount of cargo transported over Texas highways would have taken 2.02 million full semitrailer-equivalents each year. In the future, the state may be called upon to provide funds for federal projects to realign channel problem areas and to construct and/or maintain disposal containment facilities.

To carry out its administration of state sponsorship of the GIWW, TxDOT's Multimodal Operations Office (MMO) coordinates identification and acquisition of right-of-way as disposal sites for materials dredged by the U.S. Army Corps of Engineers. The Environmental Affairs Division assists MMO by carrying out environmental assessment reviews for the candidate disposal sites. The state also has the authority to provide right-of-way for "beneficial use projects" for dredged material as well as to participate with the federal government in the financing of such projects upon approval by the Texas Transportation Commission. There are ten categories of beneficial use projects: habitat development; beach nourishment; aquaculture; parks and recreation; agriculture, forestry, and horticulture; strip mine reclamation and solid waste management; shoreline stabilization and erosion control; construction and industrial use; material transfer (fill, dikes, levees, parking lots, roads); and multiple purpose. MMO is TxDOT's representative to the Corps of Engineers for participating in studies; it also oversees waterway-related research for the Department. In addition, MMO will also support and participate in the action plans of the various GIWW governance bodies and continue its own efforts to promote the waterway as an essential element of the state's multimodal transportation system.

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- · support economic and social prosperity

OBJECTIVE 1.1: To develop, operate and maintain in an environmentally sensitive manner an efficient and effective transportation system and provide services which facilitate the movement of people and goods.

STRATEGY 1.1.8: Support the Gulf Intracoastal	Where we	e are now	Where we plan to be						
Waterway	<b>19</b> 95	1996	1997	1998	1999	2000	2001		
Outcome Measures: Percent of Corps of Engineer-requested dredge disposal acreage provided	100	100	100	100	100	100	100		
Output Measures:			Efficiency	Measure:					
Number of acres made available for dredged material			Average of fair marke	cost per acr	e acquired	as a perce	ntage of		
Number of requests to evaluate proposed projects and stud Gulf Intracoastal Waterway	ies relating	to the	Explanato	ry Measure	<b>:</b> :				
Number of beneficial use or nontraditional disposal projects	conducted		Number o material	f acres req	uired for di	sposal of d	redge		

#### Ferry Systems—Strategy 1.1.9

TxDOT maintains and operates two 24-hour toll-free ferry systems, one in Galveston and one in Port Aransas. The five 70-car ferries of the Galveston system connect Galveston and Port Bolivar along state highway 87. In FY 1995, 2.1 million vehicles took the 20-minute trip in 50,300 one-way crossings at an operating cost of \$4.03 per vehicle. The Port Aransas system operates five 20-car ferries, which connect Port Aransas with Aransas Pass along state highway 361. Almost 2 million vehicles made the 5-minute trip on the Port Aransas system during FY 1995, in 149,200 one-way crossings, at a cost of \$0.69 per vehicle. Use of the Port Aransas and Galveston systems fluctuates by season, with summer and spring vacation being the peaks.

Over the next five years, TxDOT will continue to upgrade and maintain the two systems. At Port Aransas, the last of the 9-vehicle capacity ferryboats will be replaced by a new 20-vehicle capacity boat; this replacement cycle started in 1987. The Operations Office building will be replaced, and one work dock will be upgraded. The Galveston system will replace one ferryboat, the next to last in a cycle that began in 1977. The final replacement will occur after FY 2001. One landing will be added at each side of the crossing, and the staging area on both sides will be replaced. The system's existing rock jetties will be extended, and the present timber jetties will be replaced by rock jetties.

- · work together;
- are safe, comfortable, durable, and affordable;
- are environmentally sensitive; and
- support economic and social prosperity

OBJECTIVE 1.1: To develop, operate and maintain in an environmentally sensitive manner an efficient and effective transportation system and provide services which facilitate the movement of people and goods.

STRATEGY 1.1.9: Maintain and operate ferry systems in	Where we	e are now	Where we plan to be						
Texas	1995	1996	1997	1998	1999	2000	2001		
Outcome Measures:  Number of vehicles (in millions) carried on ferryboats	4.101	4.185	4.255	4.510	4.655	4.790	4.935		
Output Measures:			Efficiency	Measures:					
Number of vehicles carried on ferryboats at Galveston			Average of Galvestor	•	nicle carried	d on ferrybo	ats at		
Number of vehicles carried on ferryboats at Port Aransas									
Number of hours of downtime			Port Aran	•	nicie carried	l on ferrybo	oats at		

## Vehicle Titling and Registration—Strategy 1.1.10

TxDOT staff in the Vehicle Titles and Registration (VTR) Division work closely with 254 county tax assessor-collectors to register over 15 million Texas vehicles, issue over 4 million certificates of title, and collect over \$2.4 billion in fees and taxes from vehicle owners. Texas counties share with the state the revenue generated by registration and titling fees. A new automated point-of-sale system for registering and titling vehicles has been implemented in over 200 county tax offices, replacing traditional manual procedures. By the end of 1996, ninety-six percent of Texas counties will be on-line, enabling registration records to be updated within 48 hours and title documents to be issued within five work days. TxDOT issues approximately 200,000 specialty license plates each year, generating about \$1,000,000. These plates include collegiate, amateur radio, and Pearl Harbor survivor plates.

VTR's future tasks include continuing to improve services to an ever-increasing population of Texas vehicle owners; addressing international border registration issues with Mexico; assessing the effect on revenue collection of the proposal to deny registration for failure to pass emissions tests; implementing new legislation; and determining whether future funding of the point-of-sale registration and titling system should continue to be wholly state-funded, or whether counties, which benefit from the fees collected, should also share in the costs.

- · work together;
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- are environmentally sensitive; and
- · support economic and social prosperity

OBJECTIVE 1.1: To develop, operate and maintain in an environmentally sensitive manner an efficient and effective transportation system and provide services which facilitate the movement of people and goods.

STRATEGY 1.1.10: Administer the provisions of the	Where we	e are now	Where we plan to be						
motor vehicle registration and titling statutes	1995	1996	1997	1998	1999	2000	2001		
Outcome Measures:  Percent counties connected to automated registration and titling system	55.5	80	96	100	100	100	100		
Output Measures:			Efficiency	Measures:					
Number of registration renewal notices mailed			Average	number of a	days to issu	e and mail	titles		
Number of titles issued			Average record file	turnaround es	time to upo	late vehicle	title		
Number of vehicles registered			1 ~	turnaround on record fi	•	to update	vehicle		
				number of o	days for iss	uance of co	ommercial		
			Explanato	ory Measure	es:				
			Number o	of vehicle re	cords on a	utomated fi	ile		
			Number o	of license pl	ates manuf	actured			

## Texas Motor Vehicle Commission Code—Strategy 1.1.11

TxDOT's Motor Vehicle Division administers the Texas Motor Vehicle Commission Code by licensing new and used vehicle dealerships, manufacturers, converters, and leasing companies. Approximately 20,000 licenses are issued each year.

The Motor Vehicle Division also administers the Texas Lemon Law, enacted in 1983 to provide consumers with a procedure to enforce the warranty on a new motor vehicle against the manufacturer without filing a time-consuming and costly lawsuit. Approximately 1,200 complaints are filed each year, resulting in consumers receiving the repurchase or replacement of their vehicles in over 50 percent of the cases.

