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Perspective

Transportation News January 1997

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Perspective 1997

Transportation News wrapped up its 20th year in 1996. In the two decades since its creation, the department's employee newsletter has become a tradition. The monthly publication covers department happenings, features employees and their hobbies, and reports on issues important to TxDOT.

From Transportation News another tradition was born. With a 79-year history and more than 14,000 employees, TxDOT's accomplishments are hard to fit in a 100-page document. Perspective, which serves biannually as the January issue of Transportation News, spotlights some of the changes and successes throughout the department.

Although Perspective is produced by the Public Information Office, it requires the support and contribution of each district, division and special office. Writers and photographers statewide submitted copy and art. District and division public information officers were invaluable with their contributions. Travel and Information Division photographers supplied additional support, and the General Services Division printed and bound all 22,500 issues. And of course, it takes the hard work and talent of all employees to attain the achievements reported in this book.

Regular issues of Transportation News will resume in February.

Until then, enjoy reading about the department's successes and employees' accomplishments, and take pride in the fact that we are already compiling information on department successes for the next issue of Perspective. ★

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Transportation NEWS

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Publisher
Eloise Lundgren
Executive Editor
Roger Polson
Editor
Meredith Whitten
Design and Production
Jeff Carmack

Contributing PIOs
Janie De La Cruz
Randall Dillard
Susan Hodgson
Alan King
Kerry Kutch
Linda Ribble
Melissa Welch

Staff Support
Amanda Flores
Carol Garcia
Pam Swain
Diana Ward
Photo Librarian
Anne Cook

Travel and Information Division Photographers
Michael Amador
Geoff Appold
Gay Shackelford
Griff Smith
Kevin Stillman
Stan A. Williams

From the Executive Director

Two years can pass awfully quickly. Even so, it's amazing to look at how much we've accomplished in the past two years.

Our successes stretch across the state, from the Panhandle to the Rio Grande Valley and from the piney woods of East Texas to the plains of West Texas.

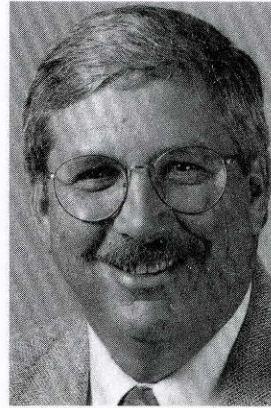
We've made Texas an international leader in Intelligent Transportation Systems, with San Antonio's TransGuide catching the eyes of the world. Houston recently ushered in its own intelligent transportation system, TranStar. These systems are shining examples of the future of transportation management.

When Congress repealed the federal speed limit in December 1995, our department was one of the quickest to react. Motorists on Texas highways saw speed limit signs statewide change in less than nine months.

We've reached out more to our fellow Texans, encouraging partnerships with communities across the state. In Dallas, we worked with public and private entities to speed construction of Texas 190. Completion of this toll road, known as the President George Bush Turnpike, will be completed years earlier than it would have been without such a partnership.

Decentralization has brought our products and services closer to our customers. With the Routine Airport Maintenance Program (RAMP), TxDOT matches grants to local governments to keep airports in good condition. The program expands roadway maintenance to cover publicly owned airports and maximizes funds for airport pavements and facilities. RAMP provides an affordable maintenance program for local governments lacking the necessary resources.

The Registration and Title System (RTS) is another example. Implementing RTS in 240-plus counties eliminated many of the steps that were once necessary to complete a vehicle registration or



William G. Burnett

titling transaction. The automated system gives faster results, such as updating registration records within 48 hours. The department now can issue a vehicle title within five days of receiving an application.

The faces of TxDOT have changed in the past two years as well. Since many employees retired in 1993, we've worked hard to fill those vacancies with a talented, knowledgeable and diverse workforce. We expanded the Conditional Grant Program to include females and non-engineering professions, broadening our job descriptions and deepening our talent pool.

Although Texans are known to boast, our efforts speak for themselves, and others have noticed. In 1995, TxDOT was recognized as one of the most efficient transportation departments in the country. Individual employees and the department as a whole have been recognized locally, nationally and internationally for our efforts. Although the accolades are warranted, they are not why we are in this business. A letter from a satisfied citizen means more to me than any plaque we hang on the wall.

In these times of doing more with less, we maintain our high standards, producing excellent products and providing outstanding service. With tighter budgets, employees have become more creative. TxDOT employees' ideas have led to cost savings departmentwide as evidenced by the Employee Incentive Program. Over the past two years, employees have earned more than \$12,000 for their suggestions, which have saved the department more than \$300,000.

As we've shown, TxDOT is more than just a government agency; it is an organization with heart. In the past two years, employees have reached out to their communities as well as each other. Since its inception, 92 employees have earned the department's Extra Mile Award for risking their lives to save the lives of others.

When nature was unpredictable, we responded quickly, wading through floods, cleaning up after tornados and extinguishing acres of wildfires.

Though the safety of citizens is of utmost concern to us, we are also concerned with the safety of our own workforce, so we concentrated on improving workplace safety.

Whether your workplace is in a building or on a four-lane highway, making sure you can do your job safely is of vital importance to me. We implemented the Give Us a Brake campaign to remind the public to drive more carefully through construction zones. And we emphasized safety internally as well. The Brownwood District exemplified this when, in fiscal 1996, the district went the entire year with no lost-time injuries.

Our safety record is good, but there is still room for improvement. And although our team is large — more than 14,000 work for TxDOT — we care about each other, and hurt when something happens to a fellow team member. We dedicated the opening session of the 1996 Transportation Conference to our workers who gave their lives working for the citizens of Texas. In the past two years, this has included seven employees.

Despite our successes, we must focus on the future. With infrastructure demands

growing, it is imperative that transportation-related issues stay in the forefront of local, state and national agendas.

New legislation will affect each of us as well as the department we represent and the people we serve. The Intermodal Surface Transportation Efficiency Act expires in 1997, and reauthorization of the act is

vital to fulfill mobility needs.

It is easy to take our first-rate transportation system for granted. But without adequate funding to keep maintenance in step with demands, the nation will face a crisis. Our Interstate system turned 40 in 1996. To last another 40 years, the system needs proper maintenance.

The department celebrates its 80th anniversary this year. Although we've come a long way, we still have a long way to go. We must strive to remain a modern state agency, using

initiatives such as Retooling. We need to increase revenues, implement the Texas Transportation Plan, deal with the effects of the North American Free Trade Agreement and reduce on-the-job injuries.

As the saying goes, the only thing constant is change, and how we respond to the changing demands of Texas transportation will define TxDOT as we enter the 21st century. We should look back at our history and see where we came from, but we should also look toward the future to where we are headed. We should relish our successes, learn from our mistakes and pledge to continue what started 80 years ago — providing the best transportation system in the world. That goal is something we all share. It is our common perspective. ★

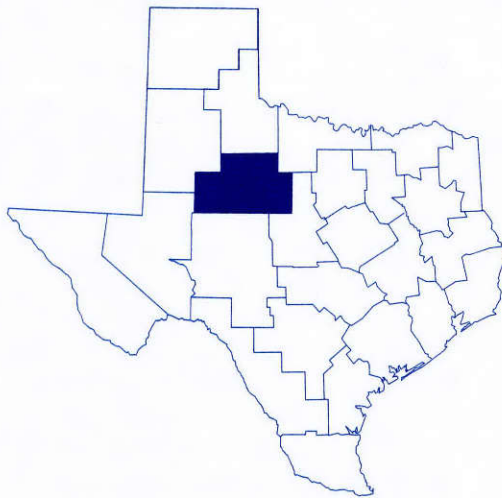
Our successes stretch across the state, from the Panhandle to the Rio Grande Valley and from the piney woods of East Texas to the plains of West Texas.

Abilene District

Given the reins to try new and innovative approaches, encouraged to express their ideas and not be afraid of failure, employees of the Abilene District (ABL) forge ahead, accepting the challenge of pilot programs and multimodal projects. This, along with an aggressive community relations program that incorporates public input into plans and programs, has fostered excellent working relationships with community leaders and elected officials in the district's 13 counties.

Multimodal has become a buzzword of the 1990s. Even though ABL is a relatively small and rural district, its employees are involved in many areas of multimodalism.

ABL was selected as a pilot district for



District Engineer Maribel P. Chavez, P.E.
Main number (915) 673-3761
Counties Borden, Callahan, Fisher, Haskell, Howard, Jones, Kent, Mitchell, Nolan, Scurry, Shackelford, Stonewall, Taylor
Area Engineers Blair Haynie, P.E., Abilene; Dan Richardson, P.E., Big Spring; Joe Higgins, P.E., Hamlin; Michael Taylor, P.E., Snyder
Employees 363
Centerline miles 3,633
Lane miles 8,267
Registered vehicles 217,760

both construction oversight and the rural airport maintenance program. Big Spring Area Engineer Dan Richardson, who also is an airplane pilot, worked closely with consulting engineering firms in the design of projects on Avenger Field in Sweetwater and Colorado City Municipal Airport.

In spring '96, ABL developed maintenance agreements for most of the district's rural airports. And in June, the Haskell County Maintenance Section became the first TxDOT section to perform such maintenance when employees resurfaced the Haskell Municipal Airport.

Another aspect of the multimodal program with which the district is intimately involved is public transportation.

ABL's public transportation focus is second to none. The program continues to grow and provide transportation to both those in Abilene and in the rural communities. To ensure that services are not duplicated, programs are coordinated between the 13 providers of transportation services.

Of these providers, one is urban, two are rural, and 10 serve the elderly and disabled.

The two rural public transportation providers in the district serve nine of the district's 13 counties. The two agencies operated 18 vehicles to provide nearly 80,000 one-way passenger trips traveling more than 400,000 miles over the past year. The 10 providers furnishing transportation to the elderly and disabled operated 16 vehicles and provided 39,000 trips traveling more than 170,000 miles the past year.

ABL manifests the spirit of the Intermodal Surface Transportation Efficiency Act by involving citizens and local elected officials in planning. Efforts included the use of citizen study teams to assist with planning efforts in rural communities. Study teams have formed in Haskell, Anson and Clyde.

An example of how well these groups



Mary Beth Kigore, ABL

Maribel P. Chavez, Abilene district engineer, talks with Scurry county maintenance technicians Art White, center, and George Larralde during the 1996 Safety Awards Banquet.

are performing can be found in the old railroad town of Clyde, which is bisected by increasingly busy train tracks with no grade-separated crossings. A 13-member citizen study team formed to examine the situation. Using a TxDOT-trained facilitator, the team identified issues and possible solutions, and made a recommendation to District Engineer Maribel Chavez. The process took less than three months and provided TxDOT planners with an abundance of useful information.

ABL also invited public participation when the district set out to renovate seven rest areas. Students in local schools were asked for drawings depicting something historical from the particular area. Construction of the winning designs, which will be installed as murals in the redesigned rest areas, is under way.

Public involvement also played an important role in the completion of U.S. 87 through Howard County. The multiphase construction of this four-lane divided highway was accelerated when Howard County citizens purchased 100 percent of the right of way.

Community involvement and partner-

ing, along with support of local media, were paramount in 1995, when the district undertook the reconstruction of ABL's busiest intersection —

U.S. 83 and Farm-to-Market Road 89.

Merchants and elected officials participated in the planning and partnering session. The cooperation among the contractor, TxDOT, the public, news media and area merchants

was excellent and, to the delight of Abilene citizens and merchants, the project was completed ahead of schedule. In recognition of exemplary cooperation and performance in construction of the intersection, the Associated General Contractors presented its 1995 Construction Award to Burt Spraberry, Abilene area project manager, Gene Yost, then-project manager, and Robert Elkins, Bay maintenance superintendent.

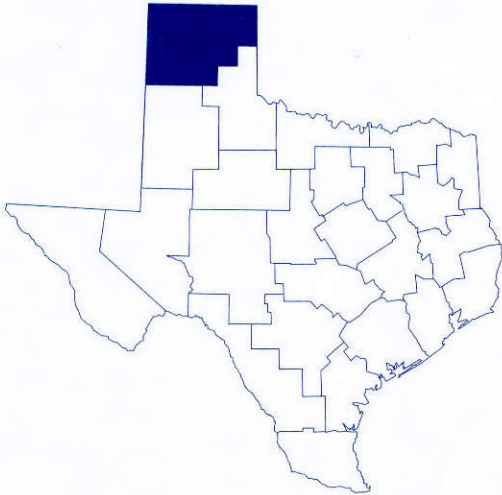
Chavez received recognition for her work as well, as she was honored with the National 1996 Hispanic Engineer Professional Achievement Award

Challenged to find a way to dispense magnesium chloride, a de-icing chemical, Jack Talley, Scurry County maintenance supervisor, and Doug Tindall, section mechanic, designed a bar to dispense the de-icing agent. This apparatus, which cost only \$300 to build, caught the attention of other TxDOT districts and similar ones are being built around the state. Not only did they save the district money, Talley and Tindall found another use for the herbicide trucks. ★

Amarillo District

Technology took over the snow and ice removal business in the Amarillo District (AMA) in 1995. Although the new technology will never replace a snow plow and a faithful TxDOT driver, the district purchased and implemented the Road Weather Information System (RWIS), tested sophisticated anti-icing materials and began work on an anti-glaze bridge to enhance winter weather transportation control.

RWIS is a network of laptop computers and roadway sensors available to each maintenance supervisor in the district's 17 counties. The supervisors dial up the system's central processing unit from just about anywhere and receive real-time weather data and pavement forecasts.



District Engineer Mark Tomlinson, P.E.

Main number (806) 356-3200

Counties Armstrong, Carson, Dallam, Deaf Smith, Gray, Hansford, Hartley, Hemphill, Hutchinson, Lipscomb, Moore, Ochiltree, Oldham, Potter, Randall, Roberts, Sherman

Area Engineers Joe Chappell, P.E., Amarillo; Kenneth Petr, P.E., Borger; Don Day, P.E., Canyon; Jerry Raines, P.E., Pampa

Employees 405

Centerline miles 3,987

Lane miles 9,212

Registered vehicles 319,139

Before a storm, the system predicts when moisture on the pavement will freeze, giving road crews a good idea of when they should send out their snow plows.

As a result of the well-attended Five State Snow Conference hosted by AMA in 1995, new anti-ice materials were tested. The materials proved effective and less corrosive than salt, which has been used for years. With RWIS pavement sensors, maintenance supervisors know when to use anti-ice materials as well as how much to apply. In some cases, the pavement's moisture freezing point was reduced by 10 degrees.

Construction on the state's first geothermal heated bridge was completed in 1996. The heating system that coils through the bridge's concrete deck is part of a Federal Highway Administration (FHWA) research program aimed at preventing "black ice" from forming on the bridge during winter months. The coils were filled with an environmentally safe antifreeze that is warmed when it is pumped through a series of 100 wells along the highway's right of way. The FHWA will monitor the bridge's operation for the next two years and determine the feasibility of future geothermal heated bridges in the United States.

Winter weather projects enhanced transportation in the Texas Panhandle but were not the only projects aimed at improving travel through the area. The district began a \$3.5 million project in northwest Amarillo that will significantly affect the five-state medical center. The project is the first of three needed to complete the transportation loop around Amarillo. The long overdue Loop 335 will be completed by 1999.

Transportation in four states benefitted when the U.S. 54 road rehabilitation projects got under way. The district's first metric job was on U.S. 54, a major truck corridor that links Texas, New Mexico, Oklahoma and Kansas.



Tonia Dettler, AMA

Construction on the state's first geothermal heated bridge was completed in 1996. Heating coils in the bridge deck are filled with an environmentally safe antifreeze that is warmed when it is pumped through a series of 100 wells along highway right of way.

As one of two districts in Texas housing the famous old highway Route 66, AMA unveiled new signs in March '95, just in time for the tourist season. Signs now mark where the old route once was.

Thousands of people travel the route each year and communities along "Old Route 66" (Business Interstate 40) welcomed the signs that direct tourists from the fast lane of the Interstate onto a roadway from the past.

AMA is one of five districts that participated in a pilot airport maintenance program. Under the program, TxDOT matched local funds up to \$10,000 to pay for maintaining general aviation airports. Of the 16 airports eligible, more than half participated as of August '95.

Landscape maintenance in the district was enhanced with agreements between TxDOT maintenance offices and several state prisons. The first agreement was signed in May '95 between the Amarillo Expressway Office and the Neal Unit of the Texas Department of Criminal Justice (TDCJ). Prisoners performed landscape maintenance with equipment purchased by TxDOT. They were transported in TxDOT buses and supervised by TDCJ guards. The program led to agreements with several other prisons in the Panhandle.

Finally, Billy D. Parks, AMA's district engineer since Oct. 1, 1993, moved on in the TxDOT ranks, becoming district engineer in the Corpus Christi District in September '96. Mark Tomlinson, former director of Transportation Planning and Development in the San Angelo District, was named AMA District Engineer in November '96. ★

Atlanta District

The past two years have been banner years for the Atlanta District (ATL) in areas of work and safety.

During fiscal 1995, a record 52 construction projects amounting to almost \$62 million were awarded. During August '95, the district also had a record volume of \$109 million in work under construction, ranking seventh in the state in total volume and fifth in monthly estimates paid to contractors — not bad for the smallest district, areawise, in the state.

Maintenance forces also were hard at work, using a record \$4.7 million in hot mix and other materials purchased for use by district crews. Thousands of dollars in rehabilitation work were saved by milling

and inlay work that removed bad pavement and rutting caused by the heavy truck traffic throughout the district.

Even while working at a record pace, ATL met all three safety goals set for minor injuries, disabling injuries and vehicle accidents. Due to an aggressive new safety committee, the district's minor injuries were reduced by 36 percent and disabling injuries went down 12 percent.

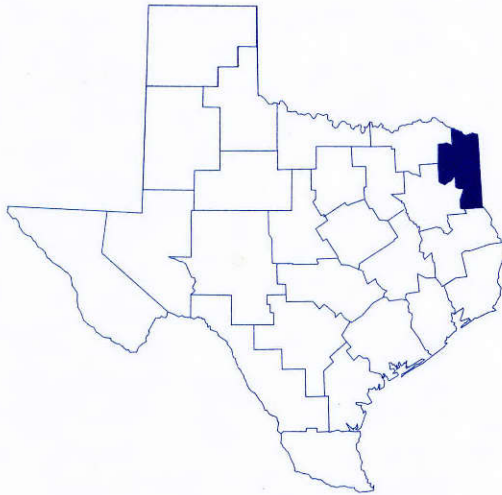
In 1996, the district continued its busy pace with 41 construction projects let to contract totaling almost \$48 million.

In spite of the increase in work in all areas, the district's safety record continued to improve. Minor injuries decreased again about one-third and disabling injuries were cut by more than half. Although vehicle accidents remained the same over the past three years, fewer accidents occurred due to employee error.

Major projects under way in ATL include the upgrade of U.S. 59 to a four-lane divided highway throughout the district. Heavier truck traffic resulting from the North American Free Trade Agreement (NAFTA) continues to tax this system and the district is working hard to meet increasing needs. Construction to replace the final two-lane, two-way bridge on U.S. 59 in East Texas began in December '95 and is should be completed this year.

ATL's Environmental and Right of Way sections are working to clear remaining sections of U.S. 59 between Atlanta and Jefferson for construction.

Three major corridor studies have been conducted through the district — Corridors 1, 18 and 20. Corridor 1 follows U.S. 71 between Kansas City, Mo., and Shreveport, La. Its proposed path could carry it through Texarkana on the Texas side before crossing the Red River back into Arkansas. The district is working for approval to complete a south loop around Texarkana to relieve congestion on I-30 and to handle anticipated additional traffic demands resulting from NAFTA.



District Engineer D. Gene Adams, P.E.

Main number (903) 796-2851

Counties Bowie, Camp, Cass, Harrison, Marion, Morris, Panola, Titus, Upshur

Area Engineers John Baker, P.E., Atlanta; Michael Anderson, P.E., Carthage; Bryan Nash, P.E., Gilmer; Steven Juneau, P.E., Marshall; Roger Ledbetter, P.E., Mount Pleasant; David Williams, P.E., Texarkana

Employees 363

Centerline miles 2,661

Lane miles 6,255

Registered vehicles 257,762



Marcus Sandler, ATL

This project on U.S. 59 near Jefferson replaces the only two-lane, two-way bridge on the state system. The work is part of ATL's efforts to upgrade the highway to handle growing traffic volumes.

Corridor 18 runs from I-69 in Memphis, Tenn., to Houston through Shreveport. The route would intersect U.S. 59 near Carthage in ATL.

Corridor 20 begins at the Texas-Mexico border following U.S. 59 through Houston

to Texarkana. The original study called for a route to the Mexico border at Laredo, but additional routes to McAllen and Brownsville in the Rio Grande Valley have been included in the study.

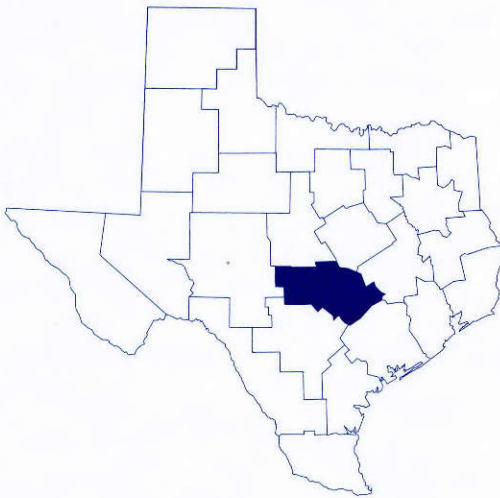
All three feasibility studies showed each route would be cost-effective. ATL employees look forward to the challenges that lay ahead. ★

Austin District

It's big, it's bold and it's brash. The U.S. 183 segmental bridge under construction in Austin is the talk, and often the toast, of the town. The bridge, including a four-level interchange at Interstate 35, is part of the Austin District's (AUS') conversion of U.S. 183 into a freeway section. The new freeway will run from just east of I-35, to just north of the Travis-Williamson county line.