In the future, TxDOT must increase consumer awareness of the Lemon Law, handle an increasing Lemon Law case load with no increase in processing time, and maintain fair and efficient regulation of the motor vehicle industry in Texas.

- · work together;
- are safe, comfortable, durable, and affordable;
- · are environmentally sensitive; and
- · support economic and social prosperity

OBJECTIVE 1.1: To develop, operate and maintain in an environmentally sensitive manner an efficient and effective transportation system and provide services which facilitate the movement of people and goods.

STRATEGY 1.1.11: Administer the provisions of the	Where we are now		Where we plan to be						
Texas Motor Vehicle Commission Code	<b>199</b> 5	1996	1997	1998	1999	2000	2001		
Outcome Measures:									
Percent of motor vehicle consumer complaints resolved	96	91	70	70	70	70	100		
Output Measures:			Efficiency	Measures:					
Number of licenses issued to motor vehicle dealers, manufa	cturers and	d leasing	Average r	number of v	veeks for c	omplaint re	solution		
companies			Explanato	ry Measure	s:				
Number of motor vehicle consumer complaints resolved			Number o	f motor vel	nicle consu	mer compla	ints filed		
			Number o	f new cars	replaced u	nder lemon	law		

#### Research and Development-Strategy 1.1.12

TxDOT is committed to transportation research and development. In FY 1994, there were 185 major state and/or federally funded research projects conducted by university researchers working in coordination with TxDOT research teams, for a investment of \$22.8 million. In FY 1995, there were 168 projects conducted, representing an investment of \$20.4 million. TxDOT's Research and Technology Transfer Office oversees the long-range planning for research topics, the solicitation and evaluation of proposals, and management of contracts with the universities.

Most, but not all, TxDOT-sponsored research and development falls under the Cooperative Research Program (CRP), in which transportation research is conducted chiefly by Texas state-supported schools and universities on behalf of the agency. Given the appropriate technical qualifications, TxDOT employees, other state agencies, federal agencies, and local agencies are eligible to participate in this research. Private entities participate only when the required expertise is not available in a public institution. The Texas CRP is the largest in the nation. Some immediate-need and short-term projects are wholly funded by the state and are not part of CRP. For each project, large or small, TxDOT provides research program oversight through a Project Advisory Committee.

After an extensive reassessment, the agency's research and development agenda was reorganized into 9 subject matter areas: management and policy; multimodal transportation; traffic operations; roadway planning and design; structures; pavements; materials; construction and maintenance; and right-of-way, hydraulics, and environmental conservation.<sup>12</sup>

Agency-sponsored research and development is guided by a Long-Range Research Plan (LRRP) which focuses on each of these areas, reflecting TxDOT's determination to evolve from a highway department into a full-fledged department of transportation. The agency estimates that 80 percent of research results are implemented in some form, with an average realization of \$22 in benefits to the transportation system and the travelling public for every research dollar invested. As one specific example, TxDOT will study the impacts of new technology on the freight industry and on personal travel behavior in the state.<sup>13</sup>

<sup>&</sup>lt;sup>12</sup>TTP, Action 15.1.1.

<sup>13</sup>TTP. Action 4.1.3.

- · work together;
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- · support economic and social prosperity

OBJECTIVE 1.1: To develop, operate and maintain in an environmentally sensitive manner an efficient and effective transportation system and provide services which facilitate the movement of people and goods.

STRATEGY 1.1.12: Fund and participate with state- supported colleges and universities in research and development	Where we are now		Where we plan to be						
in research and development programs that can improve transportation operations	1995	1996	1997	1998	1999	2000	2001		
Outcome Measures:									
Percent change in urban principal arterial highway level of service based on Highway Performance Monitoring System (HPMS)	2.6	2.8	3.1	3.0	2.1	1.2	1.0		
Number of research study recommendations implemented within two years of study completion	153	143	150	150	150	150	150		
Output Measures:			Efficiency	Measure:	I				
Number of research projects completed					-	dy recomme of study co			
Number of state supported colleges and universities with resubcontracts	search cont	racts or	Explanato	ory Measure	»:				
Number of new products evaluated by the Research and Tec Office	chnology Tr	ansfer	Number o	of active res	search proje	ects			

## Trade with Mexico and the North American Free Trade Agreement (NAFTA) - Strategy 1.1.13

The single most important event relating to future trade with Mexico is the North American Free Trade Agreement of 1993 between Canada, the United States, and Mexico. The overall purposes of NAFTA are increased trade in goods and services, removal of investment barriers, protection of intellectual property rights, and the establishment of a framework of cooperation to further expand the benefits of the agreement. The agreement creates a single free-trade zone for North America by (1) eliminating many nontariff trade barriers as well as tariffs on most industrial and agricultural goods traded by the three countries, (2) phasing out restrictions on automobile exports, (3) providing access to agricultural markets, and (4) increasing access of U.S. service providers to the Mexican and Canadian service markets. NAFTA will result in increased traffic along and near the Texas border with Mexico, and over the corridors connecting ports-of-entry with the commercial and industrial centers of both countries. Of the \$85.4 billion trade between the United States and Mexico in 1994, seventy-five percent passed through Texas. Sixty-two billion dollars of the 64.11 billion dollars worth of trade passing through Texas uses the ports of El Paso, Laredo, Brownsville, Eagle Pass, and Hidalgo. Trucks transported 86 percent of the cargo.

In response to this new and permanent state of international affairs, TxDOT's International Relations Office has outlined steps to establish and maintain bilateral communication and cooperation at many levels on a range of issues. TxDOT's three border districts are also involved in international planning and technology exchange. TxDOT will continue to exercise its role in U.S.-Mexican transportation planning, system coordination, and exchange of information on highway systems and infrastructure development. The agency will put Mexican border states on its transportation maps and has included Mexican officials (state and federal) in its planning/analysis function. Joint U.S.-Mexican planning teams for specific corridors will focus on freight and passenger movement between Mexican cities and U.S. industrial centers in the West and Midwest. The Mexican border states will be encouraged to participate in key associations of transportation officials such as the Western Association of State Highway Transportation Officials and the American Association of State Highway Transportation Officials. TxDOT, for its part, will ensure that it represents Texas in key binational trade-related initiatives.

<sup>&</sup>lt;sup>14</sup>TTP, Actions 14.3.5, 14.3.6.

<sup>15</sup>TTP. Action 14.3.5.

<sup>&</sup>lt;sup>16</sup>TTP. Action 14.4.1, 14.3.2.

<sup>17</sup>TTP. Action 14.3.4.

<sup>&</sup>lt;sup>18</sup>TTP. Action 14.3.3.