The segmental bridge has captured the imagination of Austin residents and visitors alike. Built of winged segments that weigh approximately 130,000 pounds, the design allowed AUS to build the elevated structure inside an area of limited right of way.

Consisting of more than 3,000 individ-



District Engineer William Garbade, P.E.

Main number (512) 832-7000

Counties Bastrop, Blanco, Burnet, Caldwell, Gillespie, Hays, Lee, Llano, Mason, Travis, Williamson

Area Engineers Daniel Smith, P.E., Bastrop; Greg Haley, P.E., Burnet; James Klotz, P.E., Georgetown; John Roberts, P.E., North Travis; Russell Lenz, P.E., South Travis

Employees 640

Centerline miles 3,142

Lane miles 8,344

Registered vehicles 890,697

ual segments, the bridge will be suspended by cables concealed inside the structure. The segments were cast and trucked to the construction site. Each segment is cast alongside an existing segment to ensure that the mating faces are identical. They then are numbered and placed beside each other in the final construction sequence to guarantee a puzzle-perfect fit. U.S. 183 eventually will be converted to a freeway from Texas 71 near the new Austin-Bergstrom International Airport north to Ranch-to-Market Road 620. The district is also looking at the possibility of constructing U.S. 183A around the two suburban communities of Cedar Park and Leander.

As part of the project, the district had to close the I-35/U.S. 183 interchange for portions of four weekends. This was done with minimal disruption of traffic. The construction has become such a topic of discussion that KLBJ-AM broadcast its entire four-hour morning show from a balanced cantilever segment overlooking I-35.

Another AUS showstopper is the Ben White Boulevard project. TxDOT also is converting this major South Austin arterial into a freeway. Part of the project included removing the old cloverleaf interchange at Ben White/Loop 360/Lamar Boulevard and reconstructing an up-to-date direct connection interchange. Future plans call for the freeway to extend west to the U.S. 290/Texas 71 "Y" in Oak Hill and east to Farm-to-Market Road 973. These projects are especially challenging because they are built in the sensitive Edwards Aquifer Recharge Zone.

FM 734 (Parmer Lane) is being extended east of I-35 and ultimately will serve a rapidly expanding industrial area which will include the new Samsung facility. At the other end, Parmer Lane is being widened to handle the increasing traffic coming from the booming Northwest Austin residential areas. As the Austin



John Hurt, AUS

area continues its surge toward the north, plans have also been made to add a third lane in each direction to I-35 between Round Rock and Georgetown.

Long-range planners are looking at the construction of Texas 130 which will serve as a relief route to I-35. Texas 130 will exit I-10 near Seguin, bypass the Austin metro area to the east and rejoin I-35 north of Georgetown. ★

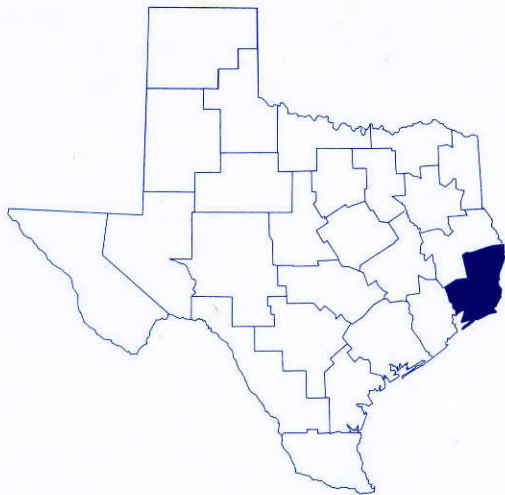
The U.S. 183 segmental bridge under construction in Austin, including a four-level interchange at Interstate 35, is part of the district's conversion of U.S. 183 into a freeway section.

Beaumont District

It doesn't get much better than in Southeast Texas. Where else can one explore a Civil War battlefield, visit the beach and tour a swamp, all in one day?

It's no wonder the area continues to intrigue Texans and tourists with its rich culture, nature and history. Bordering Louisiana and located on the Gulf of Mexico, the Beaumont District (BMT) has made great strides in meeting the transportation needs of Texans and visitors.

The district is home to seafood, swamps and, of course, fishing. This is bass fishing country. Two freshwater lakes lure anglers from around the world. Look to the south and one finds great saltwater fishing and some fine sailing.



District Engineer Walter O. Crook, P.E.

Main number (409) 892-7311

Counties Chambers, Hardin, Jasper, Jefferson, Liberty, Newton, Orange, Tyler

Area Engineers Duane Browning, P.E., Beaumont; David Bruno, P.E., Jasper; Edward F. Seymour Jr., P.E., Liberty; Howard Caldwell, P.E., Orange; Robert Conner, P.E., Port Arthur; Charlotte Warner, P.E., Silsbee

Employees 398

Centerline miles 2,291

Lane miles 5,343

Registered vehicles 435,124

One of the world's largest petrochemical complexes makes its home here, as do five correctional facilities including a federal "super-prison," and three ports. It's also home to one of the state's most environmentally sensitive areas, the Blue Elbow Swamp.

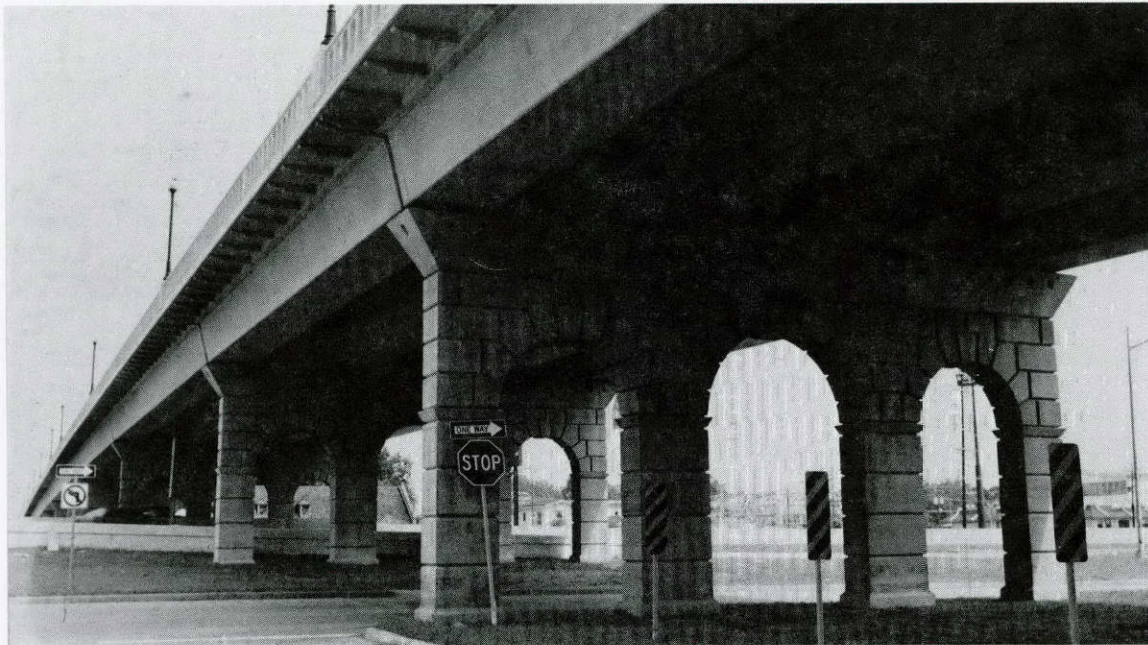
The 3,300-acre Blue Elbow is a conservationist's dream. The district's recent purchase of the swamp forever will preserve one of the last great natural resources in Texas. Rare and endangered species, including the alligator snapping turtle and bald eagle, now have a haven.

Blue Elbow soon will be the home of the new \$4 million Travel Information Center. With more than a half-million visitors each year, the new center will allow visitors to tour the swamp and see Texas the natural way. The swamp also will serve as a wetlands mitigation bank for future projects, saving money and time, ensuring real environmental benefits.

BMT now can claim one of the most impressive overpasses in the state. The Liberty-Laurel Overpass spans Interstate 10 connecting Beaumont's west end with the downtown area and helps eliminate heavy rush-hour traffic. But what's turning heads is the project's design. Designers went back to the 1930s to come up with a unique look. Sporting Roman arches, columns and street lamps, Liberty-Laurel serves as a gateway to Beaumont's historic Old Town district.

The completion of the Martin Luther King Jr. Parkway (Spur 380) in Beaumont, an \$80 million project, provides a more direct connection between I-10 in north Beaumont with U.S. 69 in south Beaumont. Travelers now have an easier connection to Lamar University and South Jefferson County, home to Port Arthur and the Jefferson County Airport.

Construction of the parkway was no small feat. More than 1 million cubic yards of dirt were moved, six overpasses con-



Marc Sheppard, BMT

structed and more than a mile of railroad track relocated as part of the project. Workers also installed a high-tech pump system capable of removing 17,500 gallons of storm water per minute. Motorists now have an attractive and more direct way of traveling through the city.

Imagine a four-lane highway complete with bicycle and hiking trails winding through some of the most scenic areas of Southeast Texas. It could soon be a reality. Under the federal Rails to Trails Program, the district acquired an abandoned portion of the Southern Pacific Railroad corridor between Lumberton and Lufkin in hopes of expanding U.S. 69. The proposed 92-mile controlled-access highway would create an economic boom for Beaumont, Port Arthur and communities to the north that depend on the region's timber industry.

Besides the economic impact, the expanded highway would enhance hurricane evacuation routes from south and mid-Jefferson County. The district is about to begin a feasibility study to determine the best use of the current roadway and railroad right of way.

Work has begun on an eight-mile

The new Liberty-Laurel Overpass spans Interstate 10, connecting Beaumont's west end with the downtown area and helping the flow of heavy rush-hour traffic. Designers went back to the 1930s to come up with the overpass' unique look.

stretch from Evadale to Buna. Soon, work will begin on several other stretches of the highway, eventually turning U.S. 96 into a four-lane highway stretching from Beaumont to Jasper.

In 1947, construction began on a two-lane highway to connect Port Arthur to Houston. Nearly 50 years later, crews are busy reconstructing Texas 73 into a four-lane roadway from Port Arthur to Winnie and I-10. The highway will provide Port Arthur better access to the ports and more economic development. The 18-mile widening project is slated for completion in 1999.

What was at one time the tallest bridge in the south will soon be restored. The Rainbow Bridge has already been repainted and its lanes widened. Crews now are working on the approach spans and hope to be finished this year. ★

Brownwood District

Signs proved to be the highlight of maintenance operations in the Brownwood District (BWD).

As the installation of the last 911 sign completed the district's 911 sign program, something else loomed over the horizon that was an even greater project for sign personnel — the repeal of the national speed limit.

Given the tight deadlines for each stage of the project, BWD employees performed trial runs, inventoried signs, and manufactured and installed signs. The immense size of the project, coupled with the close coordination with law enforcement and local governments, demanded intense planning and scheduling.

Winter '96 was challenging for BWD maintenance crews. The severe drought

fueled grass fires, which required an immediate response from BWD crews to assist local governments in controlling the fires.

Hundreds of acres in Brown, Eastland and Stephens counties were consumed by grass fires. Stephens County maintenance forces from Breckenridge deployed equipment and manpower and worked through the night to help with traffic control and blade fire guards in a team effort to save property and grassland on Farm-to-Market Road 576 and FM 207.

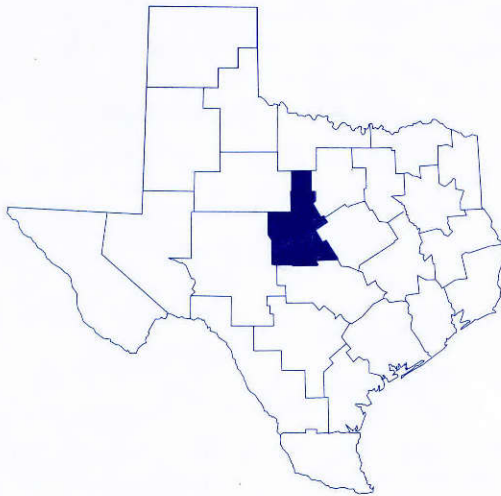
Before the winter ended, Mother Nature had one final surprise — the worst ice storm in the area's recent history. Maintenance crews worked continuously for three days keeping roadways open and helping motorists.

Because of the dedicated, conscientious efforts of its employees, BWD has earned an excellent reputation for occupational safety. For the past three years, the district's accident rate has been one of the lowest statewide in all three safety categories: lost-time accidents, vehicle accidents and all injuries.

In fiscal 1996, BWD made history by being the first district to record no lost-time injuries during a fiscal year. The district focused on other safety programs as well by holding bicycle rodeos at schools and for youth groups in an effort to promote bicycle safety.

Support operations also showed improvement in FY '96. With attentive management, the district lowered the shop rate, reduced potential stock surplus and decreased long supply percentages.

BWD is proceeding with its long-range plan of improving the infrastructure in the various cities of the district. Providing urban roadways with curb and gutter, storm drains as needed and other safety features is a part of this long-range plan. Curb and gutter has been added to various routes through several cities and



District Engineer Lynn Passmore, P.E.

Main number (915) 646-2591

Counties Brown, Coleman, Comanche, Eastland, Lampasas, McCulloch, Mills, San Saba, Stephens

Area Engineers Bryan Raschke, P.E., Brownwood; Bryan Neaves, P.E., Eastland; Howard Holland, P.E., Lampasas

Employees 251

Centerline miles 2,651

Lane miles 5,719

Registered vehicles 117,908



Courtesy BWD

Maintenance technicians Ben Makcey and James Moss install new speed limit signs following the repeal of the federal 55-mph speed limit.

major reconstruction in others with these urban features have been completed or are being planned.

The work on urban infrastructure made it necessary for the Right of Way Section to aggressively pursue the acquisition of right of way in Brownwood on FM 2524, U.S. 377 and Texas 279.

Along with the urban right of way activities, BWD is a pilot district in using an abbreviated appraisal process to help reduce right of way acquisition time on U.S. 183 in Lampasas County near Lometa. The project is the last of three on U.S. 183 between Goldthwaite and Lometa.

The urban projects in Brownwood have caused some environmental concerns because of numerous underground storage tanks. Coordination with various state agencies and TxDOT divisions to incorporate the removal of these tanks and contaminated material in the construction plans and specifications have created some challenges not normally experienced on projects.

The focus on construction projects in the district involved safety improvements. Projects include resurfacing, striping, raised pavement markings, signing, guardrail end treatments and widening, and re-aligning entrance and exit ramps.

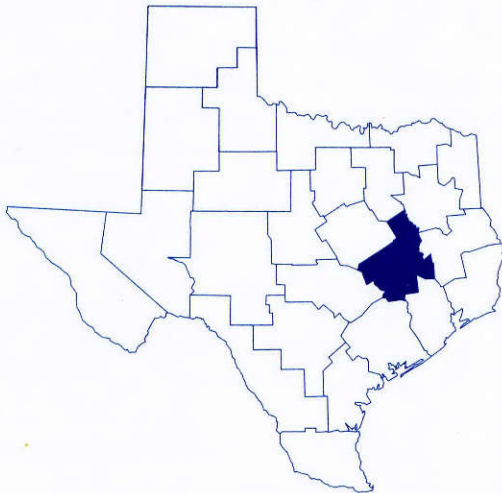
Urban projects on U.S. 377 in Brownwood include alignment changes, improving sight distance and major improvements to pedestrian safety. In rural locations, the district received funding to provide safety end treatments on more than 100 miles on U.S. 377, U.S. 87, U.S. 67, Texas 71, FM 580 and Texas 67 in Brownwood, Coleman, Lampasas, McCulloch and Stephens counties.

Other safety-related construction projects include intersections where BWD installed signals, safety lighting or flashing beacons. The district completed all construction and maintenance projects without contractor claims or disputes. ★

Bryan District

The Bryan District (BRY) recently entered a historic phase of roadway construction, ranging from rebuilding older roads to adding lanes and constructing new-location highways. With work at a near fever pitch, district employees are rising to meet the challenge of design, construction and maintenance better than ever.

The dominant theme of recent years has been the high level of construction contract awards and projects in progress. BRY is a smaller, rural district. Yet among the state's other 24 districts, BRY's recent work load has ranked sixth in the number of construction projects and seventh in total contract amounts. At one point, the district had 76 projects under way at a



District Engineer Lonny G. Traweek, P.E.

Main number (409) 778-2165

Counties Brazos, Burleson, Freestone, Grimes, Leon, Madison, Milam, Robertson, Walker, Washington

Area Engineers David McCannon, P.E., Brenham; Vacant, Buffalo; Patrick Williams, P.E., Bryan; Wesley Jasek, P.E., Hearne; Tom Hunter, Huntsville

Employees 355

Centerline miles 3,044

Lane miles 6,834

Registered vehicles 254,078

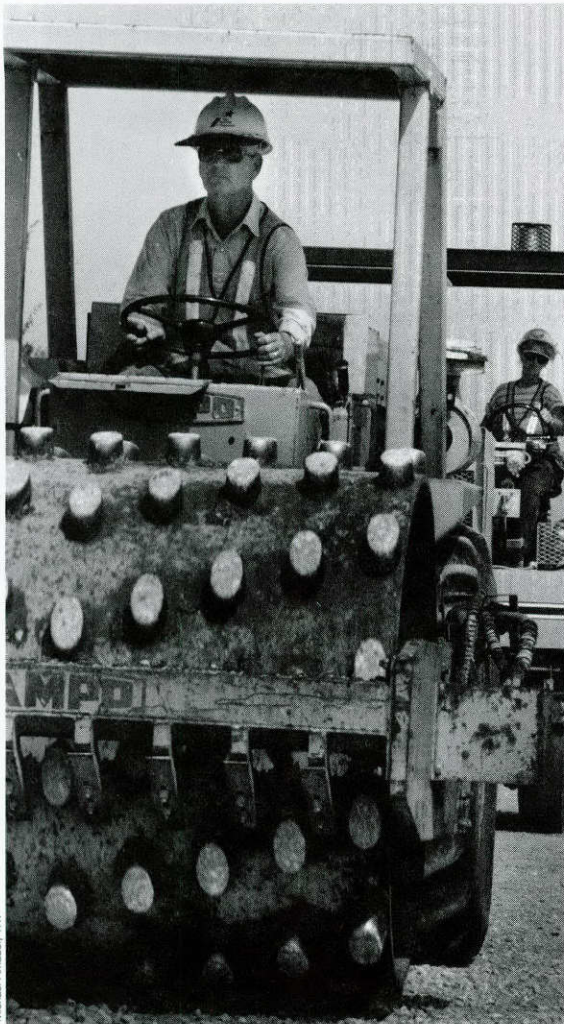
total contract cost of \$134 million. The number of contracts under way underscores the district's excellent record on contractor claims — no claim has gone before the agency's claims committee through fiscal 1996.

BRY also has concentrated heavily on reconstructing roads. The district's 1,800 miles of farm-to-market roads have taken the brunt of heavy truck use recently due to prospering oil and timber industries. Maintaining these roads is a two-pronged approach, using state forces and contract projects. As a result, almost 250 miles of FM roads were upgraded in FY '95, or about 14 percent of the district's total FM system.

In April '95, a four-mile extension of FM 3478 was completed in Walker County outside Huntsville. The project had a dramatic impact on transportation in the north part of the county because it provided a much needed bridge across the Trinity River. Northern county residents now can reach the county seat of Huntsville in about 20 minutes, versus the former 45-minute trip via the nearest Trinity River bridge in neighboring Trinity County. The project also was significant because a wetland adjacent to the river was relocated.

Bryan-College Station and Brazos County added a new highway to the transportation system in August '96 when the district officially opened Texas 47, the first major highway to open in Bryan-College Station since the early 1970s. The seven-mile highway links Texas 21 and FM 60 in west Brazos County and took a highly cooperative effort to become a reality. Texas A&M University led the way in acquiring 450 acres of right of way needed for the new-location road, and the project was supported by city officials in Bryan and College Station.

In Washington County near Brenham, Texas 36 was widened from two lanes to four lanes over 11 miles at a cost of



Michelle Amador, TVM

Madison County maintenance technician Vernon Wells operates a sheep's-foot roller on a pavement rehabilitation project on Texas 75. Maintenance tech Trish Hodges follows with a pneumatic roller.

\$14.5 million. This expansion project was completed in January '96.

Two major contracts are near completion in the district, including widening of U.S. 79 in Milam County west of Rockdale. This road is being upgraded to a four-lane highway for five miles, the first of a two-phase project between the city of Rockdale and the Milam-Williamson county line. In addition to the U.S. 79 project, another significant project is almost

ready in south Brazos County outside College Station. About five more miles of freeway are being added to Texas 6 between College Station and Navasota, including two interchanges and frontage roads.

Growth in College Station and at Texas A&M University in recent years has spurred two major road expansions now under way adjacent to the main campus.

The district's busiest city street is Business 6, also known as Texas Avenue. Because daily traffic is now at more than 40,000 vehicles, it is being upgraded to a six-lane street directly in front of the campus. On the west side of the university, FM 2347, known as George Bush Drive, is being upgraded to a four-lane road. This expansion will serve the thousands of visitors expected at the new Bush Presidential Library scheduled to open late this year.

Through the Traffic Management Task Force launched by the district in 1995, the impact of construction on both daily and special events traffic has been improved. A number of other local agencies are represented on the task force, including Texas A&M University, the cities of Bryan and College Station, Brazos Transit System, the Texas Transportation Institute and the Bryan-College Station metropolitan planning organization. So far, the task force has produced an extensive public education campaign and its members have adopted a team attitude in committing manpower and other resources for peak traffic events.

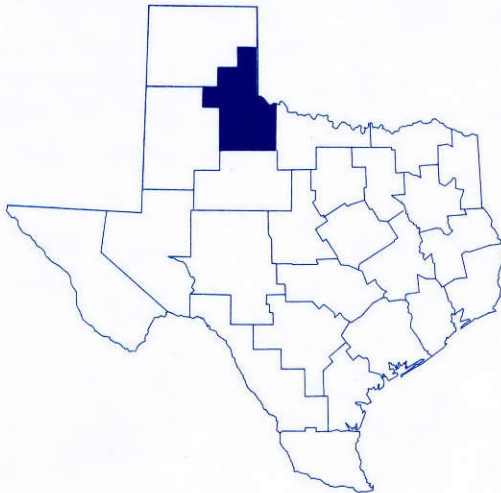
The district is also a headquarters for transit, as it is the home base of Brazos Transit, the nation's largest rural public transportation provider. The system serves an area of more than 13,000 square miles and provides transportation options for more than 800,000 people. ★

Childress District

The Childress District is located in the southeastern part of the Panhandle, known as the Rolling Plains. Agriculture is the heart of the area's economy, making cotton the king and cattle prices the main topic at local cafes and restaurants.

Summer temperatures as high as 118 degrees have been recorded and winter temperatures frequently remain below freezing for days at a time. The weather makes life difficult for area farmers and ranchers, as well as for members of the Childress District (CHS) TxDOT team.

Even though residents of the district are accustomed to extremely diverse weather conditions, no one could have been prepared for what Mother Nature had in store for the region between June '95 and May '96. During those 11 months, the 13-county district endured two major floods,



District Engineer Will J. Parks, P.E.

Main number (817) 937-7135

Counties Briscoe, Childress, Collingsworth, Cottle, Dickens, Donley, Foard, Hall, Hardeman, King, Knox, Motley, Wheeler

Area Engineers Gary Mizer, P.E., Munday; Daniel Brown, P.E., Wellington

Employees 252

Centerline miles 2,496

Lane miles 5,405

Registered vehicles 40,029

four major grass fires and two tornadoes.

The floods came in June and August '95, making it the wettest year in decades. With the storms that brought record rainfall came the devastating tornadoes.

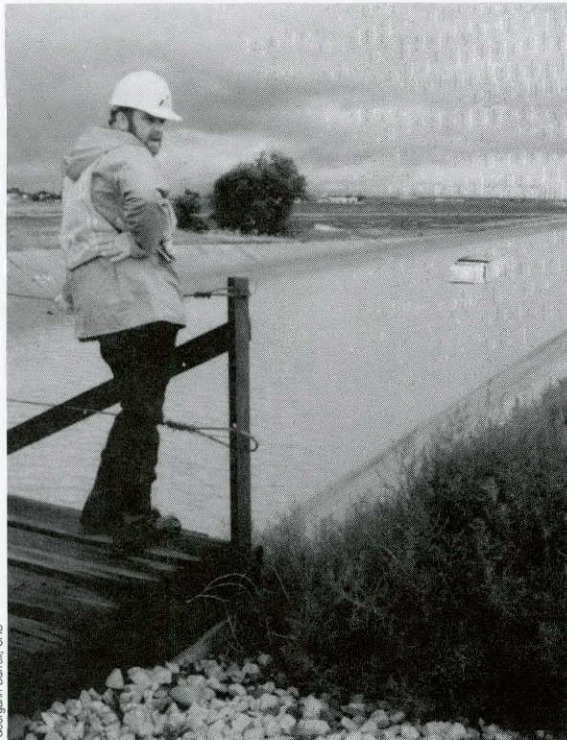
The tornado that hit Childress County cut an estimated eight-mile path through the center of the county. The Wheeler County tornado entered the southwest corner of the county and immediately lifted a 133-foot stretch of asphalt from one farm-to-market road. The tornado remained on the ground approximately 70 minutes, leaving a half-mile wide, 30-mile long path of destruction that stretched across the entire county.

The last rain of the year fell in November and the district saw no more until 1996 hit its halfway mark. With the lack of rain came the range fires — four so large the Texas Forest Service and TxDOT were called to help extinguish the flames. In all, CHS employees fought more than 100,000 acres of grass and range fires.

The district's traffic safety program took to the streets, giving safety programs to children of all ages at schools throughout the district. TxDOT also held a Bicycle Safety Rodeo at Fair Park in Childress for children ages 7 through 11. The event, which included an obstacle-course type track, gave children a safe, supervised area to practice the safe bicycle riding skills they learned at the presentations TxDOT gave at their schools.

CHS' Traffic Safety Section also had the honor of having Vince and Larry, the famous Crash Test Dummies, as special guests at the district's "Pit Stop," held in conjunction with TxDOT's Safe and Sober Road Trip '96 special event. The Pit Stop, held the weekend preceding Spring Break, offered motorists a place to stop for refreshments and traffic safety materials.

In 1995, the district had the distinction of having the least number of personal-injury accidents. This is attributed, in part, to the district's philosophy of putting safe-



Georgann Burrell, CHS

Nature dealt Douglas Campbell, Childress County maintenance supervisor, a heavy blow when 15 inches of rain filled the U.S. 83 underpass on the south side of Childress.

ty as the first consideration in any work situation. The district's safety program is further emphasized by the annual Truck Rodeo, which reminds all participants of the importance of driving safely.

CHS was selected as the pilot district for the spread-spectrum radio transceiver system, which uses two-way radio signals to synchronize traffic signals.

Synchronized traffic signals help reduce fuel consumption, traffic delays and the number of stops made during trips. The radio transceiver system, when coupled with a computer and modem, enables Traffic Operations to monitor each traffic signal, even from remote locations, to ensure optimum performance. In addition, the radio transceiver system is more cost-effective than the hard-wire connect method that traditionally has been used to synchronize traffic signals.

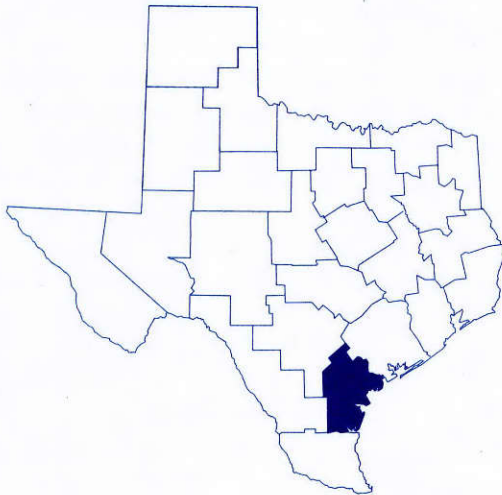
Construction on Caprock Canyons State Park Trailways, located in Hall, Briscoe and Floyd counties, is complete. The 64-mile rail-trail corridor offers a pristine, scenic experience for bicyclists, pedestrians, hikers, equestrians and the physically challenged. Visitors to the Trailways can see the 772-foot Clarity Tunnel, which is the last operating railroad tunnel in the state and is listed on the National Register of Historic Places. The entire corridor was declared eligible for listing on the National Register of Historic Places by the Texas Historical Commission because of its significant engineering achievement of early 20th century technology.

Local airports play an important role in a community's economy. A community with an airport is more accessible to produce buyers, sportsmen or businesses looking to relocate. With the decentralization of TxDOT's Aviation Division, the counties and districts worked together to maintain and improve local airports. CHS recently resurfaced and striped the Memphis and Munday airports and, in 1998, a major upgrade project is scheduled for the Childress Airport. The runways will be rebuilt, lights will be installed and the surface will be restriped. ★

Corpus Christi District

“Island time,” that special carefree mood unique to Port Aransas, became easier to attain when the Corpus Christi District (CRP) added the Arnold W. Oliver to TxDOT’s ferry system fleet July 26, 1996. Joining four other 20-vehicle vessels and one nine-vehicle vessel, the Oliver is part of a fleet that provides toll-free 24-hour service between Mustang Island and the mainland every day of the year.

When TxDOT assumed the ferryboat operation from Nueces County in 1968, the system had four nine-vehicle ferryboats. Holidays and busy weekends could result in waits up to two hours to board the boats for the five-minute trip. Today,



District Engineer Billy D. Parks, P.E.

Main number (512) 808-2300

Counties Aransas, Bee, Goliad, Jim Wells, Karnes, Kleberg, Live Oak, Nueces, Refugio, San Patricio

Area Engineers Ramiro Gutierrez, P.E., Alice; Charlotte Teague, P.E., Corpus Christi; Jose Martinez, P.E., George West; Ralph Condra, P.E., Karnes City; Arthur M. Clendenin III, P.E., Sinton

Employees 425

Centerline miles 2,747

Lane miles 6,634

Registered vehicles 380,291

the wait — even during peak times — is less than a half-hour. The number of vehicles transported across the channel steadily increases and is expected to exceed 2 million during 1996. The Oliver joins the R.E. Stotzer Jr., the Mark Goode, the J.C. Dingwall and the B. L. DeBerry, all named for former department chief executives, and the nine-vehicle Janey Briscoe, named for the former Texas first lady.

Intermodal transportation is more than a concept in the 10-county district. Located along the southwest coast of the Gulf of Mexico, CRP is served by the Port of Corpus Christi, the Corpus Christi International Airport, 14 public-use airports, the Corpus Christi Metropolitan Transportation Authority, bicycle routes, miles of highway, many bridges and the Port Aransas ferry system.

Roadway planning and construction are spurred by TxDOT’s commitment to meet transportation demands resulting from the North American Free Trade Agreement. Nearly 20 miles of additional divided roadway have been completed on U.S. 281 in Live Oak County. This major north-south route is a vital link between the Lower Rio Grande Valley and San Antonio and is an important connection to other major metropolitan routes.

The first stage of a relief route to the west of Alice began in January '96. A second contract is scheduled for this year. The four-lane route now extends between Pharr and Pleasanton. Traffic along this important international highway is expected to more than triple by 2040, with a daily volume of more than 27,000 vehicles.

A study is being conducted along the recently completed roadway section to determine whether specially designed culverts, which include walkways, are being used by bobcats and endangered ocelots. The study provides for radio-collaring both bobcats and ocelots and tracking them for 5,000 trap nights to determine if the animals prefer a particular road-cross-



ing design and if their range includes the project area. This information will be used in future roadway planning and design throughout the area.

Completion of a four-mile segment of Interstate 37 in Corpus Christi widened the freeway from four to six lanes to provide continuity with roadway sections on each end. This section was a bottleneck during hurricane evacuation and other peak periods. Included in the project were modifications at two entering roadways. New ramps at Carbon Plant Road will be critical for the Interstate connection if a proposed route along the Corpus Christi Ship Channel, known as the North Shore Road, is constructed. The new roadway would provide another link from the Interstate to the Port of Corpus Christi.

Construction is under way on a project to build a four-lane divided freeway with overpasses along U.S. 77 from near Corpus Christi to Robstown. This is an impor-

The Arnold W. Oliver, a new ferryboat named for the former TxDOT executive director, is the fifth 20-vehicle vessel in the Port Aransas fleet and was put in service in July 1996.

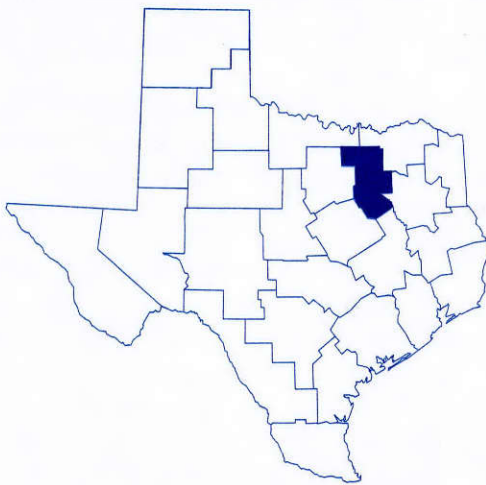
tant north-south connection between the Rio Grande Valley and the northern part of the state and connects with U.S. 59 to carry travelers and commerce to Houston and beyond. U.S. 77 is a vital segment of the Corridor 20 Transportation Study and will connect Texas from the Rio Grande Valley and Laredo north to Texarkana. It is being coordinated with the Corridor 18 study, which provides a comprehensive multistate analysis of transportation needs from Mexico through the industrial areas of the United States to Canada. ★

Dallas District

Employees in the Dallas District (DAL) have achieved their commitment to Total Quality Management as the district continues to exceed the high standards and goals it sets for itself. This is exemplified by the dedicated and talented district employees who design, construct and maintain the state transportation system in the district's seven counties.

The first half of fiscal 1996 resulted in the design and awarding of more than \$100 million in construction contracts with an estimated yearly letting of \$249 million. Work under contract in construction now amounts to more than \$817 million.

DAL broke ground with the Texas Turn-



District Engineer Jay R. Nelson, P.E.

Main number (214) 320-6100

Counties Collin, Dallas, Denton, Ellis, Kaufman, Navarro, Rockwall

Area Engineers Darwin Myers, P.E., Corsicana; Claude S. Jones Jr., P.E., Robert Brown, P.E., Patrick Ellis, P.E., Dallas; Claud P. Elsom III, P.E., Denton; William Hale, P.E., Hutchins; Gary Charlton, P.E., Kaufman; William C. Lovil Jr., P.E., McKinney; Alvin Barton, P.E., Waxahachie

Employees 1,060

Centerline miles 2,871

Lane miles 8,056

Registered vehicles 2,256,670

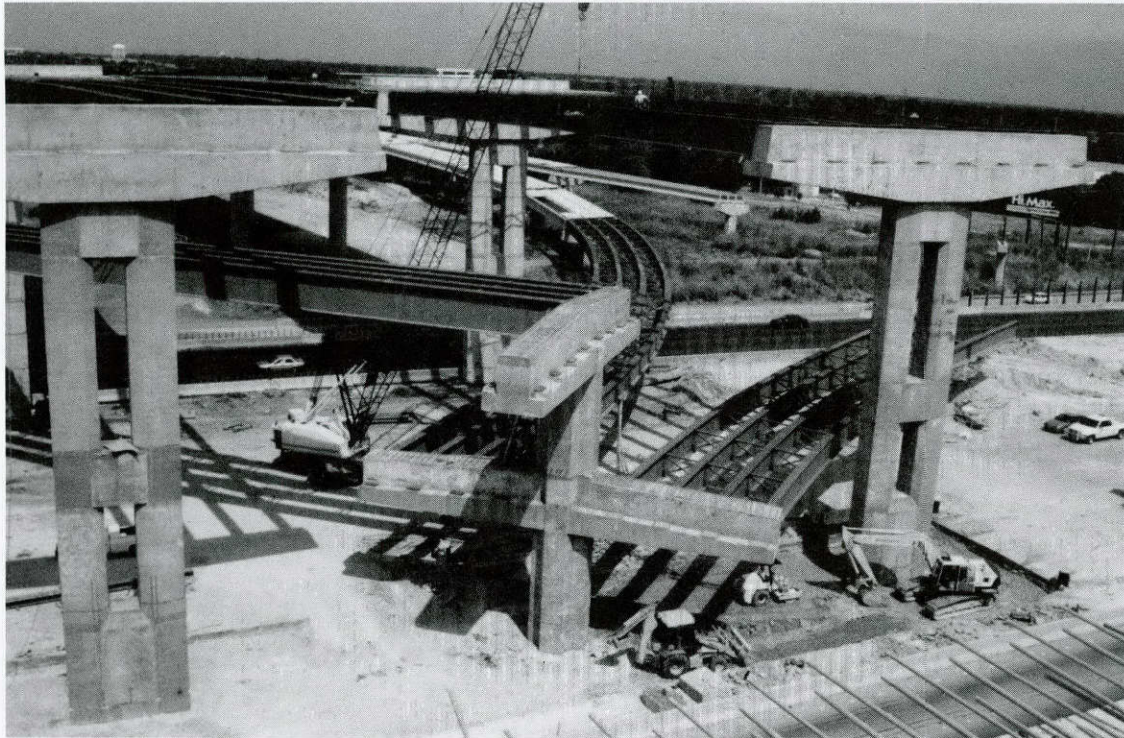
pike Authority (TTA) in the development of the Texas 190 toll road, known as the President George Bush Highway. Based on information provided by TxDOT, TTA is building the route in the northern sector of the metroplex. This partnership with TTA and the Federal Highway Administration (FHWA) has provided a funding option for projects in the area.

With the Fort Worth District and the North Central Texas Council of Governments, DAL's Public Transportation Section has asked public and private sector transit providers to participate in their new Metroplex Transit Partnering Workshop. This first-of-its-kind coalition hopes to establish a regional council of transit agencies.

DAL's Public Information and Traffic Safety offices created and distributed the "Tex and Dot" safety program and materials to teach youngsters the importance of traffic safety. The program, which has won state and national awards, teaches safety by using coloring books, posters, pencils and, in cooperation with area libraries, summer reading programs.

DAL symbolizes customer satisfaction and service to the community in the programs it provides. Surrounding cities often call upon the Environmental Section to solve hazardous waste problems and spills. Clearing the roadways of ice and snow each year affords DAL's maintenance forces the opportunity to help motorists during severe weather. During the February '96 ice storm, district employees spread 12,363 cubic yards of sand and 150.2 tons of salt on area roadways, and logged more than 8,744 hours of overtime doing so. The district's hotline received 15,821 calls in February. The public made a total of 12,634 calls over the four days of severe weather during the first week alone.

The District Maintenance Office plans to use environmentally friendly chemicals on the roadways rather than sand and salt



Fernando de la Garza, DAL

Construction continues on the Texas 190/U.S. 75 interchange in Plano. The project, now more than 75 percent complete, began in 1993 and is slated to open to traffic late this year.

because of the high cleanup costs. Another plus is that maintenance can cover more ground with less material using the chemical process, and it melts quicker with no cleanup.

The most complex Major Investment Study (MIS) in the nation is under way in Dallas. DAL began the Trinity Parkway Corridor MIS in February '96. It is one of the most complex because of its potential social, economic and environmental impacts. Also, the consideration of all modes of transportation and its location near the Dallas Central Business District and the Trinity River must be taken into account.

Eight public meetings, five newsletters and 12 community work group meetings are planned during the 18-month schedule. The district held two partnering ses-

sions in preparation for the study — one with the consultant team and one with other cooperating agencies. The agencies attending the second workshop included the city of Dallas, Dallas County, Dallas Area Rapid Transit and the U.S. Army Corps of Engineers. Also attending were the Texas Turnpike Authority, Trinity River Authority, North Central Texas Council of Governments, FHWA, Texas Transportation Institute and TxDOT.

Of the \$817 million under construction in the district, \$327 million is spent on the North Central Expressway projects. The district started maturity testing for concrete strength on two of the large North Central jobs in fall '96. This will streamline projects by allowing TxDOT to open pavements and structures earlier without compromising the quality of the product. Maturity testing may revolutionize the way TxDOT builds projects. These projects will be the first to implement it as a standard. ★

El Paso District

The El Paso District (ELP) continues to accept the challenge with a spirit of teamwork. District Engineer Eddie Sanchez is leading the district in an innovative approach to organization and staffing.

ELP now has a new design team. Two-thirds of the original team was divided, with half moving to the rural office and the other half to the urban office. The remaining one-third is at the district office under Central Design. A design support group, called District Design, was developed with three sections: Graphics, Bridge Design, and Landscaping.

ELP made strides in highway beautification and scenic preservation. In January '95, fiber-optic arches of bright light along Interstate 10 downtown added color to a bland, unattractive area. The \$1 million

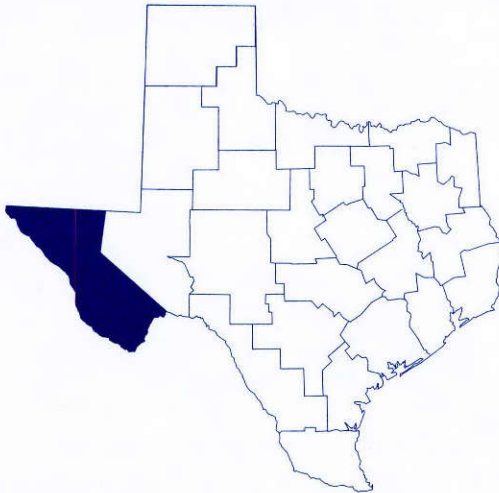
highway beautification project included retaining walls in patterns of colored rock with Southwest plants. Landscape architect Richard Mason enlivened the Border Highway with a Southwest theme along the center concrete barricades. The soft colors of terra cotta and teal make up shapes inspired by the indigenous culture and petroglyphs from the El Paso area.

The most significant construction is the 6.5 inches of bonded concrete overlay on I-10 downtown, a new process that adds 20 to 25 years to the highway's life while saving money. Surface preparation includes shot-blast cleaning the pavement, removing oil residues yet retaining necessary roughness to ensure the overlay bonds properly. While full-depth concrete pavement normally requires a week to cure, the overlay dries more quickly, sometimes within 24 hours.

This \$6.6 million project began in April '96 and was scheduled to end by mid-December '96. Instead of penalizing the contractor for delays, a new bid system rewards them with an additional \$15,000 per day for completing the project ahead of schedule. Ten standard bridges and three utility bridges, including parapet walls, along this stretch of highway will be painted terra cotta, blue and gold, reflecting the true ambiance of a border city.

In June '96, international, national, state and local officials gathered in Ciudad Juarez, Chihuahua, Mexico, to break ground for a \$12 million replacement of the International Bridge of the Americas (BOTA). The Mexican government will pay \$5 million, U.S. Congress appropriated \$5 million and \$2 million will come from a fee paid by trucking companies for each trailer taken across the bridge.

The International Boundary and Water Commission and the Mexican International Boundary and Water Commission, along with TxDOT, are responsible for the construction of four new bridges. The two-year project will expand the bridge from



District Engineer Eddie Sanchez, P.E.

Main number (915) 774-4200

Counties Brewster, Culberson, El Paso, Hudspeth, Jeff Davis, Presidio

Area Engineers Thomas Mangrem, P.E., Alpine; Bobby Steeds, P.E., El Paso (rural); Carlos Ahumada, P.E., El Paso (urban)

Employees 375

Centerline miles 1,860

Lane miles 4,593

Registered vehicles 360,000



Bianca Del Valle, ELP

The El Paso District, in cooperation with the Texas Department of Criminal Justice, uses minimum-security inmates for a variety of tasks. In addition to covering graffiti, they clean sidewalks, landscape and clean up after heavy rainstorms.

eight lanes to 12 lanes.