#### Trade with Mexico and the North American Free Trade Agreement (NAFTA)—Strategy 1.1.13 (Continued)

To address congestion at the border-crossing areas, some administration and intermodal transfers will be carried out away from the immediate border but within the maintenance limits of local ports of entry in Texas.<sup>19</sup> In this way, congestion can be relieved without penalizing the local economies. TxDOT will be establishing weigh stations in conjunction with the Texas Department of Public Safety for weight- and safety-related enforcement. Border clearance procedures, including preclearance, for freight and passengers will be expedited by means of ITS.<sup>20</sup> Administrative changes and additional staffing at U.S. Customs facilities may be explored as possible solutions to border congestion.<sup>21</sup> The involvement and cooperation of nontransportation federal entities (Border Patrol, Customs, General Services Administration) will also be sought in improving the management of the border area.<sup>22</sup>

TxDOT's Transportation Planning and Programming Division will continue to count single unit and combination-unit trucks at 25 specific data collection sites on the border and report periodically on the percent change in such traffic. Texas participates in the FHWA-sponsored Border Technology Exchange Program (BTEP). The program is in conjunction with Mexico and the Mexican border states and is one TxDOT initiative to develop an ongoing planning and programming process with our Mexican neighbors. BTEP promotes the exchange of technological information and fosters a safe, efficient, and seamless infrastructure between Texas and Mexico. It also promotes bridge construction, monitors standardization of transportation infrastructure, and contributes to agreement on transportation policies, such as those dealing with the age and language of commercial drivers.

<sup>&</sup>lt;sup>19</sup>TTP, Action 14.2.1.

<sup>&</sup>lt;sup>20</sup>TTP Action 14.2.5.

<sup>&</sup>lt;sup>21</sup>TTP, Action 14.2.4.

<sup>&</sup>lt;sup>22</sup>TTP, Action 14.3.1.

- work together;
- are safe, comfortable, durable, and affordable;
- · are environmentally sensitive; and
- · support economic and social prosperity

OBJECTIVE 1.1: To develop, operate and maintain in an environmentally sensitive manner an efficient and effective transportation system and provide services which facilitate the movement of people and goods.

STRATEGY 1.1.13: Provide for the impact of increased	Where we	are now		Wher	e we plan t	to be	
trade with Mexico.	1995	1996	1997	1998	1999	2000	2001
Outcome Measures:  Percent change in trucks crossing the Texas/Mexico border	Baseline 20,572	1.3	2.6	3.9	5.2	6.5	7.8
Percent of state highway system mainlane pavement mileage leading to international ports of entry rated good or better based on the Pavement Management Information System condition score	85.5	87.0	86.5	85.5	85.0	84.0	83.5
Percent of state highway system leading to international ports of entry rated good or better based on level of service	Not Available	Not Available	80	80	80	80	80

## **Output Measures:**

Number of joint planning sessions with US and Mexican state and federal transportation officials

#### Traffic Safety-Strategy 1.2.1

The purpose of the traffic safety function is to ensure transportation system safety. Historically, this has ranked as one of three major emphases of the Texas Transportation Commission. The TTP echoes this philosophy by calling for

- coordination of state efforts with local traffic monitoring and enforcement programs [TTP 18.2.1]
- funding of projects in state and MPO improvement programs that improve or maintain designated emergency evacuation routes [TTP 17.1.2]
- continuation of efforts to expand the joint TxDOT and Governor's Office emergency evacuation route planning process [TTP 16.1.6] and adoption of designated and recommended hurricane evacuation routes and the Nuclear Emergency Evacuation Routes [TTP 17.1.1]

The Texas Traffic Safety Program, administered by TxDOT's Traffic Operations Division (TRF), emphasizes twelve distinct program areas, including alcohol and other drug countermeasures, public information and education, occupant safety, and school bus safety. TRF participates with multiple state agencies, MPOs, and localities in the development and implementation of the Safety Management System (SMS). The purpose of the SMS is to ensure that safety considerations are incorporated into the transportation system. Also covered by Strategy 1.2.1 is the Hazard Elimination Program, which identifies and eliminates high-accident locations<sup>23</sup> in coordination with federal, state, and local government agencies and international freight-forwarding companies.<sup>24</sup> This program is funded through the Federal Highway Administration at approximately \$15 million annually.

Other safety-related initiatives include the following:

- Five state agencies and one corporation are sponsoring the Know Your Vital Signs Program to increase safety awareness.
- The Department of Public Safety (DPS) is updating the Texas Drivers Handbook.
- The Texas Education Agency is updating the drivers' education curriculum.
- The Texas Department of Health is designing driver-ed for the aging driver.
- The Texas Transportation Institute is conducting traffic safety research and developing a safety information delivery campaign.
- The 3M Corporation and TxDOT are producing a public service announcement video campaign throughout Texas.
- TxDOT is implementing symbol-oriented and multilingual signs to respond to the needs of non-English speaking drivers. [TTP 18.4.3]<sup>25</sup>

<sup>&</sup>lt;sup>23</sup>TTP, Action 16.1.1.

<sup>&</sup>lt;sup>24</sup>TTP, Actions 16.1.3, 16.1.7.

<sup>&</sup>lt;sup>25</sup> DPS is responsible for developing policies for testing and licensing non-English speaking drivers. See *TTP* Action 18.4.2.

GOAL I: To provide the State of Texas with transportation services and systems that

- work together;
- are safe, comfortable, durable, and affordable;
- are environmentally sensitive; and
- support economic and social prosperity

OBJECTIVE 1.2: To improve public safety and security on transportation systems.

STRATEGY 1.2.1: Identify problem areas and implement projects to reduce the	Where we	e are now	Where we plan to be						
number and severity of traffic accidents through the statewide traffic safety program	1995	1996	1997	1998	1999	2000	2001		
Outcome Measures:									
Percent of change in statewide traffic accident fatality rates	Not Available	Not Available	010	005	005	005	005		
Percent of drivers and front seat passengers complying with safety belt law	77.2	72.5	73.2	73.9	74.6	75.4	76.1		
Percent of car seat/safety belt use for children, ages 0-4	58.2	58.5	60.0	61.5	63.0	66.0	67.5		
Percent change in proportion of DWI fatal accidents to total fatal accidents	Not Available	Not Available	-1.0	-1.0	-1.0	-1.0	-1.0		
Number of high accident locations improved	50	<b>7</b> 0	50	50	50	50	50		
Output Measures:		1	Efficiency	/ Measure:	1	<u> </u>	*		
Number of high-accident locations identified, evaluated and improvement	programme	ed for	Administ	rative costs	as a perce	nt of progra	am grants		
Number of traffic safety grants and/or projects with agencie and schools	s, cities, co	ounties,		ory Measure					
Number of traffic law enforcement grants with agencies, co	ounties, and	d cities		of traffic fat of DWI-relat		s			
			Number	A DAALICIA	ica ratantie				

#### Tourism-Strategy 1.2.2

Tourism is a \$24.5 billion industry in the state of Texas and supports 435,000 jobs and \$946.8 million in state tax revenues. In CY 1994, nineteen million non-Texans visited Texas for leisure. Out-of-state vacationers spent an average of \$87 per person per day while Texans traveling within the state spent an average of \$63 per person per day.

TxDOT's Travel and Information Division will continue to administer its multifaceted program to stimulate travel in Texas by providing the traveling public with information about the highway system and the scenic, historic, and recreational attractions of the state. This program includes the travel information centers; *Texas Highways* magazine; travel literature; electronic travel information; responses to travel inquiries; the Department's antilitter campaign; and photography, video, photo library, and graphics services.

In FY 1995, the state's 12 travel information centers provided maps, travel information, and other services to 3.98 million visitors throughout the state. Due to high usage and the need to make them accessible, the information centers are in the process of being upgraded. The motoring public is also served by the state's system of 804 picnic areas and 111 rest stops, of which more than 100 feature tourist- and motorist-oriented InfoBords.