Also in June '96, Gov. George Bush initiated an agreement between TxDOT and the Texas Department of Criminal Justice. TxDOT uses an average of 10 minimum-security inmates daily for a variety of labor. Among other tasks, they clean sidewalks, paint over graffiti, landscape, and clean mud and debris after heavy rainstorms. TxDOT plays a major role in giving these inmates a sense of pride, and the program helps them become productive citizens.

A new district office complex is in the future for ELP. The new building will be located off Interstate 10 near Horizon City and will consist of 100,400 square feet and house about 180 employees. The rural office will move into a new location some-

time in September '97. The Eastside Area Office also will house the Maintenance Section Office. Plans for a new urban office are also in the works.

District employees continue to demonstrate the importance of community involvement. They continuously inform the public through the speakers' bureau, participating in school career days, attending city representative meetings and staffing booths for city, state and federal entities. Sanchez is pleased with the district's accomplishments and always is searching for ways to improve operations and meet the needs of ELP's customers. ★

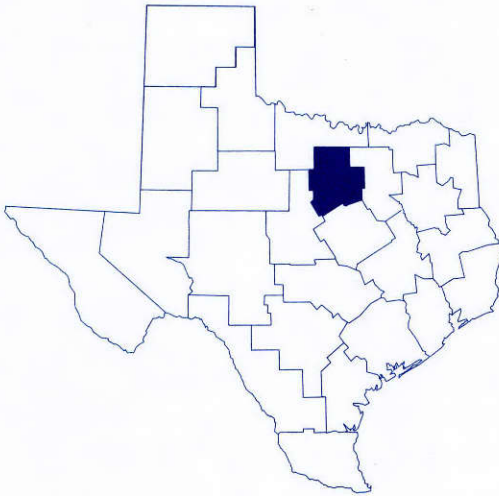
Fort Worth District

Well kept houses mark a good neighborhood.

This analogy best demonstrates the commitment the Fort Worth District (FTW), under the supervision of District Engineer Wes Heald, has made to meeting the rapidly growing area's transportation needs.

The past two years have seen FTW do some structural reorganizing, continue construction on two of the busiest interchanges in the metroplex and begin construction on Interstate 30, a major Tarrant County thoroughfare.

In Tarrant County, five construction project engineers were reassigned to form two separate area offices, North Tarrant County and South Tarrant County.



District Engineer Charles W. Heald, P.E.

Main number (817) 370-6500

Counties Erath, Hood, Jack, Johnson, Palo Pinto, Parker, Somervell, Tarrant, Wise

Area Engineers Marc McEndree, P.E., Erath; Joe Fossett, P.E., Johnson; Jimmy Bodiford, P.E., Parker; Ron Newman, P.E., North Tarrant; Harvey Oppermann, P.E., South Tarrant; Mark Schluter, P.E., Wise

Employees 720

Centerline miles 3,088

Lane miles 8,107

Registered vehicles 1,339,961

A new North Tarrant County Maintenance Section was created to maintain the roadways in the rapidly growing area near Dallas/Fort Worth International Airport. The Granbury and Glen Rose maintenance sections were combined to serve the roadway needs of Hood and Somervell counties.

Construction crews continued work on the I-30/I-35W interchange in downtown Fort Worth as well as the I-820/Texas 121/Texas 26 interchange in Northeast Tarrant County. Upon completion, both projects will provide needed relief for areas experiencing increased traffic densities.

Construction on the I-30/I-35W interchange began in 1993 and will be completed around 2004. The \$147 million project will move the main lanes of I-30 just south of the overhead that currently exists in downtown Fort Worth and rebuild the mainlanes where these busy freeways intersect.

The first of four contracts to rebuild the I-820/Texas 121/Texas 26 interchange was let in August '94 with completion of the final contract scheduled in 2000. This \$90 million project will reconstruct the mainlanes, bridges and frontage roads of this heavily traveled interchange in Northeast Tarrant County.

In August '95, the district began construction on I-30 between Fort Worth and the Dallas County line. Crews are replacing several bridges and widening the inside shoulder in preparation for future construction projects. In addition to relieving congestion on this busy freeway linking Fort Worth and Dallas, the project ultimately will provide easier access for those traveling to the Arlington entertainment district, which features popular attractions such as The Ballpark in Arlington, Six Flags Over Texas and Wet'n'Wild.

FTW completed key projects during the last two years, alleviating traffic congestion in some heavily traveled areas. The



Courtesy Fort Worth Star-Telegram

The new section of Interstate 30 is being relocated just south of the old T&P terminal, which will house the new intermodal transportation center in downtown Fort Worth. This project is a part of the new I-35W/I-30 interchange, scheduled to be completed about 2000 at an estimated cost of \$160 million.

completion of the second phase of the Texas 360 project provided a vital link to D/FW Airport for industries located in southern Tarrant County and Johnson County.

The U.S. 67 Cleburne bypass also was completed in August '96, four months ahead of schedule. This project, which had been in the works for nearly 20 years, will reduce the number of trucks traveling

through the downtown area by providing a loop around Cleburne.

Ronnie Tate of the district's Erath County Maintenance Section was named the statewide winner of the 1996 Litter Gitter Award, which recognizes outstanding contributions to the Adopt-a-Highway program.

FTW's Right of Way Section was the first in the state to develop and implement Right of Way Information Systems.

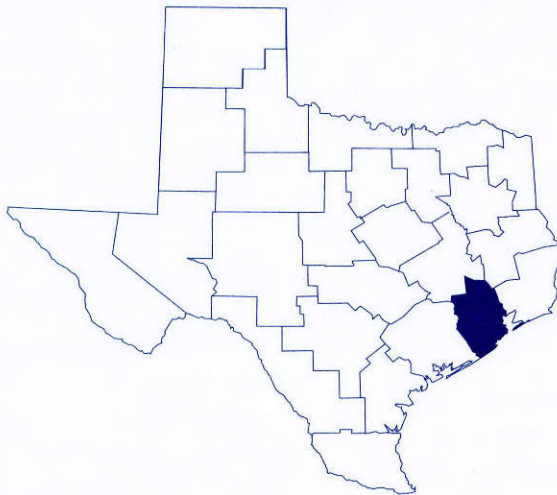
Construction on a new traffic management center located at the district complex was scheduled to begin in late 1996. District

personnel have been using an interim site near the I-20/I-35 interchange since 1993, which was the first operational traffic management system in the state. The new center will enable the district to monitor traffic more effectively and provide up-to-date information to motorists during construction, accidents and inclement weather. ★

Houston District

The Houston District (HOU) remains the front door of Texas, the state's window on the world. Houston is a center for advanced technologies and the gateway to space exploration from NASA. It is the largest port for goods originating in or destined for Mexico, and has been an integral link in the North American Free Trade Agreement chain that binds Texas to the economies of Canada and Mexico.

During 1995-96, HOU completed more than 173 projects with a construction value in excess of \$516 million. At the end of



District Engineer Gary K. Trietsch, P.E.

Main number (713) 802-5000

Counties Brazoria, Fort Bend, Galveston, Harris, Montgomery, Waller

Area Engineers Lawrence J. Heckathorn, P.E., Brazoria; Jesus R. Garcia, P.E., Fort Bend; John R. Pinkston, P.E., Galveston; Sally A. Wegmann, P.E., East Harris; Ruben Martinez, P.E., Northeast Harris; Maureen Wakeland, P.E., South Harris; Delvin Dennis, P.E., Central Houston; Charles Gaskin, P.E., Montgomery; Michael Alford, P.E., Waller and Northwest Harris

Employees 1,514

Centerline miles 2,655

Lane miles 8,721

Registered vehicles 3,045,049

August '96, the district had 171 projects with a total contract value of \$1.3 billion.

Over the past seven years the congestion index for Houston's metropolitan area has declined, due to a massive infusion of federal, state and local funds for roadway projects — an infusion that will not be sustained. To continue to lower congestion with less construction money, the district will emphasize new techniques to manage traffic.

On April 15, 1996, HOU opened the TranStar traffic management center. Governed by the city of Houston, Harris County, the Metropolitan Transit Authority and TxDOT, TranStar serves an area of 5,436 square miles and a population of 3.5 million.

TxDOT already has completed \$30 million in construction and installation of cables, video cameras and communication wiring and has an additional \$51 million under contract. TxDOT will spend another \$86 million on the Traffic Improvement Plan.

Computerized Transportation Management System (CTMS) has 57 miles under supervision. Eventually, more than 300 miles within HOU will be part of the system under constant surveillance. Expansion of CTMS will allow for additional hurricane and emergency information for the upper Texas coast.

TxDOT is installing a network of automated readers on 227 miles of freeway and 70 miles of high-occupancy-vehicle (HOV) lanes to provide real-time travel information. For commuters with access to the Internet, the system calculates average speeds and presents the information as a graphic display.

TranStar operates the flow signals project and the regionalized computer traffic signal system, as well as the Motorist Assistance Program (MAP).

Part of the Houston Information Systems Section, the Design Visualization Group uses three-dimensional computer



Tom Collins, METRO

In April 1996, the Houston District opened the TranStar traffic management center. Governed by the city of Houston, Harris County, the Metropolitan Transit Authority and TxDOT, TranStar serves an area of 5,436 square miles and a population of 3.5 million.

modeling, photo-realistic rendering and animation to support design, construction and litigation. The Design Visualization Group was established to explore this new field for the benefit of the whole state.

During 1995-96, HOU made rapid strides in the northern reaches of the district as the Eastex Freeway (U.S. 59 North), the North Freeway (Interstate 45 North) and the Tomball Parkway (Texas 249) underwent expansion and construction.

In September '95, the department opened the Fred Hartman Bridge over the Houston Ship Channel. The 2,475-foot center span arches gracefully between its signature double diamond towers, each as tall as a 45-story building.

Within two years, with the completion of the bridge approaches and a new three-level interchange, the parallel freeways, I-10 and Texas 225, will offer east Harris

County and Baytown residents alternate routes to Houston. The third eastside freeway, the Crosby Freeway, remains accessible only from Beltway 8, Houston's second major loop, now under construction.

I-45 South remains under construction as widening of the freeway continues. The southwest portions of U.S. 59 South continue to expand and plans

for a new, limited access thoroughfare, U.S. 90A, have been announced.

The department continued to implement its long-range transportation study for the I-10/Katy Freeway corridor. Now in the final quarter of a two-year study, the department will offer recommendations for long-term planning for the area's most congested corridor.

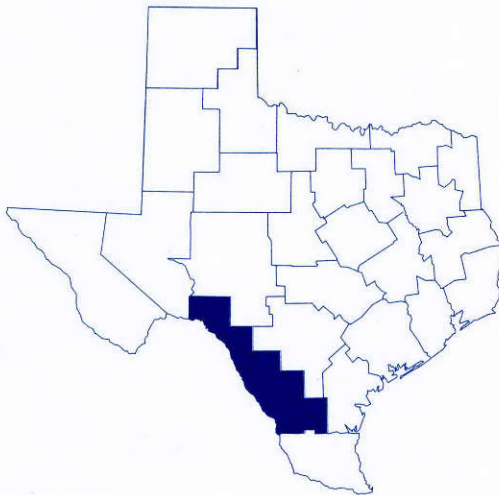
HOU established limits for rebuilding Houston's Pierce Elevated roadway, which serves the central business district between Allen Parkway and U.S. 59.

Today there are more than 63 miles of HOV lanes in Houston. Soon there will be more than 100 miles on six major freeways. Through cooperation and determination to manage effectively, Houston remains the national model for HOV systems. ★

Laredo District

TxDOT recognized the growing need for further infrastructure development in South Texas and in response on Sept. 1, 1994, established the Laredo District (LRD) in the fastest growing city in Texas. Along with all TxDOT employees, LRD's staff is committed to providing motorists with safe, effective and efficient movement of people and goods.

In May '96, the district office relocated to its permanent location adjacent to the newly constructed Bob Bullock Loop. Housing more than 60 employees, the building is the first of its kind for the department. The exterior is a Spanish architectural design with white cinder block, red tile molding and a tile roof, all of which complement the city's local residential areas. The interior walls are colored a soft rose with Spanish tile flooring



District Engineer Luis A. Ramirez, P.E.
Main number (210) 712-7400
Counties Webb, Dimmit, Duval, Kinney, La Salle, Maverick, Val Verde, Zavala
Area Engineers Juan D. Villarreal Jr., P.E., Laredo; Gregory C. Howard, P.E., Carrizo Springs; Robert Parker, P.E., Del Rio
Employees 224
Centerline miles 1,790
Lane miles 4,733
Registered vehicles 155,193

and oak molding with engraved stars at all entrances.

To draw a mental picture of the main building, imagine a sleeping "H" design with four primary sections: District Engineer, Administration, Operations, and Transportation Planning and Development. Behind the main building are the district laboratory, warehouse and shops.

Luis A. Zapata is the director of Administration for the Accounting, Automation, Purchasing and General Services sections for the district. Operations Director Salvador Mercado oversees construction, maintenance and traffic operations. Under his direction, the new Laredo District complex will contain a traffic management center for the new Vehicle Imagery Detection System. In the future, the system will be on-line with TransGuide in San Antonio. He also oversees traffic safety programs such as El Protector, Project Graduation, the district yearly Spring Break booth at U.S. 59 Border Patrol checkpoint and a designated driver booth at our local George Washington Birthday Celebration.

Bob Austin is the director for Transportation Planning and Development. He and his staff develop an overall district project plan. Along with International Relations Office, Austin works to enhance TxDOT's relationship with the department's counterparts in Mexico through value engineering.

"In a span of two years that Laredo has officially been a district, our employees have been able to accomplish remarkable tasks," said Luis A. Ramirez, LRD district engineer. As a team, the district has designed and let more than \$100 million in projects over the past two years.

LRD hopes to continue with an aggressive letting schedule of more than \$30 million in 1997-1998. As the largest inland port in the United States, Laredo offers an example of how the district is working to keep up with high traffic volumes — Interstate 35.



Michael Armador, IRV

Work the district is doing on the Interstate includes:

- The \$14.4 million reconstruction of I-35 to six lanes. Work includes turn-arounds, landscape, improvements around the over-passes and the installation of high-mast illumination;
- Construction of \$2.4 million concrete pavement;
- A \$2 million project to interconnect traffic signals; and
- The \$7 million Shiloh Interchange.

The construction of the Bob Bullock Loop (Loop 20) in Laredo is also evidence of Laredo's growth and TxDOT's commitment to South Texas. Completion of the \$17 million project provides motorists with direct access to Texas A&M Interna-

Laredo District Engineer Luis Ramirez signs a framed photo of the new district headquarters at grand opening ceremonies in October 1996. Looking on are, from the left, Webb County Judge Mercurio Martinez Jr., Texas Transportation Commissioner David Laney and Laredo Mayor Pro Tem Alfonso "Poncho" Casso.

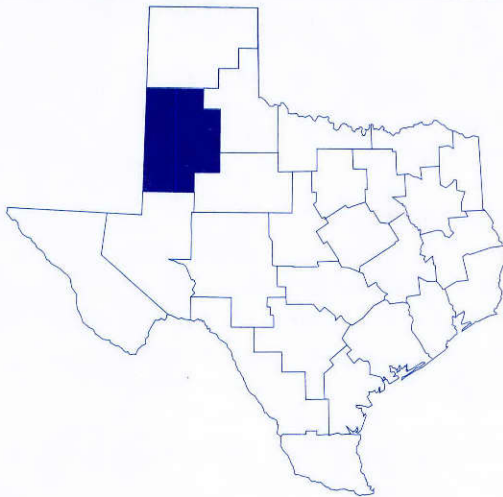
tional University, I-35, Texas 359, U.S. 59 and U.S. 83.

LRD has implemented new concepts, boosted the economy by creating jobs, made extensive changes and improvements to the district infrastructure system and, most importantly, has laid a foundation for the 21st century. ★

Lubbock District

From highway maintenance to new construction, the Lubbock District (LBB) starts every project with a solid foundation of Continuous Improvement (CI) philosophy. Add teamwork and partnering, and you have a recipe for success. Because LBB employees embrace the CI concept, every project is founded in the quality philosophy that assures excellent products and service for West Texas drivers. And LBB has had its share of accomplishments and milestones.

Last year, the Federal Highway Administration (FHWA) signed the Record of Decision giving LBB clearance to develop plans for a new freeway which will pro-



District Engineer Carl Utley, P.E.

Main number (806) 748-4400

Counties Bailey, Castro, Cochran, Crosby, Dawson, Floyd, Gaines, Garza, Hale, Hockley, Lamb, Lubbock, Lynn, Parmer, Swisher, Terry, Yoakum

Area Engineers Jim Combes, P.E., Brownfield; Stevan Perez, P.E., Littlefield; Frank Phillips, P.E., Lubbock Rural; Kerry Miller, P.E., Lubbock Urban; Mike Craig, P.E., Plainview

Employees 476

Centerline miles 5,134

Lane miles 11,907

Registered vehicles 347,922

vide an east/west corridor across the city of Lubbock.

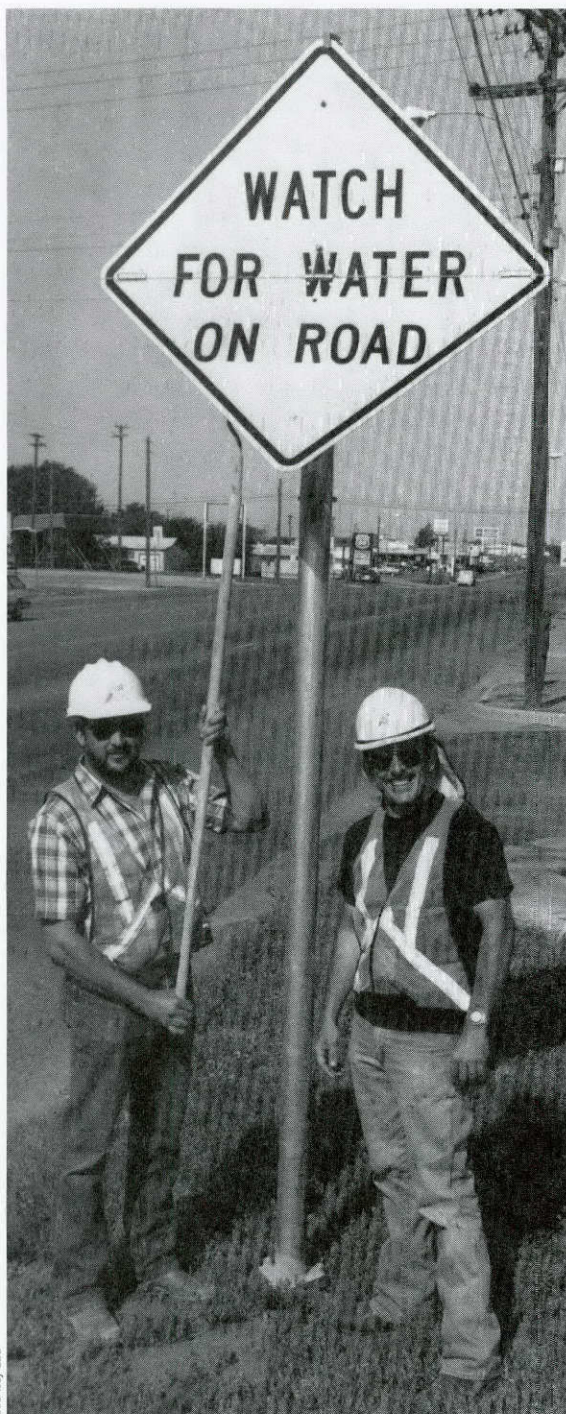
Lubbock's future East/West Freeway is a \$265 million project that will extend 8.7 miles from Interstate 27 to Loop 289 West. The federal stamp of approval meant that LBB could begin right-of-way acquisition and construction of a \$7.7 million storm sewer outfall line which will provide drainage for the new freeway. The construction phase of the project probably won't begin before 2000. LBB hopes to have design consultants on board soon. The goal is to submit completed plans by 1999.

Several years ago, TxDOT hired HDR Engineering to conduct a study to determine if it was feasible to extend I-27 south to I-10 and north to the state line. The purpose was to build a more efficient trade route that would link the Panhandle with South and East Texas.

In May '96, HDR Engineering completed the last part of Phase I of the Lubbock to I-10 Route Study. Of the five corridors studied, only two were "marginally feasible" for upgrades to freeway status. The southern route rated marginally feasible was from Lubbock to Post, Sweetwater, San Angelo and down to Menard County. The northern route was from Amarillo through Dumas to the state line.

Since the corridors rated low, HDR recommended upgrading all five corridors rather than making one corridor a designated freeway. Therefore, Phase II of the Lubbock to I-10 Route Study will be evaluating all the corridors for future improvements.

Lubbock was the winner of the 1995 Texas Quality Initiative Award for excellence in highway design and for promoting the concepts of partnering and teamwork. The \$7 million Canyon Lakes Crossing is a perfect example of teamwork at its finest. This project was part of the larger \$200 million I-27 system completed in 1992, and it was this project that earned



Courtesy LBB

LBB recognition for its partnering and teamwork efforts. LBB was TxDOT's entry in the National Quality Initiative (NQI) Achievement Award competition in Washington, D.C.

Danny Putman, left, and Rocky Menning display a road sign equipped with latches of their design that make it easy to move the bottom portion up or down. Putman and Menning, both maintenance technicians in Bovina, invented the latch to make changing signs easier during bad weather.

The quality philosophy has always been a part of the TxDOT mission even before it was put in writing. TxDOT employees know the benefits of working in an environment that fosters trust, understanding and mutual respect. Continuous Improvement means that TxDOT employees will continue to look for innovative methods, materials and design concepts to build quality transportation systems. This willingness to accept Continuous Improvement shows up in every highway project designed and built in LBB.

The district now has more than \$70.8 million under contract, including such projects as the widening and rehabilitation of Indian Avenue, a major north/south arterial through the city of Lubbock, and Texas 114 (19th Street) another major thoroughfare running east/west.