The travel information centers and phone center also provide information and travel counseling through a toll-free phone number, 1-800-452-9292. Motorists can also use this TxDOT service to obtain routing assistance and emergency road condition reports.

In FY 1995, five million copies of the monthly state travel magazine *Texas Highways* were distributed, along with 1.7 million copies of the *Texas State Travel Guide*, 312,000 quarterly *Texas Events Calendars*, and 2.2 million *Official Texas Travel Maps. Texas Highways* articles are designed to stimulate interest in traveling in Texas. The magazine is sold by subscription and over the counter. *Texas Highways* annual receipts, inclusive of its ancillary products, are \$4.5 to \$5 million per year. Ancillary products include historical and scenic prints, calendars, and note cards. The funds are deposited in the Highway Trust Fund.

TxDOT meets quarterly with the Texas Department of Commerce (TDOC) and the Texas Parks and Wildlife Department to guide and coordinate statewide travel-related advertisements, promotions, media relations, and collateral pieces of the three agencies. TDOC's advertising/marketing efforts have contributed to the increase in the number of travel literature requests fulfilled by TxDOT. In FY 1995, over 1.2 million written requests were fulfilled, up 12.8 percent from the previous fiscal year.

As stated in the *TTP*, the Commission will give priority to transportation projects that maintain or improve links between highway corridors and state and national parks and other major tourist attractions.<sup>26</sup>

<sup>&</sup>lt;sup>26</sup>TTP, Action 5.1.4.

work together;

• are safe, comfortable, durable, and affordable;

are environmentally sensitive; and

• support economic and social prosperity

OBJECTIVE 1.2: To improve public safety and security on transportation systems.

STRATEGY 1.2.2: Support and promote tourism	Where we	e are now		Whe	re we plan	to be	
	1995	1996	1997	1998	1999	2000	2001
Outcome Measures:				į			:
Percent change in the number of people provided services at Travel Information Centers	Baseline 3.98 mil	2.0	2.0	2.0	2.0	5.0	5.0
Percent change in number of public information requests filled	Baseline 15,369	-2.4	2.0	2.0	2.0	2.0	2.0
Output Measures:		<u> </u>	Efficiency	Measure:			
Number of travel literature requests filled			Average i	number of c	days to resp	oond to trav	vel mail
Number of customers served at Travel Information Centers			· •				
Number of <i>Texas Highways</i> magazines sold							
Number of emergency road condition inquiries answered							

#### Railroad Crossings—Strategy 1.2.3

Texas has over 16,000 highway-rail at-grade crossings—more than any other state. The installation of active warning devices (signals and gates) on and off the state highway system is performed under the Federal Railroad Signal Program, currently funded at approximately \$15 million annually, 90 percent federal money and 10 percent state. Approximately \$3.5 million in state funds is also provided annually to improve crossing surfaces on the state highway system. An additional \$950,000 in state funds are provided annually to railroad companies for signal maintenance.

Candidate active warning device projects are nominated each year by TxDOT district offices and are evaluated by the Traffic Operations Division using a priority index, which takes several factors into account: the number of trains, train speed, the number of vehicles per day, and existing warning devices at the crossing. This information is submitted to TxDOT's Transportation Planning and Programming Division for consideration in the Unified Transportation Program. Installation of active warning devices typically costs \$100,000 or more per location.

While railroad crossing projects typically provide for the installation of active warning devices, closure of redundant or unused crossings is also a technique being considered to improve safety. The *Texas Transportation Plan* calls for an accelerated program of adding rail crossing protection or eliminating at-grade rail crossings. [*TTP* 18.1.2] Regardless of the chosen method, diagnostic inspections are performed at each location to determine the appropriate safety improvements. A final inspection is also conducted after each project is completed. With about 7,000 passive crossings at present (i.e., those with no active warning devices), it will take many years for the state to signalize or consolidate all of them.

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- support economic and social prosperity

OBJECTIVE 1.2: To improve public safety and security on transportation systems.

STRATEGY 1.2.3: Improve railroad crossing and	Where we are now		Where we plan to be					
warning devices on and off the state highway system	1995	1996	1997	1998	1999	2000	2001	
Outcome Measures:								
Percent of change in railroad grade crossing accidents statewide	+ 22.7	-27.0	-5.0	5.0	-5.0	-5.0	-5.0	
Percent of change in railroad grade crossing fatalities statewide	-5.5	-11.5	-5.0	-5.0	-5.0	-5.0	-5.0	

## **Output Measures:**

Number of railroad grade warning signal projects started

Number of railroad grade warning signal projects completed

## Outdoor Advertising Signs, Junkyards, and Auto Graveyards-Strategy 1.3.1

Federal law mandates state regulation of outdoor advertising signs, junkyards, and auto graveyards adjacent to transportation facilities. If not done effectively, the Department could lose 10 percent of construction funds from the Federal Highway Administration. While it is illegal to erect or maintain signs on the state right-of-way, TxDOT is required to regulate signage on adjacent property. Statutes and rules are in place governing the erection and maintenance of such signs. The Right-of-Way Division acts to remove signs by the appropriate court action if erected without or in violation of license or permit.

In 1995, TxDOT's Right-of-Way Division, acting under new legislation, began permitting advertising on highway right-of-way. In proximity to exits of interstate highways, TxDOT signs will display the logos of services available at those exits.

· work together;

• are safe, comfortable, durable, and affordable;

• are environmentally sensitive; and

• support economic and social prosperity

**OBJECTIVE 1.3:** To protect and enhance the environment in transportation activities.

STRATEGY 1.3.1: Control the use of outdoor advertising signs, junkyards, and auto graveyards adjacent to transportation systems	Where w	e are now	Where we plan to be						
	1995	1996	1997	<b>199</b> 8	1999	2000	2001		
Outcome Measures:  Percent of outdoor advertising signs in compliance with state and federal laws	93	93	94	94	95	95	96		
Output Measures:  Number of sign permits and licenses issued  Number of non-conforming signs removed  Number of sites improved to meet federal beautification standards			Efficiency Measure:  Total expense per sign permit and license issued						

#### Environmental Consideration in Department Purchases and Activities—Strategy 1.3.2

TxDOT continues to pursue a policy of employee and Departmental education, research, involvement, and action on environmental issues. The Environmental Affairs Division reviews all required environmental documentation and assists the districts with assessment and mitigation of potential impacts to cultural and natural resources, including air quality. The Division also assesses the potential impacts of hazardous materials on TxDOT operations. The Department's General Services Division spearheads the agency's statewide Recycling and Recycled Products Program, which handles the following activities: (1) recycling of white paper, in all districts; (2) remanufacturing of toner cartridges, which saves the Department 40 to 60 percent of the cost of new cartridges and keeps used cartridges out of landfills; (3) recycling of the more than 20,000 plastic herbicide containers TxDOT uses each year; and (4) sizeable investments in research exploring ways to use recycled materials in roadway construction. TxDOT operates a fleet of over 4,000 vehicles which run on alternative fuels (natural gas and propane) and will be evaluating the changes and costs involved.<sup>27</sup> The Department will also be working with the Alternative Fuels Council to help educate the public on the advantages of alternative fuels for vehicles.<sup>28</sup>

In addition to encouraging all employees to use public transportation to commute to and from work, the Human Resources Division has promulgated policies and procedures for a compressed four-day work week as well as for telecommuting, which eliminates the need to travel to the workplace. All these measures can reduce traffic congestion and pollution.

<sup>&</sup>lt;sup>27</sup>TTP, Action 15.1.7.

<sup>&</sup>lt;sup>28</sup>TTP, Action 15.1.6. DPS has jurisdiction over enforcement of vehicle emission standards. See TTP Action 15.1.11.

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- · support economic and social prosperity

OBJECTIVE 1.3: To protect and enhance the environment in transportation activities.

STRATEGY 1,3.2: Include environmental consideration in all department purchases and activities	Where we are now		Where we plan to be					
	1995	1996	1997	1998	1999	2000	2001	
Outcome Measures:								
Number of implemented policies, programs and procedures that ensure that transportation activities are environmentally sensitive	20	28	40	44	46	49	52	
Ratio of alternative fuel used to regular fuel used in department alternative fuel vehicles	.51	.57	.70	.80	.90	.90	.95	
Percent of use of recycled, remanufactured and environmentally sensitive materials and supplies.	15	20	20	20	20	20	20	

## Output Measures:

Number of public involvement activities held as part of the environmental process

Number of projects reviewed for environmental clearance

#### Multimodal and Intermodal Transportation-Strategy 1.4.1

Efficient movement of people and goods requires that the various modes of transportation (highway, marine, pipeline, rail, aviation, public transit, bicycle, pedestrian, and telecommunications) operate seamlessly as one transportation system. TxDOT has been and will continue to be involved in significant multimodal and intermodal projects. In addition to its development of public transit transfer facilities and its administration of state sponsorship of the Gulf Intracoastal Waterway (through TxDOT's Multimodal Operations Office), TxDOT is partnering in the development of passenger and freight transfer facilities. These facilities include connector highways to a major Dallas-Fort Worth commercial airport (Alliance Airport), highway access to a truck-rail intermodal facility north of Fort Worth (Santa Fe Railway Transportation Center at Alliance), an additional rail line leading into a container terminal at the Port of Houston (Barbours Cut), and evaluation of a potential intermodal transfer project in San Antonio.

The TTP actions that support this strategy are as follows:

- All the major routes, corridors, facilities, connections, and modes of the Texas multi- and intermodal system are to be identified, reviewed periodically, and planned for. [TTP 1.1.1, 1.1.2, 1.1.5, 1.1.6, 14.1.1] Regulatory barriers to public-private intermodal partnerships will be identified. [TTP 9.1.5]
- Multimodal and intermodal freight and passenger trip patterns, transfer patterns, commodity types, performance measures, and benchmarks will be surveyed. [TTP 1.1.3, 3.2.5]
- Inter- and intrastate passenger travel patterns will be studied to identify system deficiencies, corrective actions, and opportunities for improvement. [TTP Action 12.1.2]
- Texas' multi- and intermodal transportation system will be expanded and promoted. [TTP 5.1.5, 12.3.2
- TxDOT and the Department of Public Safety will upgrade current traffic accident (crash) records for all modes.
   ITTP 18.3.31
- State highway system signage to intermodal terminals will be improved, as well as the signage in bus and rail stations, airports, and other intermodal passenger facilities. [TTP 12.3.1]
- Action teams will recommend solutions to specific barriers to intermodal connectivity in both passenger and freight transportation. [TTP 12.1.3] Corridor-level traffic and congestion management systems will be used to ensure functioning of intermodal links critical to economic development. [TTP 13.1.8]
- Rural intermodal centers will be expanded. [TTP 5.1.5]
- Bicycle and pedestrian mobility will be enhanced by expanding and improving facilities [TTP 2.3.6], educating the
  public concerning bicycling and bicycle-related laws [TTP 2.3.2], and supporting enforcement of laws relating to
  illegal operation of both automobiles and bicycles. [TTP 2.3.3]
- Level-of-service goals for access to ports and airports will be established. [TTP 12.2.12]

# Multimodal and Intermodal Transportation—Strategy 1.4.1 (Continued)

- Plans will be developed to improve access and intermodal transfer facilities at major airport facilities. [TTP 12.2.3]
- Port and airport access, capacity, and effectiveness will be evaluated and upgraded. [TTP 12.2.2, 12.2.4, 12.2.5, 12.2.8, 12.2.11]
- Intelligent Transportation Systems will also be put in place to improve access to ports and airports. [TTP 12.2.10]
- Container-handling facilities at Texas ports and rail terminals will be considered for improvement. [TTP 12.2.7]
- Where appropriate, rail will be promoted to decrease truck traffic and highway usage. [TTP 3.2.8]
- Marine port studies will be conducted to identify and prioritize needed intermodal facility improvements. [TTP 12.2.4]
- New technologies will be studied for their impacts on freight and passenger travel. [TTP 4.1.3]

- · work together;
- · are safe, comfortable, durable, and affordable;
- are environmentally sensitive; and
- support economic and social prosperity

OBJECTIVE 1.4: To improve and promote the connectivity of multimodal transportation services and systems.

STRATEGY 1.4.1: Maximize mobility using a full range of transportation solutions	Where we are now		Where we plan to be					
	1995	1996	1997	1998	1999	2000	2001	
Outcome Measures:  Number of intermodal facilities that TxDOT helps develop or improve	Not Available	Establish Baseline	Baseline + 3	Baseline + 5	Baseline + 7	Baseline + 9	Baseline + 10	

## **Output Measures:**

Number of intermodal facilities in which TxDOT provides consulting services

#### Financing—Strategy 1.5.1

In its ongoing effort to use the funds it has effectively and increase transportation revenues, TxDOT is rethinking some traditional financing techniques and exploring new ones.<sup>29</sup> TxDOT's Budget and Finance Division, for example, is working on an initiative to reduce fuel tax evasion, estimates of which range from \$15 million to \$200 million annually in Texas. Other states have reported success at reducing this type of fraud by changing the point of tax collection in the fuel distribution chain.

But because reducing fuel tax evasion will not adequately overcome TxDOT's funding shortfall, the Department's Management Services Office is developing a Request for Proposal for a research project to explore other means to increase transportation revenues. Toll roads, constructed through the Texas Turnpike Authority, which issues revenue bonds, are a viable means in some instances. This is especially true in urbanized areas where congestion is greater and there are more potential users. Other techniques include highway revenue bonds, congestion pricing, equity in fuel taxation, taxes on alternative fuels, higher truck registration fees, increased vehicle registration fees, and inflation-adjusted motor fuels taxes. TxDOT is also actively looking for cost-sharing partners for specific projects.

The Department is also exploring the utility of State Infrastructure Banks (SIBs). These new institutions, provided for by the National Highway System Designation Act of 1995, may receive federal and state money and make loans, issue debt, enhance credit, or serve as a capital reserve for bond or debt instrument issuance costs. Acting as a revolving fund (leveraged or unleveraged), the SIB would serve as a financing option for accelerating major transportation projects. Texas was one of 10 pilot states selected to try out the idea. TxDOT's Legislative Affairs Office and General Counsel Office are investigating what legislation may be necessary in order to utilize SIBs to the maximum extent.

<sup>&</sup>lt;sup>29</sup>TTP. Action 9.1.3.