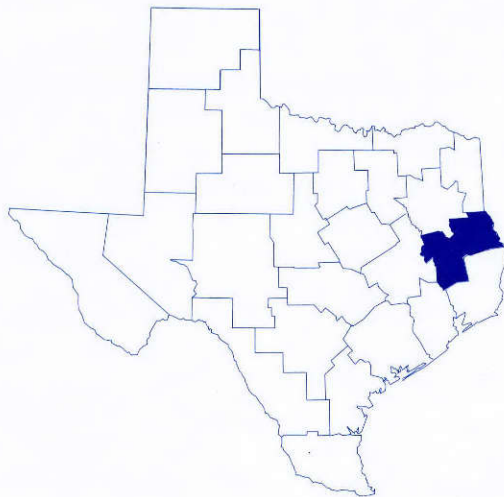
Other projects include \$18 million to improve two major highways in the district — U.S. 87 in Dawson and Lynn counties and U.S. 84 in Garza County. More than \$11 million was spent in 1996 on state highways. During the next 12 months, LBB will spend more than \$50 million on highway improvements.

More importantly, LBB has more than 460 dedicated, talented employees. This commitment to quality and process improvements, makes LBB an ideal place to work. With an emphasis on teamwork, LBB employees continue to grow professionally, and make the sacrifices necessary to assure a safe and efficient transportation system for West Texas. ★

Lufkin District

The Intermodal Surface Transportation Efficiency Act of 1991 included requirements for transportation agencies to be more proactive in involving the public in all phases of public work. The changes in public involvement procedures in the Lufkin District (LFK) were prompted by the initiation of several large projects. These included widening U.S. 69 to a divided four-lane road from Huntington to Zavalla; widening U.S. 96 to four lanes from San Augustine, and ultimately from Center to the Jasper County line in the eastern portion of the district.

Relief route projects around the cities of Diboll and Corrigan on U.S. 59 prompted the district to use a new approach for public involvement. More public meetings



District Engineer David L. Justice, P. E.

Main number (409) 634-4433

Counties Angelina, Houston, Nacogdoches, Polk, Sabine, San Augustine, San Jacinto, Shelby, Trinity

Area Engineers Harry Thompson, P.E., Livingston; Cheryl Flood, P.E., Lufkin; Chester Still, P.E., Nacogdoches; Clark Slacum, P.E., San Augustine

Employees 313

Centerline miles 2,826

Lane miles 6,257

Registered vehicles 225,285

with more input from land owners and local citizens in and around the project areas should lead to better understanding of the project development process.

LFK adopted the U.S. Forest Service's technique of "scoping" public opinion before a project actually starts. LFK held three scoping meetings on the U.S. 69 project in September '95 in Huntington, Zavalla and Lufkin. Each meeting was well advertised with public announcements, offering the opportunity for concerned citizens to attend. Between 25 and 50 people attended each meeting. Their comments were considered while the schematics were being drawn.

The district held a scoping meeting in San Augustine to discuss the U.S. 96 project in January '96. There, district employees dispelled rumors about the proposed routes with emphasis placed on a project already under development in San Augustine. More than 150 people attended the event.

The district's first try at a public workshop, with a come-and-go format, resulted in a great citizen turnout for the U.S. 59 Corrigan relief route. The consultants and TxDOT employees visited one-on-one as residents moved among displays, which included preliminary constraints maps, a listing of environmental concerns, a project timeline and large-scale aerial photos of the study area.

In February '96 a public meeting was held in Diboll for the U.S. 59 relief route. Notices were sent to all 144 property owners along the proposed route in a half-mile wide, seven-mile long corridor, with approximately 95 property owners attending.

While planning a public meeting for July, the district mailed 3,300 bilingual meeting notices via bulk mail. Attendance was listed at 159, plus 19 consultants and TxDOT employees.

LFK held the scoping meetings to indicate that work was beginning on project



Jimmie Styles, LFK

plans and to convey to the public that TxDOT takes a serious proactive attitude about obtaining their comments and gathering information while planning and developing projects. ★

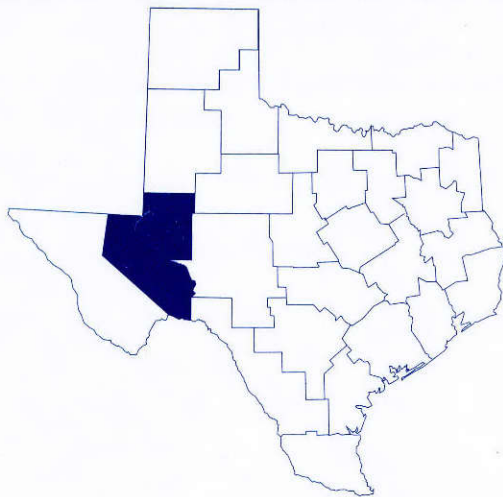
Hugo Buston, ENV, left, and John Miller, LFK environmental coordinator, talk with landowners at a public forum in Corrigan in November.

Odessa District

In the vast 18,000-square mile Odessa District (ODA) in West Texas, TxDOT engineers and maintenance workers take their inspiration from the sweeping vistas before them — tapestries of mesa and sky, highway and horizon. These are vistas that fuel a vision of tomorrow.

It is a vision shared by members of the TxDOT team, a vision that emphasizes and nurtures cutting-edge technology, shares a concern for the environment, invites construction for the future, fosters workplace quality and dramatizes the importance of customer service.

In 1996, ODA beta-tested the use of an innovative video-logging technology that enables employees to “drive” through the district via computer — by just pointing



District Engineer José E. Morales Jr., P.E.

Main number (915) 332-0501

Counties Andrews, Crane, Ector, Loving, Martin, Midland, Pecos, Reeves, Terrell, Upton, Ward, Winkler

Area Engineers Paul Hoelscher, P.E., Fort Stockton; Michael Chetty, P.E., Midland; Daniel Dalager, P.E., Odessa; Russell Whitworth, Pecos

Employees 335

Centerline miles 3,294

Lane miles 7,881

Registered vehicles 268,066

and clicking a computer mouse.

The district mapped its entire 3,830 miles of highway with a high-resolution digital camera, then transferred the images to a database. Now, when district pavement management specialists want to view a section of roadway, they just go to the computer.

The district’s engineers will use this video record to chart structures, right-of-way conditions and geometry; plan highway construction and maintenance; prepare visual aids for public hearings; reduce on-the-road travel times for district personnel; and inventory and manage items along the roadway.

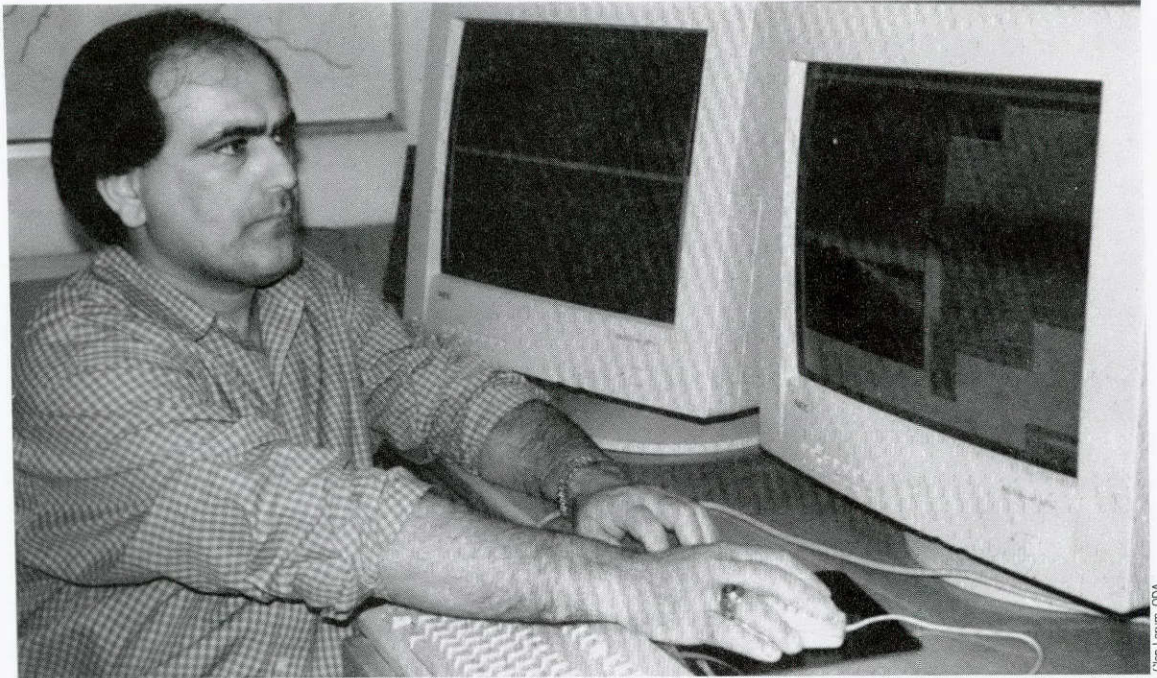
The technology could be the basis for TxDOT’s 21st Century pavement management system, a system that can be stored on servers within each district and accessed by anyone on the TxDOT Intranet.

ODA took part in an innovative effort with the Texas Parks and Wildlife Department to create a habitat for two endangered fish species, the Comanche Springs pupfish and the Pecos gambusia, at Balmorhea State Park. The district built wetlands, or cienega, in return for environmental mitigation credits to use when a highway construction project in the district requires the destruction of wetlands.

Efforts like the cienega project and other cooperative landscaping efforts in virtually every community in the district have raised the public’s awareness of TxDOT’s role in enhancing the environment.

Major TxDOT urban highway construction in Midland — one of the district’s two major communities — has spawned retail development along Loop 250, creating a potent, new business district to serve Midland and Odessa, a combined 250,000 population metropolitan area.

TxDOT has helped knit together these one-time rival communities. With completion of a third highway, Texas 191, between the two, traffic counts on Inter-



state 20, Business Interstate 20 and Texas 191 put daily intercity travel figures at 42,000 vehicles.

Civic and business leaders in both cities heralded the district's expansion of 14 miles of Texas 158 from two lanes to four lanes from just south of Midland to the Glasscock County line as an important link between Midland-Odessa and San Angelo.

These efforts are all slices of a larger vision, one also championed by the Midland-Odessa Transportation Alliance, formed in 1994 to lobby for improvements to transportation facilities along a north-south intermodal trade corridor linking all the major cities of West Texas.

Jamshid Jahangiri, director of ODA's Advanced Project Development Design Section, demonstrates video logging. Engineers can use the digital images to study the geometry or right of way at a project location. The district is involved in a pilot project to demonstrate the value of "point-and-click" data banks of roadway information.

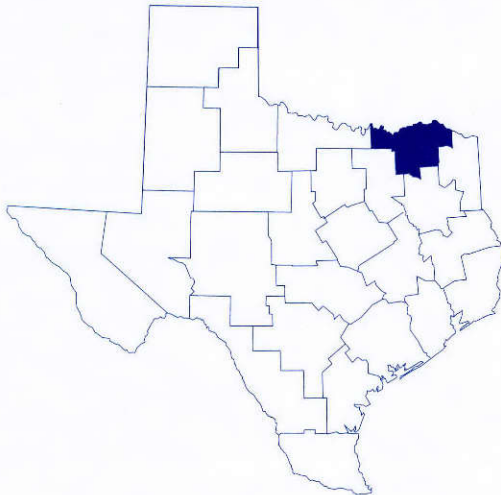
In the workplace, the district also broke new ground. For the first time in history, an employee was allowed to telecommute. District Engineer José E. Morales has promoted the expanded use of Continuous Improvement teams made up of district employees to solve persistent workplace problems and address critical issues.. ★

Paris District

For the Paris District (PAR), the emphasis for the immediate future is on plans, pavements, people and progress.

Using this approach, PAR began an aggressive campaign to build a better district; to deliver distinguished service to the more than 290,000 people who live in its nine-county area; and to create a team of quality professionals committed to building and maintaining the best highway system in the state.

PAR has a clear direction with the development of a new Strategic Plan for fiscal 1997-2001. The plan, developed by district senior management, was devised over several months and includes the district's mission and vision statements, along with six strategic goals. Each goal



District Engineer Thomas D. Ellis, P.E.

Main number (903) 737-9300

Counties Delta, Fannin, Franklin, Grayson, Hopkins, Hunt, Lamar, Rains, Red River

Area Engineers Glenn Daniel, P.E., Bonham; Jon Clements, P.E., Greenville; Steve Ekstrom, P.E., Paris; Bobby Littlefield, P.E., Sherman; Ernest Teague, P.E., Sulphur Springs

Employees 351

Centerline miles 3,994

Lane miles 7,198

Registered vehicles 288,744

addresses a major focus for the district during the coming years. These goals include:

- Develop a comprehensive plan to rehabilitate the district's farm-to-market road system;
- Develop a comprehensive preventative maintenance program to maintain the highway system;
- Develop a comprehensive bridge replacement plan;
- Develop a comprehensive program to upgrade signing;
- Develop a capital improvement plan for all district facilities; and
- Develop a comprehensive program to improve morale.

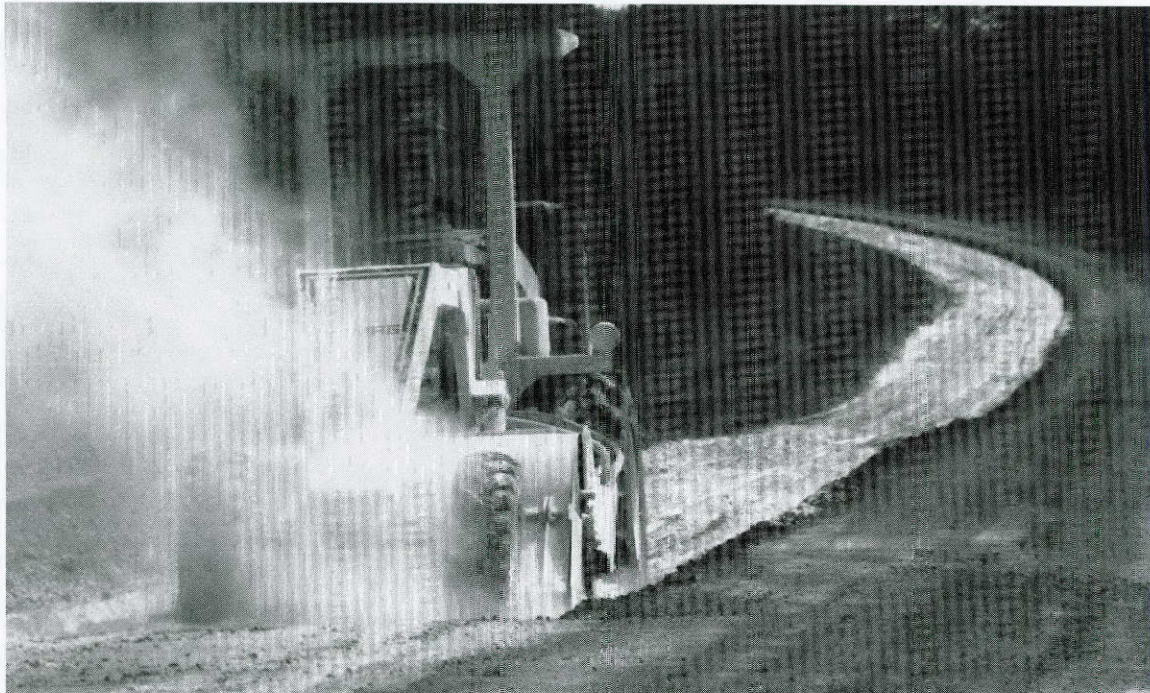
PAR emphasized restoring its pavements, specifically on its 3,994-mile farm-to-market system, which ranks sixth in the number of FM lane miles in the state. Weakening pavements and declining budgets have given the district an opportunity to try an innovative solution to its pavement problems.

Combined with contracted base repair operations, state maintenance forces in two counties — Hunt and Red River — began performing the work themselves. Using 10-member teams, some 30 miles of roadway in the counties will be repaired over the next fiscal year, ultimately saving several thousand dollars for the state — money which will be used for other roadway projects throughout the district.

PAR's commitment to creating a strong preventative maintenance program also will provide a desirable resurfacing cycle for its 7,198 lane miles of roadways.

Capitalizing on the department's Continuous Improvement approach to problem-solving, PAR employees recently conducted a CI workshop on rehabilitation and maintenance techniques. They also are involved in identifying innovative financing and creative partnerships with cities, counties and other state agencies.

In PAR's ongoing efforts to create a



Along with the traditional method of contracting base repair operations, the Paris District has begun using an innovative approach to its pavement problems. State maintenance forces in Red River and Hunt counties are performing the work themselves.

work force that is more representative of the population it serves, a new district recruitment plan has been developed to actively hire high-quality employees in three major job positions: maintenance technician, engineering technician and engineering assistant.

Five 10-member teams were selected by District Engineer Tom Ellis to recruit at major area colleges and universities, the University of Texas at Austin and Texas A&M University. PAR's Human Resources Office also mails job vacancy notices to minority organizations in the area, including colleges and businesses, and makes personal contacts with minority community leaders, contractors and churches.

For the first time in PAR history, it will use consultants to acquire right of way for the relocation of U.S. 82 through Fannin

and Grayson counties.

U.S. 82 has taken on a new look in the district. Increased safety, with the possibility of expanding the roadway to four lanes, prompted PAR to rebuild and relocate about 40 miles of the roadway.

Hiring a consultant for the project will help PAR continue its commitment to the development of U.S. 82, which has a long and colorful history. Developed during the 1920s and '30s, the roadway traverses Grayson, Fannin, Lamar and Red River counties. It is a major section of the national highway system that carries traffic between the east and west coasts along a southern route, from New Mexico through Texas, Arkansas, Mississippi and Georgia.

With other major projects planned, such as the continued four-lane construction of Texas 24 through Delta County and the rehabilitation of Interstate 30 in Hopkins County, PAR will continue to play a major role in improved transportation for North-east Texas. ★

Pharr District

The unique geography of the Pharr District (PHR) challenged employees to meet the district's vision and mission. Its accomplishments incorporated issues that addressed bicultural, binational and multimodal commitments.

The district partnered with its neighbors to the south by sharing nine border crossings with seven additional crossings planned for Cameron, Hidalgo and Starr counties.

This relationship set a precedent in the Roma suspension bridge. This rehabilitation project — which received \$1.2 million in federal funds — involved partnering with federal, state and county entities; the Texas Historical Commission; the cities of Roma, Texas, and Miguel Aleman, Tamaulipas, Mexico; and Mexico's Depart-

ment of Tourism.

Built in 1928, the bridge is the last remaining suspension bridge crossing the Rio Grande. When rehabilitated, it will serve pedestrian and bicycle traffic and promote tourism for Roma and Miguel Aleman. This project will complement the historical plaza in downtown Roma, another enhancement project.

Partnering with Mexico was not limited to this project, but included an array of activities such as:

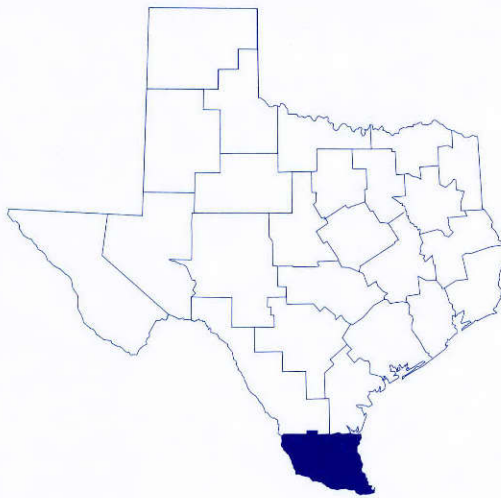
- Value engineering workshops held at the district with full participation from Mexico;
- Joint inspection of international bridges; and
- Various project coordination meetings held with Mexico, providing a duo-perspective in planning, designing and construction of projects fundamental to both countries.

Another project essential to the United States/Mexico alliance is the Los Caminos Del Rio project, valuable in its preservation of cultural, environmental and historical corridors.

The district also participated in a technology exchange program with the states of Tamaulipas, Nuevo Leon, Coahuila and Zacatecas, and Mexico City, to share information and plans for future infrastructure development.

Partnering at the local level resulted in area entities providing financial support toward major projects. For example, the city of McAllen contributed \$1.7 million for the expansion of the U.S. 83 Expressway to six lanes in Hidalgo County. TxDOT funded \$28 million. And, the city of Brownsville contributed \$700,000 for the 6th and 7th Street overpass project in Cameron County; TxDOT funded \$3.2 million.

The Port of Brownsville Railroad Relocation Demonstration project is vital to eliminating traffic congestion to downtown Brownsville. This project will reroute



District Engineer Amadeo Saenz Jr., P. E.
Main number (210) 701-6100

Counties Brooks, Cameron, Hidalgo, Jim Hogg, Kenedy, Starr, Willacy, Zapata

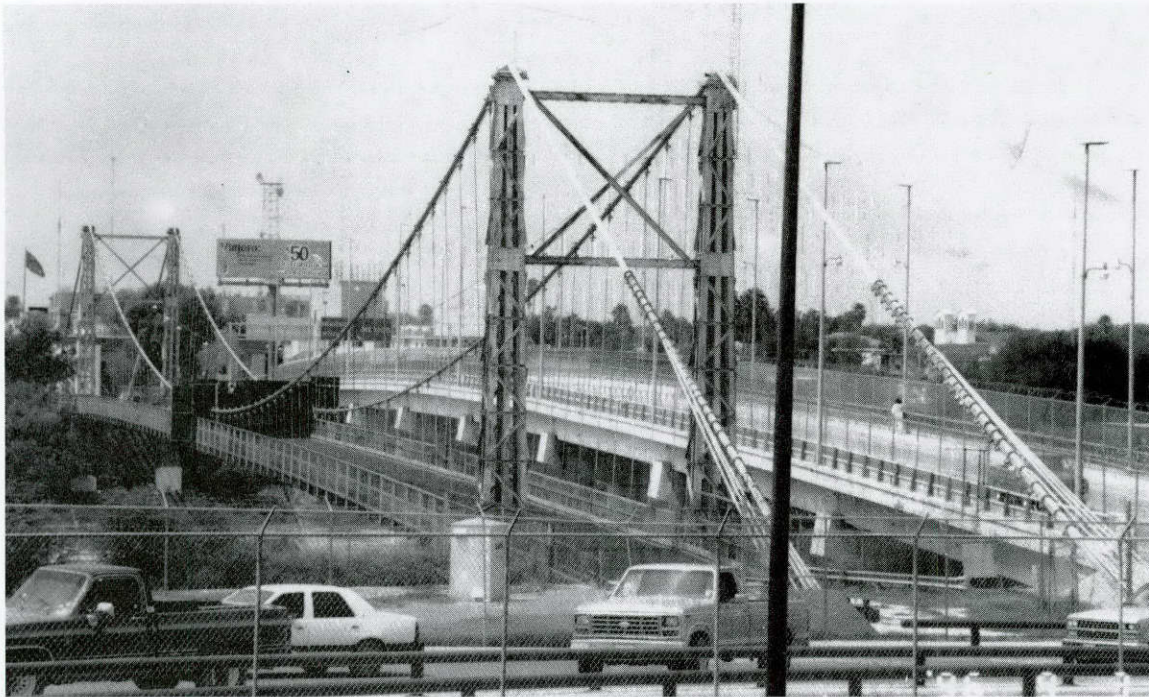
Area Engineers Alberto Quintanilla, P.E., Hebbronville; Mario Jorge, P.E., Pharr; Jacinto Garza, P.E., Raymondville; Arnoldo Cortez, P.E., San Benito

Employees 371

Centerline miles 2,094

Lane miles 5,351

Registered vehicles 455,541



Stephen Walker, PHR

the railroad outside of downtown and eliminate 78 railroad crossings.