- work together;
- are safe, comfortable, durable, and affordable;
- · are environmentally sensitive; and
- · support economic and social prosperity

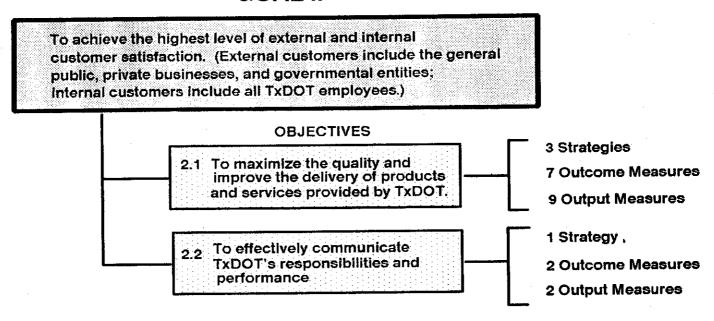
**OBJECTIVE 1.5:** To obtain sufficient revenues to meet essential transportation needs.

STRATEGY 1.5.1: Promote innovative transportation financing	Where we	are now	Where we plan to be					
	1995	1996	1997	1998	1999	2000	2001	
Outcome Measures:  Dollar amount (in millions) of transportation projects financed using nontraditional methods.	130	20	10	10	10	10	10	

## Output Measures:

Number of lane miles using nontraditional financing.

## **GOAL II**



### **Customer Satisfaction-Goal II**

TxDOT is committed to satisfying customers, both external and internal to the organization. This goal has two major aspects, a quality objective and a communication objective. Quality of TxDOT products and services will be improved through the three-prong strategies of ensuring accountability of product and service providers, establishing continuous improvement throughout the department, and promoting an environment to foster employee productivity. Two-way communication is essential to understanding customer needs, establishing realistic expectations, and getting timely customer feedback.

#### Accountability of Providers - Strategy 2.1.1

To achieve its mission and goals, TxDOT depends on a wide range of providers to plan, design, construct, and maintain an efficient and effective transportation system. The quality of that system is therefore greatly influenced by the quality of the goods and services received from providers. The Department uses four basic methods to improve this quality: (1) Quality Control/ Quality Assurance specifications, (2) quality monitoring programs, (3) certification programs, and (4) partnering.

Texas participates in the Total Quality Initiative (TQI), an offshoot of the National Quality Initiative. The TQI was formed by TxDOT, the Federal Highway Administration, five associations, and three research institutes to focus attention on continuous quality improvement within the transportation industry. TxDOT continues to improve existing contracts and specifications, giving providers the opportunity to develop methods which ensure delivery of high quality goods and services to the agency. In the future, TxDOT specifications may include performance time frames or warranties and supplier quality management systems. Partnering is a teamwork concept employed with external contractors, suppliers, design consultants, and other product/service providers. The partnering process involves structured methods for improving communication, setting joint goals, and developing mutual decision-making strategies.

TxDOT's Materials and Tests Division (MAT) provides service and expertise in materials technology and is a leader in applying new transportation-related products. In addition to testing a wide range of construction and maintenance materials in TxDOT laboratories, MAT also trains, sets standards and evaluates commercial laboratories to ensure high quality and reliable results. MAT uses performance evaluations at the end of contracts with commercial labs and takes action based on those evaluations.

TxDOT's General Services Division plays an integral role in purchasing appropriate and high quality equipment, materials and services. The staff of certified purchasers assists in drafting specifications for purchase and conducts the process for obtaining bids on equipment, materials, and services.

OBJECTIVE 2.1: To maximize the quality and improve the delivery of products and services provided by TxDOT.

STRATEGY 2.1.1: Ensure accountability of product and	Where w	e are now	Where we plan to be				
service providers	1995	1996	1997	1998	1999	2000	2001
Outcome Measures:							
Percent of general public satisfied with TxDOT highway maintenance and appearance	75	75	73	71	68	66	64

## **Output Measures:**

Number of quality control/assurance measures used

#### Continuous Improvement and Retooling-Strategy 2.1.2

TxDOT's approach to quality emphasizes meeting customer needs, those of both internal and external customers; team work; employee involvement in the decision making process; and fact-based decision making. The quality approach also emphasizes partnering with the Department's contractors, suppliers, consultants, and other external product/service providers. Partnering's ultimate objective is to provide a high-quality product on schedule, within budget, and without claims. Continuous Improvement (CI) processes and tools can be used by single-function or cross functional teams to identify and solve problems. The problems and issues dealt with can be of a local nature or have statewide impact. To promote effective teamwork, the Department's CI Office provides facilitators as well as multiple training courses, including facilitator certification and employee training.

The Retooling TxDOT Program of the Information Resources Management Office is driven by the Department's strategic business direction. It has several key objectives:

- maintain the agency's clear strategic business direction,
- emphasize customer needs and value added to the business,
- improve Department business processes and operations,
- streamline Department policies and procedures,
- make technological improvements to support the business,
- manage expectations related to business and technology change, and
- manage resistance to change by key stakeholders while encouraging the use of innovative methods and tools.

Since 1994, Retooling TxDOT has concentrated on four business areas: real property (in particular right-of-way acquisition), human resources, information services, and transportation system planning. In 1996 and 1997 fiscal services, equipment, materials and supplies, and other business areas will be studied. TxDOT's Information Systems Division, Audit Office, Office of the General Council and other offices responsible for supporting or reviewing business processes work in coordination with retooling initiatives. Retooling TxDOT also works in coordination with districts, divisions, and special offices responsible for business activities being retooled.

OBJECTIVE 2.1: To maximize the quality and improve the delivery of products and services provided by TxDOT.

STRATEGY 2.1.2: Continuously improve the way we		Where we are now		Where we plan to be					
do business	1995	1996	1997	1998	1999	2000	2001		
Outcome Measures:									
Percent of general public satisfied with response time	53	53	54	55	56	57	59		
Number of retooling improvement projects implemented to increase efficiency and effectiveness	2	28	30	20	20	20	20		
Number of Continuous Improvement Team recommendations implemented	183	211	269	262	271	280	288		

# Output Measures:

Number of business processes reviewed for retooling opportunity

Number of Continuous Improvement Team efforts completed

Number of people(general public) surveyed

Number of formal partnership agreements formed

#### Work Environment—Strategy 2.1.3

TxDOT's Human Resources Division provides a comprehensive set of services that adds value to TxDOT's work environment. These include training and development, compensation and benefits programs, employee relations, staffing services, and cultural diversity awareness. TxDOT's Civil Rights Division is responsible for the coordination, planning and oversight of the civil rights-related activities of the Department. The division ensures that all TxDOT organizational units provide equal opportunity to everyone seeking employment, promotion, training, employee services and public services. This is accomplished by conducting investigations of complaints, identifying practices that may represent unlawful discrimination, identifying nondiscriminatory practices that may represent unprofessional or unethical behavior, and providing technical assistance to all organizational units in achieving compliance with equal opportunity policies and procedures. TxDOT's Information Systems Division provides technological support in the form of appropriate computer hardware and software needed to complete tasks efficiently.