Special projects that fulfilled the district's environmental, enhancement, design and partnering obligations included:

- The environmentally sensitive Texas 100 project, a direct route to South Padre Island, that included wetland mitigation and protection of the endangered ocelot;
- An ongoing research project with TTI to protect the endangered brown pelican and determine the cause of birds landing on the Queen Isabela Causeway. The study identified application of traffic control measures to reduce mortalities; and
- The Cathodic Protection Demonstration project, which will protect the Queen Isabela Causeway substructure against corrosion.

Border runs/fact finding missions were implemented for federal and state officials to analyze border crossings.

Five general utility airports were

A unique international rehabilitation project, the Roma suspension bridge will serve pedestrian and bicycle traffic as well as promote tourism for both the United States and Mexico.

upgraded.

Enhancement projects provided by the Intermodal Surface Transportation Efficiency Act of 1991 included restoration of the Pump House in Hidalgo, the lighthouse in Port Isabel and the railroad depot in Edinburg, and provided shelter for an antique railroad engine in Brownsville.

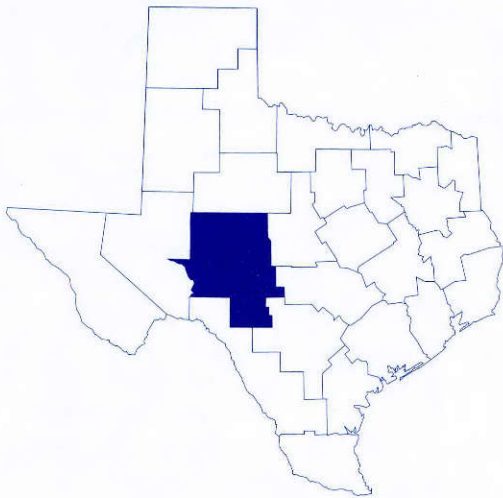
Two major goals for the district are the expansion of U.S. 83 to six lanes from Brownsville to La Joya and the Interstate 69 corridor.

PHR is proud of its employees and their contribution to the organization. Two employees who exemplify characteristics of district employees are Gustavo Lopez and Pedro Alvarez, both recipients of the Extra Mile Award. ★

San Angelo District

When the Texas Transportation Commission joined other state and local officials in the San Angelo District (SJT) Aug. 31, 1995 to break ground on the East-West Freeway, the gold paint on the shovels matched the golden moment of the day for citizens of the Concho Valley. It was a historic benchmark for San Angelo's 600 home and business owners who sold their property to the state more than two decades ago.

Ten years ago, the city celebrated the opening of the final section of frontage roads for the proposed freeway. This project would be the first to construct mainlanes. The busiest intersection of the East-West Freeway (U.S. 67) at U.S. 87, will be safer and more convenient for the 100,000



District Engineer Walter McCullough, P.E.

Main number (915) 944-1501

Counties Coke, Concho, Crockett, Edwards, Glasscock, Irion, Kimble, Menard, Reagan, Real, Runnels, Schleicher, Sterling, Sutton, Tom Green

Area Engineers Karl Bednarz, P.E., Junction; Paul Chevalier, P.E., Sonora; Donald Peterson, P.E., San Angelo

Employees 287

Centerline miles 3,189

Lane miles 7,109

Registered vehicles 143,310

average daily traffic users. When the \$11.6 million project is finished, it will include an overpass built about 16 feet over the North Concho River, U.S. 87 (Bryant Boulevard) and a portion of the South Orient Railroad tracks, linking the city's industrial, housing and retail centers.

Construction of this facility has attracted attention of federal transportation officials because it will use high-performance concrete. High-performance concrete is engineered to achieve enhanced durability and strength. With one of two bridges in the state to use this concrete, SJT was chosen because the project includes a dual-bridge construction ideal for a comparison.

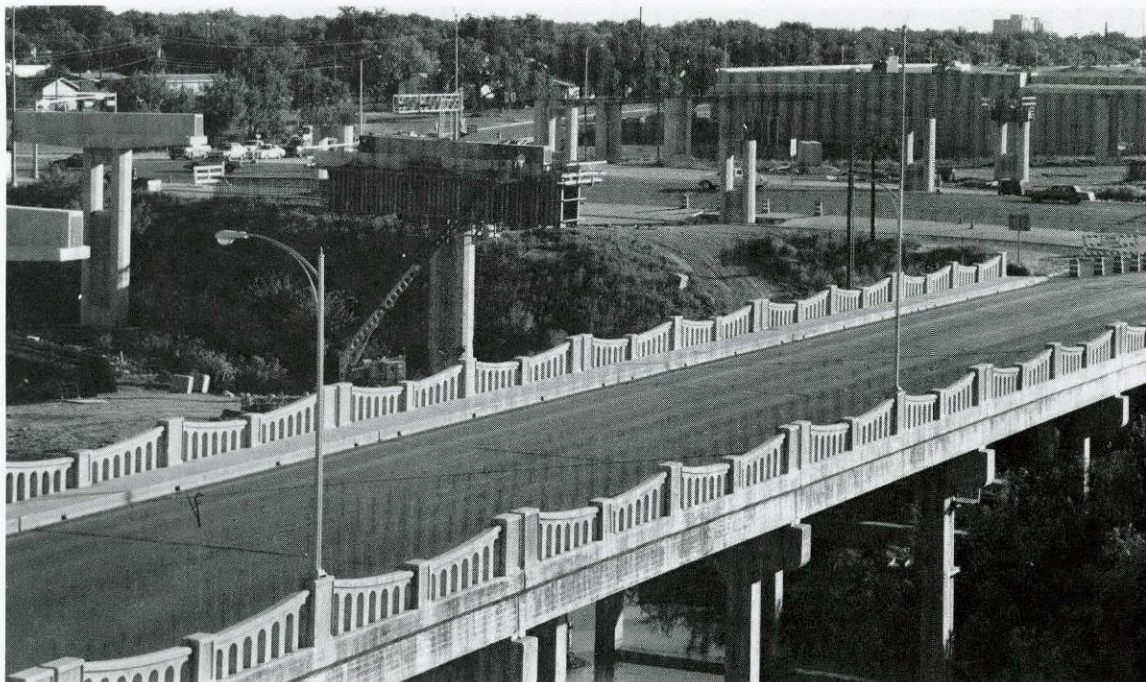
SJT is using the new high-performance concrete on the eastbound bridge and on the columns. The westbound bridge will be made with regular concrete.

Researchers at the University of Texas will compare the two with the expectation that the high-performance concrete will last about 75 years. Regular concrete lasts about 40 years. The side-by-side bridges provide a crucial opportunity to compare the new concrete with the old under nearly identical conditions.

The next step will be up to area residents and visitors. As they drive on both bridges, researchers will measure how the structures hold up over time. "This is one of very few trial cases," said David Whitney, a UT researcher. "The information we get from this and a few others across the country will determine federal standards for bridge building."

Researchers will study two aspects of the bridge: its structure, or how the bridge deflects under the weight of traffic and the bridge's own weight; and its durability, or how well the concrete and steel resist deterioration.

The Federal Highway Administration has allotted \$750,000 for research over a five-year period. And the first five years



Jimmy Aves, SJT

will be most important in watching how the new concrete supports the weight, Whitney said.

According to Mary Lou Ralls in TxDOT's Design Division, SJT also was chosen for the project because the width of the river that the bridge spans requires long beams under the bridge which high-performance concrete could support better. The longest beam is 154 feet. As researchers study the bridges, San Angelo's weather will provide an additional challenge for the material, Ralls said. The area is called a "freeze-thaw" zone, where rapid temperature changes can wreck havoc on concrete and steel.

While researchers continue to test and experiment with the durability high-performance concrete could produce, Donald Peterson, area engineer in San Angelo, provides information to local, state and national media about the project.

Peterson and SJT District Engineer Walter McCullough had to keep the bridge design in mind since city-owned parkland stretches along the river near the bridge.

Bridge columns for the East-West Freeway in San Angelo are made of high-performance concrete. The bridge is expected to be completed this fall.

"It's a place where people go on the weekends and take their families for picnics," Peterson said.

McCullough added, "The design is appealing and will enhance the character of this community."

While local citizens are proud to see a promise fulfilled after a 28-year wait, the most common question from motorists is, "When will it be completed?" The answer? "Sometime this fall." ☆

San Antonio District

The San Antonio District (SAT) continued to take advantage of opportunities through innovation and partnerships. The district has continued technological innovations through TransGuide — the traffic management system in San Antonio.

TransGuide was selected by the Federal Highway Administration to receive funding that will allow TransGuide to demonstrate the measurable benefits of integrated approaches to traffic management.

TransGuide became the first traffic management system to send its live video and traffic information to the local news media through a low-power television station in 1995. In January '96, construction began

on an additional 14 miles of freeway for TransGuide coverage.

The first section of the Wurzbach Parkway opened to motorists in August '96, and immediately improved mobility in north San Antonio. This project was a cooperative effort between TxDOT and the city of San Antonio.

A major project, completed in June '96, upgraded four miles of Loop 1604 from a two-lane rural roadway to a four-lane divided freeway with continuous frontage roads.

SAT completed construction on the first minor project in preparation for a fully-directional interchange at Loop 410 and U.S. 281.

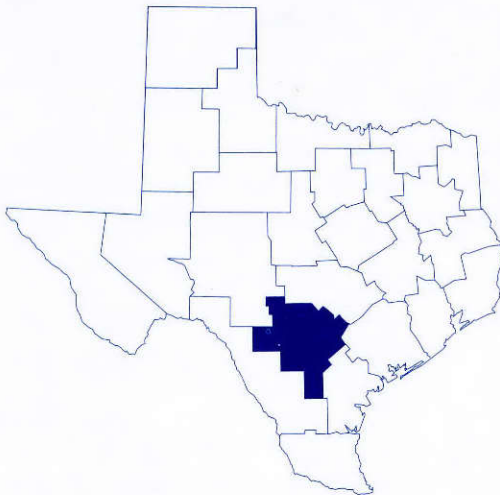
Construction is progressing on several other projects in the district, including the expansion of six miles of Interstate 35 between San Antonio and New Braunfels; I-10 in northwest San Antonio; and Loop 410 east of the I-10/Loop 410 interchange.

In 1996, SAT converted the I-35 frontage roads in New Braunfels to one-way operation, clearing the way for future expansion of I-35 through New Braunfels.

Design work continues on the San Antonio Mission Trail project, which will improve vehicle, pedestrian and bicycle access to the historic missions.

The district set guidelines for employees and special provisions for contractors on days that high ozone levels are expected. The district has become a leader in preventing the formation of ground-level ozone in the area.

The Boerne Maintenance Office relocated in August '96 under an agreement between TxDOT and H-E-B Food Stores. H-E-B provided a new building on 12.25 acres of land in exchange for the Boerne Maintenance Office. H-E-B paid for the land as well as construction of the facility. The new site includes a water recycling system for vehicle washing, a natural vegetation buffer along U.S. 87 and drought-tolerant landscaping.



District Engineer John P. Kelly, P.E.

Main number (210) 615-1110

Counties Atascosa, Bandera, Bexar, Comal, Frio, Guadalupe, Kendall, Kerr, La Salle, McMullen, Medina, Uvalde, Wilson

Area Engineers Garland Galm, P.E., Hondo; Bill Tucker, P.E., Kerrville; David Kopp, P.E., New Braunfels; Ken Davenport P.E., (acting), Pleasanton; Dale R. Stein Jr., P.E., David Balli, P.E., San Antonio; Edward Stephen, P.E., Seguin

Employees 772

Centerline miles 4,150

Lane miles 10,246

Registered vehicles 935,373



Bill Frost, SAT

The Traffic Safety and Public Information sections developed the “Keep Right ... Keep Texas Moving” campaign. Hang tags and brochures encourage slower-moving traffic to keep right. SAT posted signs above the standard “Slower Traffic Keep Right” signs as part of the campaign.

SAT created the Texas Centralized Parts System, which expanded the traditional in-house support operations by contracting with a private-sector vendor, who has a parts store at the district office.

The district participated in the Construction Maintenance Contract System, designed to ensure a smoother system for preparation, review, letting and processing of routine maintenance contracts. SAT will be a Construction Management System (CMS) beta testing site. CMS computerizes

SAT used Interstate expansion, roadway construction and maintenance, public education campaigns and aggressive traffic management to improve mobility.

construction and materials information. The third pilot program will decentralize management of aviation construction and planning.

Three major runway reconstructions are under way. Plans are being made to enter into cooperative maintenance agreements with all airports in the district this year.

One of SAT’s rural public transportation contractors, the Alamo Area Council of Governments, received funding to construct a multimodal terminal in Fredericksburg, enabling TxDOT and four other agencies to embark on a coordinated transportation venture. ★

Tyler District

The Tyler District (TYL) serves a 6,623 square mile area comprising eight East Texas counties. The city of Tyler is the manufacturing, health care, educational and retail center of East Texas.

The economy is diverse and most of the district is rural. About 60 percent of TYL's total miles are farm-to-market roads; 37 percent are U.S. and Texas highways; and 2 percent are Interstate highways and frontage roads.

The district completed 33 construction projects totaling approximately \$43 million from September '95 to August '96. Also, a record number of 28 projects were let, totaling more than \$57 million.

Suggestions to axe the Henderson traffic circle became a reality, with Henderson's

circle becoming a "star." In 1992, the average daily traffic volume on the circle was approximately 25,000 vehicles. Between 1990 and 1995, an average of 35 accidents a year occurred, with the largest number — 29 — occurring in 1993.

From December '95 until September '96, only four accidents have occurred at the star-shaped intersection, and since the traffic star's completion, no accidents have involved trucks turning over — a common problem throughout the traffic circle's history.

The circle was built in 1941 and connected U.S. 259, U.S. 79, Texas 64 and Texas 43. It consisted of only two-lane divided highways with right lanes for the adjacent roadways.

The new traffic star has innovative signalization, and the roadway was upgraded to include five lanes. The \$3 million project consisted of the rehabilitation of the existing roadway to include grading, structures, concrete pavement, curb and gutter work, asphaltic concrete pavement base and surface, pavement markings, traffic signals, illumination and signing.

Other recent TYL accomplishments include:

Maintenance

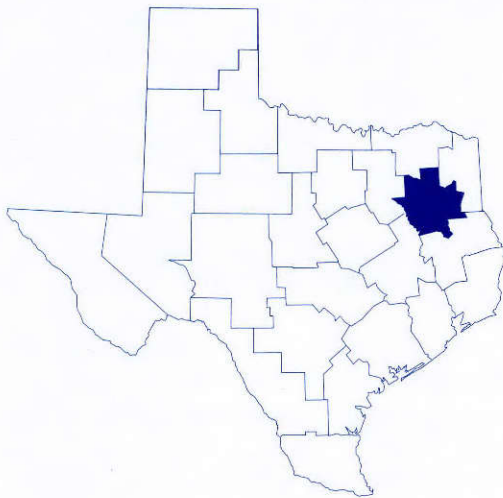
- Implemented the district's one-year maintenance plan.
- All maintenance sections secured personal computers for contract employees.
- Completed speed-zone signing.

Area Offices

- Completed Texas State Railroad bridge replacement project using consultant inspector although at a high cost.
- Cleared land for new Longview area and maintenance offices to include Vehicle Titles and Registration.

BRINSAP

- Awarded two BRINSAP Scour Program contracts.
- Completed three off-system BRINSAP contracts.



District Engineer Mary M. May, P.E.

Main number (903) 510-9100

Counties Anderson, Cherokee, Gregg, Henderson, Rusk, Smith, Van Zandt, Wood

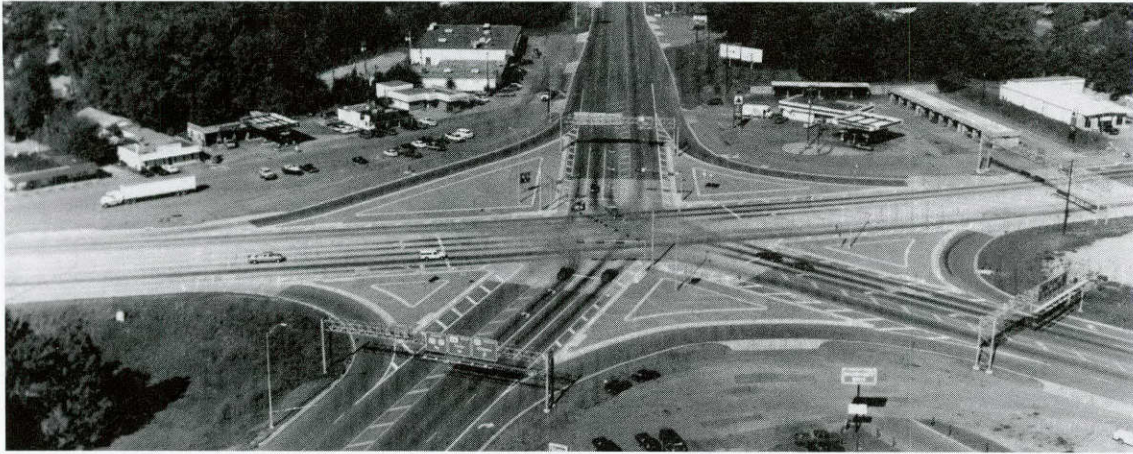
Area Engineers Bernie Dodd, P.E., Athens; Mark Sturrock (acting) P.E., Jacksonville; Raymond P. Jaap, P.E., Longview; Michael Schneider, P.E., Mineola; Walter Smith, P.E., Palestine; Clifford Mouser, P.E., Tyler

Employees 401

Centerline miles 3,642

Lane miles 8,415

Registered vehicles 508,214



Pete Martinez, TYL

Railroad Coordination

- Completed four railroad upgrades.

Traffic Safety

- Presented 15 traffic signal operation programs.
- Completed 22 Project Celebration grants with local schools. Completed a joint Project Celebration grant involving five schools and three districts.

Striping Operations

- Completed upgrade of all two-lane roadways for 70-mph speed limit changes.

Signal Operations

- Installed six sets of warning flashers and three illumination systems.
- Upgraded nine sets of school flashers, eight signalized intersections and two railroad warning flashers.

Sign Shop

- Fabricated 23,559 square feet of signs, an increase of 20 percent.

Transportation Planning and Development

- Highest plans, specifications and estimates (PS&E) letting for TYL at \$63 million.
- Established process for environmental mitigation for upland impacts.
- Consultant usage had record amount of contracts under way, including areas never used before such as contracts for traffic engineering studies and specific

Construction to turn the Henderson traffic circle into a star began in March '94. The \$3 million project connected U.S. 259, U.S. 79, Texas 64 and Texas 43. The new configuration has reduced the number of accidents as well.

tasks related to PS&E preparation.

Automation

- Set up a second server for communication, making a modem pool available to users for a fax modem and Internet access.
- Information Resources Users Support Team was established as an extension to the Automation Office to assist with local trouble shooting for local offices.
- Installed Geopak for area offices to help employees prepare quality plans.

Public Information

- Began a district newsletter.
- Sent biweekly media advisory updates with emphasis on informing the public about construction operations.
- Hosted TYL's first districtwide open house. ☆

Waco District

Projects and activities in the Waco District (WAC) cover a broad spectrum, from restoring the historic to working with state-of-the-art technology.

The department's first Statewide Transportation Enhancement Program project officially began in January '95. The exterior restoration of the Hill County courthouse was made possible by the \$3 million in federal funds from this program. A new roof and clock tower are being constructed after the 105-year-old landmark was gutted by fire in 1993. The partnering of this project with the contractor and county officials served as a model for other STEP projects around the state.

The courthouse in Hillsboro is one of 10 enhancement projects in WAC. Other STEP projects include historic building

restorations, bicycle and pedestrian trails, and bridge repair and restoration.

Moving and preserving historic county bridges has become popular in WAC with six off-state system structures moved to new sites.

The district's Environmental Section has worked closely with county officials to successfully market bridges in Bosque, Coryell and Hamilton counties to locations where they will be restored for future generations.

In May '95, a 104-year-old bridge in Coryell County made the longest journey across the state to its new home in Deer Park near Houston.