To follow up on issues raised in the University of Texas Survey of Excellence, TxDOT conducted an examination of attitudes and perceptions about its work environment. The responses revealed the following:

- employee freedom to discuss problems and concerns with supervisors and fellow employees
- encouragement of open and honest discussion
- a strong feeling of "community" among TxDOT employees
- commitment to the organization
- cooperation in carrying out duties and responsibilities
- a sense of satisfaction about work
- the positive incentive value of alternative work schedules

In an ongoing effort to evaluate the quality of the work environment, employee surveys are conducted at the annual Texas Transportation Conference and in *Transportation News*, TxDOT's monthly publication. *Transportation News* also contains an "Ask Bill" section where issues are addressed by the Executive Director. Employee suggestion boxes are located throughout TxDOT buildings to receive suggestions; the Employees Advisory Committee coordinates the responses to these suggestions for divisions and special offices in Austin. Employees statewide may submit suggestions to the Department's Employee Incentive Program which evaluates all suggestions and implements those which improve operation and/or save money.

Future tasks to improve the TxDOT work environment will include maintaining highway worker safety in increased traffic, handling new chemicals and materials, implementing new technology, meeting the need for increased employee knowledge, and a continuing emphasis on diversity and empowerment. TxDOT's Occupational Safety Division (OCC) provides workplace health and safety awareness training and investigates and recommends improvements to hazardous working conditions. OCC also administers the Department's workers' compensation and liability insurance programs.

OBJECTIVE 2.1: To maximize the quality and improve the delivery of products and services provided by TxDOT.

STRATEGY 2.1.3: Promote an environment of mutual		Where we are now		Where we plan to be				
respect, trust, and fairness in which all employees' contributions are recognized as important	1995	1996	1997	1998	1999	2000	2001	
Outcome Measures:	ic							
Percent of employees, who believe they work in a safe, flexible and supportive environment	62	62	63	65	66	67	68	
Percent of employees, who feel empowered and accountable for their areas of responsibility.	53	53	54	55	56	57	59	
Workforce composition percentage (F = Female, B = Black, H = Hispanic)	F 21.8 B 7.7 H 18.9	F 22.1 B 7.7 H 19.1	F 22.4 B 7.9 H 19.4	F 22.7 B 7.8 H 19.7	F 23.0 B 8.0 H 20.0	F 23.6 B 8.2 H 20.5	F 24.2 B 8.4 H 21.0	

# Output Measures:

Number of suggestions received through the Employees Advisory Committee and the Employee Incentive Program.

Number of lost time accidents for TxDOT employees

Number of people in Temporary Recruitment Program

Number of students in Conditional Grant Program

## Department Information Strategy 2.2.1

In 1994, a sample of transportation stakeholders (elected officials, truckers, local transportation officials, consultants, Metropolitan Planning Organizations, etc.), job applicants, and the general public were surveyed to determine the level of public awareness of Department services. The responses showed a high level of awareness of some TxDOT functions and services, such as highway construction, vehicle title and registration, and the antilitter campaign, but less awareness of many other TxDOT services. Job applicants, it was found, understood agency hiring processes and procedures relatively well, and most of the job seekers reported their being notified when positions were filled.

TxDOT has utilized new communications technologies in order to keep employees and the public informed. TxDOT's Information Resource Management Office; with the assistance of TxDOT's Public Information Office, Information Systems Division, and other organizations; are providing agency information via TxDOT's Internet World Wide Web site (http://www.dot.state.tx.us). Road condition inquiries have been automated to the extent possible. The agency's Information Systems Division has provided statewide access to e-mail to increase internal communications and has added the capability of teleconferencing.

**OBJECTIVE 2.2:** To effectively communicate TxDOT's responsibilities and performance.

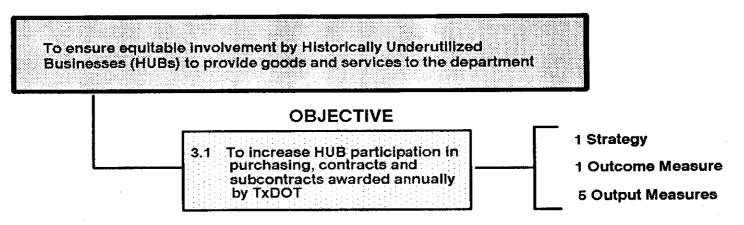
STRATEGY 2.2.1: Improve and expand programs to inform employees and the public about the department	Where we are now		Where we plan to be					
	1995	1996	1997	1998	1999	2000	2001	
Outcome Measures:  Percent of customers (general public), reporting that transportation services provided by TxDOT meet their travel needs.	77 (1)	77	79	82	84	86	88	
Percent of customer (general public) awareness of TxDOT's products and services	62	62	65	68	71	74	78	

# Output Measures:

Number of employees involved in speakers' bureaus or presentations to civic groups, etc.

Number of users accessing TxDOT's web site daily/weekly/monthly/yearly

# **GOAL III**



## HUB Implementation -- Goal III

TxDOT continues to broaden its partnership with vendors, contractors, and professional services through increased use of Disadvantaged Business Enterprises (DBEs) and Historically Underutilized Businesses (HUBs). During FY 1995, TxDOT purchased over \$348 million worth of goods and services from DBEs and HUBs, making this agency the largest state user of DBEs and HUBs.

In order to provide a single point of contact, the Department has consolidated all DBE and HUB operations into a single Business Opportunity Program (BOP). Potential contractors can contact the BOP office for referrals and for assistance in preparing proposals and bids for TxDOT. The Department also operates a DBE/HUB Supportive Service Outreach Training Program. Currently 22 Supportive Service Contractors are available to provide technical assistance to DBEs and HUBs interested in procurement opportunities with TxDOT. This assistance is offered free of charge. Of the 22 Supportive Service Contractors, 17 are themselves DBE/HUB contractors.

To ensure equitable involvement by historically underutilized businesses (HUBs) to provide goods and services to the GOAL III: department.

OBJECTIVE 3.1: To increase HUB participation in purchasing, contracts and subcontracts awarded annually by TxDOT.

STRATEGY 3.1.1: Implement a plan for increasing the		Where we are now		Where we plan to be				
use of HUBs in contracting and purchasing activities	1995	1996	1997	1998	1999	2000	2001	
Outcome Measures:  Percent of total dollar value of contracting and purchasing services awarded to HUBs.	16	15	15	15	15	15	15	

## Output Measures:

Number of highway contracts awarded to HUBs.

Number of HUB vendors, contractors and subcontractors contacted for bid proposals

Dollar value of HUB contracts and subcontracts awarded

Percent of routine maintenance contracts that involved HUBs

Number of disadvantaged businesses and HUBs used

# Appendix A

## Strategic Plan Development Process

Strategic Plan 1997-2001 is a refinement of the Strategic Plan 1995-1999. The vision, mission and goals of the latter were developed by the Senior Management Team in 1995. A core group of employees completed the 1995-1999 Plan led by the Management Services Office. Completion included development of objectives, outcome measures, strategies, output measures, and measures of effectiveness and efficiency. All phases of development included concurrence of the Management Team and briefing of the the Transportation Commission.