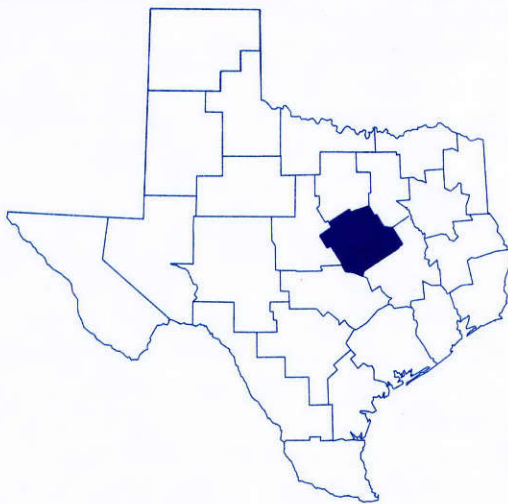
While historic bridges are of interest in the state, traffic signal technology has put Waco in the national spotlight. Camera detection systems have been used to control traffic at a single intersection, but for the first time it has been placed along a route with five intersections.

The Waco system on Loop 396 (Valley Mills Drive) replaces the electronic loops commonly placed in the pavement to detect traffic and control the signals.

With this new system, adjustments to the timing of traffic signals can be made from one of the five controllers located at the intersections, the district's traffic signal office located five miles away or a laptop computer.

In addition to signal detection, these cameras will prove useful in providing traffic counts and monitoring traffic movements. They also eliminate the inconvenience of lane closures required to repair or replace loop detectors.

New technology is also being used along U.S. 190 in Copperas Cove, where the traffic signals are interconnected without cable. Spread-spectrum radio antennas allow communication between five intersections on this route. These signals also are linked to the same master computer system in Waco, giving traffic signal crews the option of making adjustments from the



District Engineer Kirby W. Pickett, P.E.

Main number (817) 867-2700

Counties Bell, Bosque, Coryell, Falls, Hamilton, Hill, Limestone, McLennan

Area Engineers James W. Cowan, II, P.E., Belton; Charles Harris, P.E., Gatesville; Steven James, P.E., Hillsboro; Larry Stewart, P.E., Marlin; Duane Schwarz, P.E., Waco

Employees 409

Centerline miles 3,305

Lane miles 7,489

Registered vehicles 444,332



Helen Henkel, WAC

district office 65 miles away.

The debate of removing the Waco traffic circle and replacing it with a signalized intersection is over. A beautification project helped assure circle supporters of its future. The once-grassy mound in the center has been replaced by a concrete star, outlined by landscape pavers and surrounded by buffalo grass.

While landscaping the circle was a small project, it was one of many that helped the district set an all-time high. For the year, the district had an average of \$79 million under construction, reaching a record \$85.3 million in December '95.

The largest project on the Waco construction list is the \$17 million widening of Interstate 35 through Waco.

Also in 1995, the district began shifting some of its engineering work to consultants. A major investment study to relieve congestion on U.S. 190 in Copperas Cove was the initial project. Since that time, 12 firms have come on board to conduct

TxDOT's Bobby Roberts, left, and Tim Schulte, seated, listen as David Cherry of Texas Signal Equipment demonstrates the capabilities of a new traffic signal system.

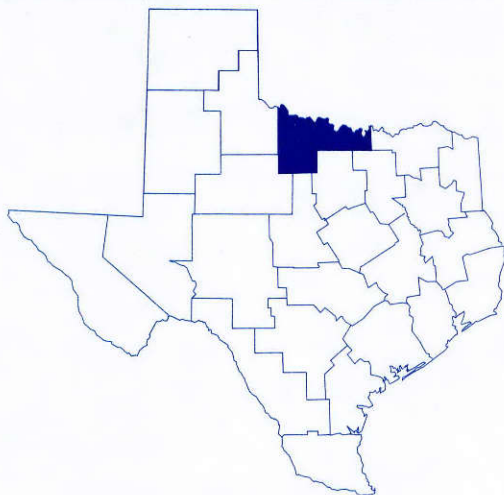
feasibility studies, do bridge inspections, and prepare plans, specifications and estimates.

The strength of the district continues to be its employees and their willingness to serve. WAC employees have answered the call, whether it was to sand icy bridges, fight wildfires, or serve on a committee or task force, and they have done so in a professional manner. ★

Wichita Falls District

“Community involvement, beautification, strong emphasis on safety, imaginative and productive employees, and smooth highways — that’s what the Wichita Falls District (WFS) is all about,” District Engineer David Peeples said. “Realizing that much of the expertise of the past is just about gone and new priorities are the rule rather than the exception, we are adapting with an eye on the future of transportation in our area.”

Planning continues for a 14-block overhead expressway on Holliday and Broad streets (U.S. 287) in the heart of Wichita Falls. With rapid growth in the area, and ever-increasing truck traffic, the overhead project is the high priority of the district.



District Engineer David Peeples Jr., P.E.

Main number (817) 720-7700

Counties Archer, Baylor, Clay, Cooke, Montague, Throckmorton, Wichita, Wilbarger, Young

Area Engineers John Barton, P.E., Bowie; John Barton, P.E., (acting) Gainesville; Robert Garner, P.E., Graham; Buddie Rivers, P.E., Vernon; Ralph D. Self Jr., P.E., Wichita Falls

Employees 315

Centerline miles 2,706

Lane miles 6,248

Registered vehicles 213,600

Community leaders involved with the project include former TxDOT Executive Director Arnold Oliver, former District Engineer Jim Stacks and several retired businessmen who also serve on the Transportation Committee of the Wichita Falls Board of Commerce and Industry.

Working with communities in beautification efforts continues to be a pleasant priority in the district’s nine counties. In Wichita Falls, 15,000 trees have been planted in the past 10 years, many on the rights of way of the city’s several highways.

On the state system, WFS moves onto a beautification site with the city and does the excavation, concrete and brick work. City workers install the sod, irrigation, trees, flowers and other vegetation.

On system right-of-way sites, TxDOT provides many of the trees and aids in the sites. The city takes care of the trees, installs spray irrigation systems, and applies mulch and fertilizer. WFS provides the mowing.

This combined effort has enhanced the rights of way in many areas, and has made garden spots of some 200 medians and intersections.

Cooperative beautification efforts also have become reality in Burkburnett, Seymour, Throckmorton, Vernon, Gainesville, Saint Jo, Bowie, Muenster, Graham and other communities in the district. Several cities have won cash awards in the Keep Texas Beautiful competitions and reinvested them in other beautification projects.

Safety Awareness Days (SADs) made their debut in Montague County when Bowie Area Engineer John Barton decided to dedicate a day to safety. Employees meet to clean their maintenance and engineering offices, grounds and vehicles to create a safer environment. Employees hold safety meetings, discussions on safety issues, and inspections of buildings and vehicles in relation to safety hazards and hazardous materials. The highlight of the day is a Dutch-treat lunch for all employ-



Dale Terry, WFS

ees and visitors. The day has become a regular activity in most sections.

To have a SAD, a section has to be accident-free for three months. The results are obvious, as the district safety record gets better and better — and when employees are healthy and happy, they produce better.

The TxDOT Truck Roadeo is a popular event in WFS and employees are not the only ones who get involved. The officers of the Wichita Falls Police Motorcycle Unit serve as judges for the event at the district office and some district employees help the officers with their annual police motorcycle competition. It's a great trade-out for the police and employees.

Training has become a priority in the district and the department is reaping the benefits. With many recent retirements, WFS has lost scores of years of experience. Newer employees are willing to take the reins and continue the high level of productivity expected in the district.

With the expanded growth of the area comes the problem of heavier use of the roadways, some of them being more than 30 years old. Engineering and maintenance employees have joined hands to keep the roads in good condition as long as necessary. It means that workers have

A cooperative beautification effort between the city of Wichita Falls and TxDOT has enhanced area rights of way, medians and intersections. Here, Jack Murphy (left), director of Parks and Recreation for the city, and Fred Hill, Wichita East Maintenance supervisor, discuss a project near U.S. 287 and U.S. 281.

to be ready to move into troubled areas at a moment's notice.

WFS' Special Job Crew and regular maintenance forces have proved time and again they can handle the problems until better solutions are possible.

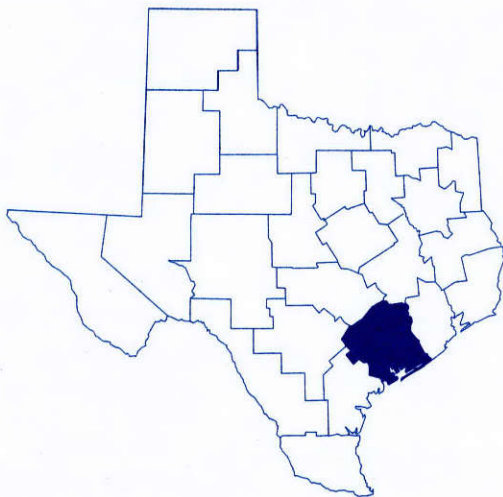
WFS has an international flavor with several predominately German communities, Czech communities and the Euro-NATO Flight Training Program at Sheppard Air Force Base. The district also has an abundance of descendants of the pioneer and oil boom families and thousands of residents who migrated from the north and east to the factories and government jobs in the area. ★

Yoakum District

With innovative ideas applied to major construction projects and enhancement programs, the achievements in the Yoakum District (YKM) during the past year can only be described as unusual.

Through YKM's efforts, two major enhancement programs begun in 1995 received funds, allowing both projects to continue through their final phases.

The Birding Trail enhancement program will supply funds for Phases II and III of the project. Upon completion, the Birding Trail will provide the public a 500-mile chain of birding sites covering the upper, central and lower Texas Coast. No single link will be more than 30 minutes from the next. Included in the project are parking areas, fencing, signs, maps, viewing plat-



District Engineer Michael W. Behrens, P.E.

Main number (512) 293-4300

Counties Austin, Calhoun, Colorado, DeWitt, Fayette, Gonzales, Jackson, Lavaca, Matagorda, Victoria, Wharton

Area Engineers Larry Blazek, P.E., La Grange; Reuben J. Petrusek Jr., P.E., Victoria; Glen Dvorak, P.E., Wharton; Lonnie Gregorcyk, P.E., Yoakum

Employees 357

Centerline miles 3,497

Lane miles 7,803

Registered vehicles 275,351

forms, and hiking and walking trails.

Billy Goodrich of YKM's Design Section will oversee the entire project. Phases II and III will cost approximately \$740,000. As a hobby, birding is second only to gardening, and birders are expected to spend more than \$800 million annually in Texas in pursuit of this pastime.

The second enhancement project is for the La Salle shipwreck excavation, which will provide documentation of the archaeological remains of the 1686 ship, the La Belle. The first enhancement project resulted in the discovery in July '95 of the second-oldest shipwreck in Texas history. At the time of the discovery, a 6-foot long, 1,000-pound bronze cannon was recovered from the shipwreck. Despite being submerged in 12 feet of saltwater for more than 300 years, the ornate etchings of a king's crest and two dolphins were still visible on the gun.

The Texas Historical Commission will receive approximately \$535,000 for the continued excavation of the shipwreck, which is being achieved with the innovative use of a coffer dam. The dam surrounds the La Belle and allows archaeologists to excavate on relatively dry land in the middle of the ocean. An observation deck allows the public to dock their boats and watch the excavation work, which is expected to be completed, weather permitting, by March '97.

Archaeologists hope to find personal possessions of La Salle and his officers as well as La Belle's anchor and other supplies. Among the artifacts discovered so far are several cannonballs.

Another innovative project was the replacement and relocation of the Rocky Creek Bridge located on County Road 286 in Lavaca County. The old truss bridge was moved from its original location intact to its new location at the Spoetzl Brewery in Shiner. The 1.5-mile move took approximately three hours to complete with the bridge supported by two forklifts



Pearlie Dushong, YOM

moving slowly through town. The old truss bridge will serve as a pedestrian crossing over Boggy Creek in Shiner. The new two-lane bridge over Rocky Creek opened to traffic in December '95.

A construction project to complete Loop 463 around the city of Victoria was let in May '96 and will cost approximately \$21 million to complete. This project is the only one in the district being constructed on an entirely new location. Even though enough right of way is purchased along the 10 miles to construct a four-lane highway, the present job is designed as a two-lane roadway. Completion of the two phases is expected by spring '99.

Another major project let in May '95 was the widening of U.S. 59 from Spur 91 to U.S. 77 at Goldman Hill. The completed project will include curb and gutter and two additional lanes, making the roadway a four-lane divided highway. The cost of the three-mile project will be about \$8.7 million.

Another accomplishment for the district in the past year is the construction of a new combination area engineer and maintenance office in Victoria. The new site on

Lavaca County Maintenance technician Gilbert Mozisek helps spread rock on U.S. 77 in Hallettsville.

U.S. 59 replaces the old building located on U.S. 77, which was built in 1963. The size of the old facility as well as Victoria's expansion in the last 30 years contributed to the necessity for the new location and building. The new facility opened for business in May '96. ★

Administration

TxDOT is governed by the three-member Texas Transportation Commission and an executive director selected by the commission. Commission members, serving overlapping six-year terms, are appointed by the governor with the advice and consent of the Texas Senate.

David Laney was named to the Transportation Commission in April '95. That same month, Gov. George W. Bush appointed Laney as chairman of the commission. Laney, who hails from Dallas, joined commission members Anne Wynne of Austin and David Bernsen of Beaumont.

Executive Director William G. Burnett manages, directs and implements TxDOT policies, programs and operating strategies. Burnett also represents TxDOT before the Texas Legislature and other entities.

Burnett is assisted by two deputy directors, four assistant executive directors and a director of staff services. These eight employees make up the Senior Management Team.

Bob Cuellar serves as deputy executive director for Transportation Planning and Development. He oversees the Transportation Planning and Programming, Environmental Affairs, Right of Way and Design divisions, and the International Relations Office.

Cuellar's office is charged with designing methods to assess and evaluate transportation needs. Employees then make policy recommendations that respond to changing visions and meet transportation needs. This office creates the methodology and basis for allocating scarce resources to provide the finest transportation infrastructure possible in keeping with the public's vision.

Bobbie Templeton is assistant executive director for Field Operations and has oversight of the operation of the department's total transportation system. The Field Operations team devotes its energies to supporting districts and their personnel in constructing, maintaining and operating the state transportation system. The team originates and implements research related to improved materials, construction methods, and safer and more efficient operation of travel facilities. These activities collectively account for the vast majority of the department's annual expenditures.

The director of Field Operations supports the Engineering Professional Development Office. This office assists graduate engineers in becoming registered professional engineers and promotes development of department engineers throughout their TxDOT careers.

Field Operations comprises the Construction and Maintenance, Materials and Tests, and Traffic Operations divisions, and the Research and Technology Transfer Office.

Multimodal Transportation has primary responsibility for managing and overseeing TxDOT's nonhighway transportation functions. Headed by Assistant Executive Director for Multimodal Transportation Tom Griebel, the office sets direction and establishes policies which guide the department's involvement in mode-specific and intermodal projects and programs. Multimodal Transportation is involved in trip reduction, telecommuting, congestion pricing and other initiatives that enhance the efficiency of the Texas transportation system.

Multimodal Operations comprises the Aviation and Public Transportation divisions and the Multimodal Operations Office.

Deputy Executive Director for Administrative Services Cassie Carlson Reed's office provides the department a single management focus for several organizations whose major objectives are to provide administrative support services to the entire department.

Every area in TxDOT uses this office's services. These include budgeting for future expenditures, procuring equipment necessary to accomplish technical tasks, providing information systems to accomplish all tasks and offering more opportunities for increased numbers of business partners.

The divisions and special offices within the Administrative Services area include the Budget and Finance, General Services and Information Systems divisions, and the Business Opportunity Programs Office.

The effect of combining these organizational units under one leadership and focal point optimizes the delivery of business services and provides for consistent support to all TxDOT programs and functions.

The goal of Human Resources Management is to provide comprehensive human resources services to all TxDOT employees, prospective employees and other users.

Under the leadership of Assistant Executive Director for Human Resource Management Daffney Henry, the office promotes a trusting environment where the customer views the department as a credible resource, is a partner treated with dignity and respect, and receives prompt, courteous service.

Human Resources Management responds to the identified needs of internal and external customers by providing and continuously improving services for a safe, supportive and enriching work environment.

Human Resources Management comprises the Human Resources, Civil Rights and Occupational Safety divisions, and the Continuous Improvement and Appeals offices.

Jim Bisson serves as assistant executive director for Motorist Services.

Motorist Services focuses on vehicles and travel in Texas. The staff encourages and facilitates the use and enjoyment of the roads and the places they lead. Employees make sure vehicles are sold by properly licensed vendors, operate legally and cause of minimal amount of road damage.

Motorist Services comprises the Travel and Information, Vehicle Titles and Registration, Motor Vehicle and Motor Carrier divisions.

These divisions generate millions of dollars in revenue for Texas through the collection of fees and activities aimed at increasing travel and tourism.

Staff Services coordinates the development of TxDOT's federal and state legislative programs and oversees its public information and communications activities. The department's Strategic Plan and other special studies and projects assigned by the executive director are developed under the auspices of Staff Services Director Russell Harding.

Staff Services include the Public Information Office, the Legislative Affairs Office, Management Services Office and the Office of General Counsel.

Responsibility for overseeing development of Texas Transportation Commission meeting agendas, briefing documents and meeting procedures falls within the realm of Staff Services. This area provides support for the consultant contracting process and other department committees and task forces. ★

Audit Office

The Audit Office (AUD) is an independent appraisal function for internal and external department operations. Externally, AUD performs approximately 420 contract audits a year covering \$110 million to \$120 million of billed contract costs involving federal; state and local government funds. AUD exceptions

average \$1.5 million per year.

Internally, AUD assists employees by conducting independent and objective reviews of TxDOT operations and procedures to ensure they are functioning as intended.

Based on legislative direction, more coordination between the district and division internal review analysts (IRAs) and AUD is under way. New directions include planning and reporting of internal review activities with AUD, and an independent evaluation of these IRA activities. ★

Director Owen Whitworth
Main number (512) 463-8635
Sections Internal Audit; External Audit
Employees 16

Aviation Division

In 1996, the Aviation Division (AVN) launched the Routine Airport Maintenance Program (RAMP), an innovative way to protect the public investment in the state's aviation infrastructure and to preserve the integrity of the overall Texas Airport System.

RAMP, grants local governments up to \$10,000 to be matched by AVN for routine airport maintenance. The program expands roadway maintenance programs to cover publicly owned airports and maximizes available funds to counteract deterioration of airport pavements and facilities statewide.

The division tested RAMP through a pilot program at 53 airports in five districts. The pilot's success led the Texas Transportation Commission to expand the program statewide Sept. 1, 1996. RAMP

now includes every districts and represents more than 200 additional eligible airports. TxDOT funding for the program is \$2.5 million.

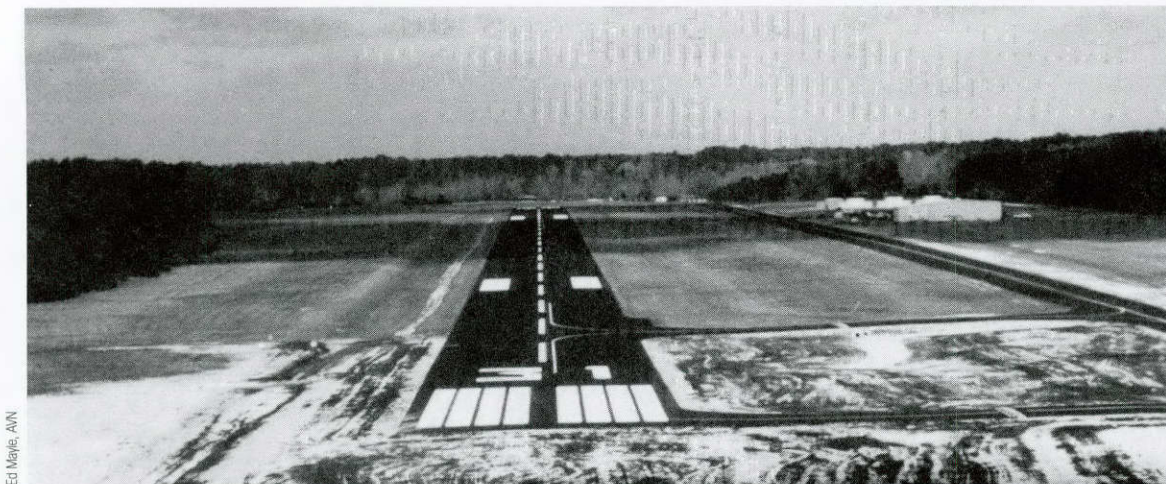
By using the available resources of existing district highway system maintenance services and TxDOT contracts, AVN provides a consistent, well-managed maintenance program enhances the safety, serviceability and useful life of airports.

RAMP provides an affordable maintenance program for local governments that lack the financial and technical resources to perform adequate maintenance at their airports. Routine maintenance conducted through the department for publicly owned airports includes crack repair, seal coats, herbicide application, striping, sweeping and other maintenance needs.

The plan strengthens the aviation program, and has increased airport owners' awareness of TxDOT's involvement in aviation programs. RAMP also marks the first time in the department's history that districts have been involved in airport maintenance.

The Federal Aviation Administration (FAA) approved the use of a modified TxDOT hot mix asphalt specification for general aviation airports in the state.

Director David Fulton
Main number (512) 416-4500
 or (800) 68-PILOT
Sections Administration; Aviation and Administrative Services; Aviation Education Information; Grant Management; Planning and Programming, Project Management
Employees 33



Ed Meyer, AVN

While approval is granted on a case-by-case basis, the FAA relies on TxDOT to evaluate field performance. The FAA also has approved the unmodified TxDOT base material specification for general aviation applications. FAA acceptance of both of these TxDOT specifications could encourage greater contractor participation and better unit costs for general aviation construction projects. These approvals represent the culmination of research and creation of technical memoranda by the Center for Transportation Research, input from TxDOT employees and private aviation consultants, and communication with the FAA.

A followup study is under way to consolidate other aviation specifications, using the 1995 Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges as the basis. Again, the purpose is to increase contractor comfort and better integrate aviation construction into TxDOT's mission.