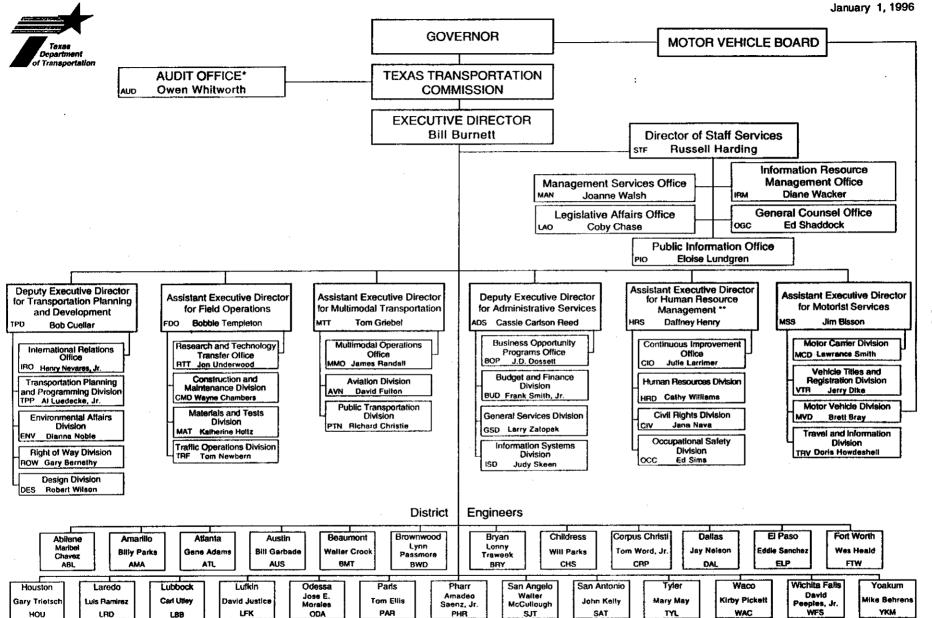
The Senior Management Team turned to the Management Services Office to lead a core group of employees to build and refine the 1997-2001 Strategic Plan. The core group included personnel from Budget and Finance, Transportation Planning and Programming, Human Resources, Multimodal, Information Resources Management, Management Services, executive assistants and the district offices. The charge to the group was to ensure that (1) the Strategic Plan reflected a true department of transportation; (2) objectives, strategies and measures were strategic in nature; and (3) measures would be timely, relevant, accurate and efficient to gather.

The internal/external assessment was extended to include discussion of strategies. The divisions and offices provided input regarding strengths, weaknesses, challenges, and opportunities over the next five years. They also provided actions they would take in carrying out the strategies.

Recommendations of the core group were coordinated with divisions and offices and presented to the Management Team for review and comment. Once accomplished, the document was forwarded to the executive director for negotiation with Legislative Budget Board personnel on changes from the 1995-1999 Plan.

Throughout the process the Transportation Commission was informed of progress and the proposed plan was presented to the Transportation Commission for approval at its June 18, 1996 meeting.





Note: In the absence of the Executive Director, the Deputy Executive Director for Transportation Planning and Development also oversees Reid Operations and Multimodal Transportation; and the Deputy Executive Director for Administrative Services also oversees Human Resources Management, Motorist Services, and Staff Services.



Operations of Audit Office coordinated by Director of Staff Services
 The Assistant Executive Director for Human Resources Management is the Department's designated EEO/Affirmative Action Officer.

# Appendix C

## Survey of Organizational Excellence

The Survey of Organizational Excellence, conducted by the School of Social Work of The University of Texas in September 1994, was designed to assist management in making decisions about particular areas that serve to improve employee productivity, morale and agency quality. The constructs (defined on the following page) categories were developed so that actions can be directed to assist TxDOT in the process of continual improvement. The constructs provide a quick thumbnail sketch of major aspects of the department and are very useful in building organizational-wide consensus of areas of needed change.

The constructs cover major aspects that are available to management intervention toward strengthening the department. These constructs provide information on how employees view these 5 major organizational dimensions:

- Work Team Perceptions
- Physical Work Settings or Accommodations
- General Organizational Features
- Communication Patterns
- Personal Demands

Work Team Perceptions relates to activities with others in the employees' immediate vicinity. They establish how the employee relates to peers, the supervisor and all of the persons most closely involved in day to day work activity. Physical Work Settings or Accommodations refers to the physical work setting and the factors associated with compensation, work technology and tools. General Organizational Features refers to the degree and type of hierarchy, how clearly the organization focuses upon work, creativity, the environment and quality. Communication Patterns refers to how formalized and structured communication is within the department and to outside groups. It examines the degree to which the employee feels communication is directed to work concerns, and that the communication is focused and effective. Personal Demands reports on how much internalization of stress is occurring and the extent to which debilitating social and psychological conditions appear to be developing at the individual level.

The constructs were based upon 500 points as the maximum score. As a general rule scores below the midpoint of 250 indicate areas where improvement should be considered and scores of less than 200 are areas demanding considerable attention. However, scores near or over 400 are areas of substantial strengths. For "Stress and Burnout" the lower the score the more employees say they are experiencing problems.

# The following are TxDOT's construct scores from the University of Texas, Survey of Organizational Excellence, September 1994

Work Team Perception	n <u>s</u>	<b>Accommodations</b>	
Construct	Scores	Construct	<u>Scores</u>
Job Satisfaction	307	Benefits & Compensation	358
Affirmative Action	305	Employee Development	315
Team Effectiveness	271	Physical Environment	309
Supervisor Effectiveness	265	Fair Pay	284
Fairness	255		

Organizational Featur	<u>'es</u>	Communications	<u>5</u>	
Construct	Scores	Construct	Scores	
Environmental Strategy	369	External Communication	324	
Goal Oriented	290	Availability of Information	274	
Change Oriented	286	Internal Communication	265	
Holographic (Consistency)	283			

Personal Demands						
Construct	Scores					
Time and Stress Management	303					
Burnout	279					
Empowerment	267					

Four focus group follow up meetings with 53 employees were initiated by TxDOT to explore in greater detail the responses to questions elicited in the survey that received low scores, and to better understand the quantitative results. Questions used during the focus group follow up meetings covered four of the five major organization dimensions: *Team Characteristics* (with a focus on fairness), *General Organizational Features* (with a focus on consistency), *Communications Patterns* (with a special reference to internal communication), and *Individual Demands* (where the focus was on empowerment).

#### Organizational Strengths Identified by Focus Groups

#### Worker Satisfaction

The general work atmosphere is perceived to be wholesome, and employees feel that they make valuable contributions through a high degree of personal productivity and by working cooperatively within their respective districts, divisions, or special offices. Employees feel that they are generally rewarded for being productive on the job

## Working Relationships and Sense of Community

Other important strengths are good working relationships within the Department and widespread identification with its mission, goals, and objectives. TxDOT has a genuine feeling of community, with workers committed to the interests of the Department and bound together in the pursuit of excellence. TxDOT workers indicate a personal commitment to their duties and responsibilities.

#### Organizational Weaknesses Identified by Focus Groups

#### Trust

There is evidence to suggest that one of the concerns of TxDOT workers relates to the level of trust between employees and management at all levels. Internal communication appears to be better among peers and between workers and their immediate supervisors than with higher management.

#### Anxieties about the Future of the Department

Several factors seem to cause anxiety among TxDOT exployees: (1) concerns about legislative changes and mandates, (2) the transitional status of federal transportation policy, (3) new policies and procedures regulating contractual obligations of the Department, (4) personnel changes perceived as being unfair, and (5) privatization of services previously handled by TxDOT workers.

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