In September 1995, the districts began conducting airport safety inspections at the state's general aviation airports. The inspections promote safe, well-maintained airports, collect and disseminate timely airport data, ensure that airports that have received state or federal grants are in compliance with grant assurances, and devel-

General aviation airports, such as this one in Hardin County, benefit from AVN programs, including the Routine Airport Maintenance Program which provides affordable maintenance for local governments that lack resources for adequate airport maintenance.

op uniform airport operating procedures. To prepare the districts for the task, AVN conducted four inspector training classes in Waco, Odessa, Tyler and Corpus Christi in the summer of 1995. After completing the class, AVN inspectors spent time in each district with the newly trained district inspectors conducting airport safety inspections.

Observations made by the airport safety inspectors along with recommendations to correct any safety deficiencies observed are transmitted to the airport owner. Observations and recommendations are forwarded to AVN for review and transmittal to the FAA and the National Association of Aviation Officials/Center for Aviation Research and Education. ★

Budget and Finance Division

The Budget and Finance Division (BUD) demonstrated its leadership in national transportation financing when Texas was named as one of 10 State Infrastructure Bank (SIB) pilot program states. The SIB will allow Texas to test a variety of new financing methods, including loans and repayments, subsidized interest rates, letters of credit, and acting as a bond or debt financing security fund for local governments.

The SIB will provide Texas with a revolving fund for financing transportation that is independent of federal appropriations after the first years of growth. There is no risk of financial loss to Texas because the SIB's funds can be reconverted to traditional federal grant funds. After 20 or 30 years, the SIB will grow into a significant provider of financing for Texas transportation needs.

Accounting Management Section employees implemented several automated procedures, saving the department time and materials.

TxDOT purchased the Online Document Viewing System (ODVS) as a

result of research and recommendations from this section. ODVS archives Financial Information Management System (FIMS)-generated daily and monthly reports electronically eliminating the cost of printing, microfiche, storing and mailing.

The SLD and Trust Branch held regional meetings to train district employees in the proper procedures to prepare salary and labor distribution data for entry into the Single Entry Screen and Time Sheet Screen.

State Comptroller of Public Accounts John Sharp cited the Financial Reports Branch for successfully transmitting electronically TxDOT's Annual Financial Report to the Comptroller's Office.

The activities of the Claims Management Section touch the lives and business of every TxDOT employee, so section employees continually look for better ways to handle their work, to improve service and to move to a paperless environment.

In 1996, the Contract Payment Branch implemented the Voucher Imaging Project. Phase I is fully operational and has proved useful. Benefits include:

- Time savings — research that formerly took weeks can now be done in minutes,
- Ability for multiple users at different locations to view documents at the same time, and
- Paperless system (less storage needed, less handling, better copies).

Contract Payment Branch employees worked to receive federal funds more quickly. They recently received the necessary agreement from TxDOT's Design Division to make procedure changes that will reduce the average uncollected federal receivables from the Federal Highway Administration (FHWA) by approximately \$30 million. This was accomplished by working with the Funds Management Section of BUD, the Design Division and FHWA.

The Voucher Processing Branch recently

Director Frank Smith Jr.

Main number (512) 463-8684

Sections Administrative Support;
Administrative Services; Financial Reports;
Project Ledgers; SLD/Trust; Voucher
Processing; Employee Payments; Contract
Payments; Budget and Forecasting;
Revenue Accounting

Employees 123



consolidated and streamlined the International Registration Plan voucher process, resulting in an 87.5 percent reduction in vouchers created monthly.

The Employee Payments Branch eliminated paper and microfiche costs by adding payroll reports to ODVS. These reports now are available through a micro-computer Windows connection to ODVS.

Budget officers from the Budget and Forecasting Branch of the Funds Management Section helped develop the curriculum for the budget training module of a bimonthly maintenance section supervisor course. Employees instructed this module twice a month, and received favorable feedback. This branch plans to continue participation in the program and

Helen Gregory and Elsa Piña feed voucher papers through a scanner that places an electronic image in memory for retrieval and review.

has offered to assist in developing a similar budget training module for area engineers.

This branch sent a number of budget officers on individual, personalized visits to each district to discuss and gather budget data for the fiscal 1997-99 budget preparation process. These meetings generally entailed spending a day at each district to discuss and answer budget questions unique to that district. Participants left with a clearer understanding of the budgeting process. ★

Business Opportunity Programs Office

The Business Opportunity Programs Office (BOP) consolidates the Disadvantaged Business Enterprise (DBE) and Historically Underutilized Business (HUB) programs and provides one location to respond to all DBE/HUB issues.

With the Civil Rights Division, BOP established a Business Complaint Procedure that provides businesses with a dispute against another business or TxDOT an avenue to resolve them. BOP received 64 business complaints between January '95 and August '96, and helped resolve 36 of them.

BOP participated in to 61 Business Opportunity Forums between January '95 and August '96, and distributed information about TxDOT's DBE and HUB programs.

Through 22 supportive service providers — 17 of which are HUBs — DBEs and HUBs doing business or interested in doing business with TxDOT are offered help and training. Clients now have more service providers to choose from when requesting assistance. DBEs and HUBs must identify a TxDOT project they plan to bid on before receiving assistance. BOP evaluates requests to limit duplication and monopolization of assistance by a DBE or HUB. This controls and

evaluates expenditures of the supportive services funds.

The CompuServe bulletin board, which provides information about construction projects, includes DBE/HUB information. BOP ensures that all DBE directories and DBE/HUB construction reports are available through the bulletin board before monthly lettings.

DBE/HUB liaison committees have been established throughout the state. Each elected a delegate to represent it at the quarterly statewide liaison committee meeting and the DBE/HUB

Transportation Conference annually.

BOP revised the HUB commissioner's reports to meet new reporting requirements. The revised reports better reflect expenditures made with DBEs/HUBs because the data is retrieved directly from vouchers paid. BOP reports to districts and divisions regarding HUB participation in their areas.

Monthly certification workshops have been held since May '95 during letting to provide certification information to potential DBEs. To date, 20 firms attending the workshops have been certified as DBEs.

BOP developed and coordinated district employee training to provide consistency in monitoring compliance with DBE/HUB special provisions on construction contracts. A total of 514 employees were trained between November '95 and March '96.

BOP's accomplishments are substantial when compared to other agencies with DBE or HUB programs. Communication through public forums and liaison committees are initiatives that promise to create new partners with DBEs and HUBs. The Business Complaint Procedures offer businesses an alternative to lawsuits against the department, saving taxpayers money. Training TxDOT employees and project reviews ensure consistency in monitoring for compliance with DBE/HUB special provisions. ★

Director James Dossett

Main number (512) 305-9570

Sections Compliance and Complaints;

Certification and Audits; Goal Setting and Data Reporting; Education and Outreach; Administrative Support

Employees 26

Civil Rights Division

The Civil Rights Division (CIV) has emerged as a division employees can count on to provide consistent quality service. Between Jan. 1, 1995 and Aug. 31, 1996, investigators completed 88 investigations and conducted 195 staff visits in the districts, divisions and special offices.

TxDOT's revised complaints and appeals procedures — which went into effect July 1, 1996 — improved the way TxDOT resolves employee complaints. The new policy emphasizes resolution at the appropriate management level and provides individuals the opportunity to have their concerns heard and resolved in a timely manner.

An unparalleled accomplishment by the division was the Advisory Information Module (AIM) Series, which began development in December '95. The modules assist employees and managers with communication and expectations on various issues that affect all aspects of the department's most valuable resource — people.

The modules were not intended to provide specific policy training for internal policy and procedure, but to serve as reminders of sound management practices or general employment law information. The six modules include Managing Performance, Mediation, Preventing Sexual Harassment, Public Information, Termination, and Whistleblower Act. CIV employees provide on-site presentations at the request of districts, divisions and special offices. In a four-month period, 265 employees received the information.

In addition to investigations, division employees also were busy conducting TxDOT training. Four investigators conducted Interviewing and Hiring Training in two districts. Six investigators conduct-

ed the complaint processing module of the DBE/HUB and Title VI Training in 10 districts. The two-hour sexual harassment module of the New Employee Orientation Program was delivered in all scheduled classes. CIV actively participated in the Human Resource Management Overview Program.

In January '96, the division began developing a comprehensive complaints and appeals database that includes CIV, the Human Resources Division and the Appeals Office. This comprehensive tracking system allows the end users to produce products previously unattainable plus the ability to maintain current status on mediations, complaints and appeals. In addition, this database provides more accurate reports concerning these problem-solving procedures.

When the Lubbock, El Paso and San Antonio field offices were closed, CIV realigned the districts they supported under the remaining offices in Austin, Dallas and Houston.

Focusing on the future, CIV will proceed with proactive programs and activities. While investigations will continue to be the primary function, doing more for the department in the area of prevention will be just as important. ★

Director Jana Nava

Main number (512) 475-3117

Field Offices Austin; Dallas; Houston

Employees 24

Construction and Maintenance Division

The Construction and Maintenance Division (CMD) has improved, expanded, and diversified its work since it was created in TxDOT's 1993 reorganization.

The division has been retooling its forms and procedures to become more responsive to its customers among the districts and contractors. It consolidated some functions, allowed districts to take control of others and is putting all forms it uses on-line.

CMD continues to make its operations more fully automated. Employees have been involved in the development of the American Association of State Highway and Transportation Officials' automated Construction Management System (CMS) to make construction management easier and more efficient. As one of the test states, TxDOT started a CMS pilot test in the Waco and San Antonio districts in fall '96. The electronic bulletin-board system is up and running, providing pre- and post-letting information, along with information from the Design, Aviation and

Materials and Tests divisions, and the Business Opportunities Office. This information is accessible to contractors, vendors and material suppliers through CompuServe. CMD held training for districts interested in using the Critical Path Method (CPM) for scheduling projects. The installation of CPM scheduling also helps the division resolve potential complaints and disputes.

CMD chaired a committee that studied the Maintenance Management Information System (MMIS). The results will make the system more user-friendly for field personnel and add value to the department. The division conducted research on electronically capturing maintenance field data that will result in an annual savings of approximately \$800,000 if implemented statewide.

Another of the services CMD provides is training in diverse areas, from construction project record management, metrication, pesticide use, and, in conjunction with the Federal Highway Administration (FHWA), Title VI training for the districts and divisions.

An agreement between TxDOT and the Texas Department of Criminal Justice resulted in the use of inmates to perform work that otherwise would go undone. In another area, CMD is involved in making personnel, equipment and materials available for use in a cooperative agreement among the 16 member states of the Southern Regional Emergency Management Assistance Compact (SREMAC) to provide critical emergency services to members in the event of a disaster. Although Texas is not a member of SREMAC, it is awaiting legislation to allow it to participate.

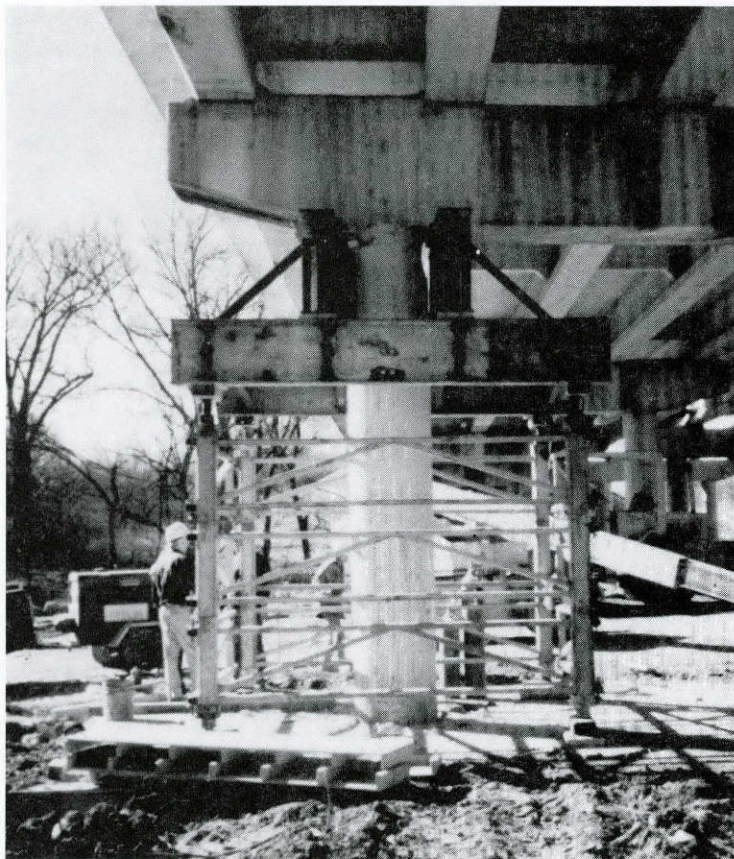
The Bridge Construction and Maintenance Section continues to provide emergency assistance to districts. Among other services, the section performs bridge condition surveys, emergency inspection of damaged structures and follow-up

Director Thomas R. Bohuslav

Main number (512) 416-2500

Sections Administration; Automated Data Processing; Bridge Construction and Maintenance; Contract Cost Analysis; EEO and Labor Compliance; Field Engineering; Maintenance Administration Contracts; Prequalification and Proposal Issuance; Special Assignments; Vegetation Management

Employees 96



Courtesy CMD

Emergency shoring designed by CMD's Bridge Section supports a column that settled during the widening of the structure.

inspections to develop repair recommendations. In emergencies, members of the section traveled to inspect damaged structures and in several cases designed emergency shoring to prevent collapse of the structure before it could be repaired. The section is also involved in TxDOT's

research program to stay on the cutting edge of new technology.

The Contract Cost Analysis Section has seen requests for historical highway construction information rise from about 10 a year to 10 a week. Outside agencies making such requests are charged a fee, which resulted in about \$1,500 from May to September '96.

The Vegetation Management Section is finishing an environmental impact study of the department's pesticide use and plans to publish a new metric herbicide manual. It also is involved with six other states and the FHWA in developing the Prairie Passage Route. This is the first year of the three-year

project to encourage native plant life along Interstate 35 from Texas to Canada. During this first year, employees inventoried plants along the route. Cultural and historical sites also will be noted for use by local tourist centers. In following years, the inventories will be interpreted and plans made for encouraging native species along the entire route. ★

Continuous Improvement Office

The Continuous Improvement Office (CIO) assists the department with its quality initiative.

Continuous Improvement (CI) is a strategy that works within the framework of an organization to foster ongoing incremental improvements to its business processes. The ultimate aim is to maintain and enhance the quality of the services and products resulting from these business processes.

Since its inception, CIO's landmark has been facilitator services. Through a Facilitator Certification Training course developed and delivered in-house, more than 200 TxDOT employees have been certified as CI facilitators since March '95. The facilitator pool represents a cross-section of department employees.

While facilitator services are still a prominent feature, the office has expanded, adding multiple dimensions, including training. Training provides employees the skills and abilities to apply CI in the workplace.

Director Julie Larrimer

Main number (512) 463-6640

Sections Administrative, Measurement and Evaluation, Partnering, Services

Employees 8

In addition to the Facilitator Certification Training, the office developed Foundations of Continuous Improvement (FCI). The course teaches the fundamentals of CI concepts and tools that can be used in any group situation.

In cooperation with the Human Resources Division, CIO also introduced two Covey Leadership Center courses. First Things First™, Covey's time-management system, is a core module of the Training Center's Management Skills for Success (MSS) course. MSS is one of four classes in a new management development curriculum resulting from this joint effort.

Seven Habits of Highly Effective People™, administered directly by CIO, is also a part of the new management development curriculum. Seven Habits™ introduces effective leadership skills at four levels: personal, interpersonal, managerial and organizational. Concentrating on the personal and interpersonal levels, Seven Habits™ has been applauded as a natural complement to any quality movement and ongoing organizational development.

Employee involvement is the key ingredient in any effective quality initiative. To recognize the role of employees in TxDOT's quality initiative, CIO developed the Journey Toward Excellence Awards. The annual awards debuted at the 1995 Transportation Conference when recipients were announced in three categories: individual, team and district/division/special office.

Like any organization, TxDOT relies on outside partners to accomplish its goals. CIO covers internal relationships as well as external relationships. The partnering initiative is a project-specific strategy employed in cooperation with TxDOT's external partners, like contractors, suppliers, consultants and designers.

Partnering encourages all stakeholders on a project to open lines of communication and develop joint goals and decision-



making strategies. Partnering's ultimate objective is to produce a quality project on time, within budget and with no claims filed against the project.

Partnering and CI services use team-building to develop trust, open lines of communication, create effective working relationships, find the best ways to solve problems together, and focus on quality services and products. ★

Jim Athey, director of administration in the Lufkin District and a CI facilitator, leads a group through a team-building exercise to demonstrate points on communication and effective teamwork.

Design Division

Two functions merged into the Design Division (DES) — the Consultant Contract Office (CCO), formerly with Management Services Office, and the Transportation Enhancement Program, formerly with the Environmental Affairs Division.

CCO assists in TxDOT's public partnering process by coordinating with divisions, districts and the Consultant Engineers Council to develop policies and procedures to procure architectural and engineering services with the Consultant Review Committee. CCO also published a contract management manual, *Architectural and Engineering Services*, which outlines developing, implementing and managing a professional services contract.

In fiscal '96, 298 contracts totaling \$77.2 million were awarded. This involved 342 architectural and engineering firms including both prime and subcontractors. CCO is working on a precertification process which should be implemented this spring.

Integrating the Transportation Enhancement Program into DES involved streamlining project reviews for commission approval and funding under the Intermodal Surface Transportation Efficiency Act (ISTEA). The third program call for the Statewide Transportation Enhancement Program resulted in 386 projects totaling \$252 million being submitted. The Texas Transportation Commission selected 55 projects totaling \$40 million for funding.

Director Robert L. Wilson, P.E.

Main number (512) 416-2601

Sections Administration; Field Coordination Area I, II, and III, Bridge Coordination Area; Bridge Design; Pavement Design; Landscape Design; Geometric Design; Hydraulic Design; Project Services

Employees 221

The division prepared a booklet titled "Local Agency Guidelines for Administering Title 23 Federally Funded Projects (It's Not a Grant)." A department task force comprising district, division and Federal Highway Administration (FHWA) representatives developed instructions to help local entities develop, let and administer the construction of off-system projects.

The booklet will help agencies understand federal and state laws, rules and regulations covering the development of these projects and not mistake federal funds for grant money.

In addition to their primary function of overseeing the plans, specifications and estimates (PS&E) phase of project design, DES field coordination sections participated in project process reviews to investigate and analyze specific TxDOT processes for compliance with federal policy, regulation, and directives related to federal-aid project design.

In cooperation with the coastal districts, the Traffic Operations Division and the Texas Department of Public Safety plus officials from the five coastal counties, DES presented a hurricane-evacuation route report to the Texas Transportation Commission and developed a new funding category to provide continued funding for improvements to various evacuation routes.

Working with the Houston District and the Harris County Toll Road Authority, DES helped develop PS&Es and obtain federal approval for 38 toll road projects. A major link between U.S. 59 South and the Houston Ship Channel will be provided when complete.

In cooperation with the International Relations Office, DES conducted Value Engineering workshops with district staff and Mexican government officials. These workshops brought together TxDOT engineers, personnel from other state DOTs bordering Mexico, FHWA, and govern-



Geoff Appold, TRV

The Design Division's Bridge Design Section personnel inspect the Louetta Road Overpass in Houston, one of two high-performance concrete (HPC) bridge projects under construction. The Bridge Design Section will evaluate research results and monitor the bridges for economic considerations.

ment officials and engineers from Mexico's border states. The relationships established by these workshops resulted in a value engineering project study conducted in Mexico with engineers from TxDOT participating. The exchange of Value Engineering technology should enhance technology exchange in other areas and establish partnerships on future cross-border projects and related processes.

The Texas Mobile Load Simulator completed its first pavement test. Preliminary data analysis revealed that most rutting occurred in early stages of use. Data will be evaluated further to determine cracking can be detected before it occurs. This would help determine the best time for maintenance and rehabilitation.

The Pavement Management Information System (PMIS) is fully implemented. PMIS data was used to allocate approximately \$485 million for pavement-related work in the fiscal '96 Unified Transportation Plan. PMIS is used to support district preventive maintenance and

Rehabilitation Program development, the statewide Revenue Needs Assessment Project and the Transportation Plan for Rural Highways.

The mission-manager workstation for the PMIS pilot was implemented in the San Antonio and Bryan districts for analyzing automated visual distress collected with the Multifunction Vehicle (MFV).

The MFV was designed for network-level road survey to ensure safety in data collection operations. The MFV collects video, ride, rut and other data at highway speeds and eliminates the need for visual rating in

high-traffic areas. The mission-manager workstations reduce the collected data, generate a historical database and evaluate candidate roadway sections for rehabilitation.

The Bridge Design Section has two high-performance concrete (HPC) bridge projects under construction. The design and construction of this new technology was sponsored by the FHWA and DES in cooperation with the Center for Transportation Research at the University of Texas at Austin. HPC's benefits include increased durability, reduced maintenance requirements and more economical bridge construction. The Bridge Design Section will evaluate research results and monitor bridge behavior over the long term for economic considerations. ★

Environmental Affairs Division

The 65 employees of the Environmental Affairs Division (ENV) deal with issues as diverse as archeological excavations, environmental site assessments, endangered species habitat, environmental training, underground storage tank removal and noise barriers — all to ensure that TxDOT's projects are sensitive to the environment and state heritage.

Because of ENV's efforts, TxDOT recently received two significant awards. The Environmental Protection Agency's Dallas Region 6 presented a Certificate of Appreciation to members of the Storm Water Advisory Team in recognition of efforts to minimize storm-water pollution during highway construction.

The Texas Historical Commission presented TxDOT with its Award of Excellence in Archeology for Research in May '96. This award is given for outstanding research in a large body of archeological work.

ENV has been heavily involved in the identification, environmental appraisal and procurement of two significant mitigation bank sites since January '95. Smith County's 2,473-acre Anderson tract and Orange County's 3,343-acre Blue Elbow swamp are wetlands bought by TxDOT and turned over to the Texas Parks and Wildlife Department for stewardship. TxDOT makes a concerted effort to ensure that construction projects do not disturb environmentally sensitive sites, but when a disturbance is unavoidable, mitigation bank sites such as these act as compensa-

tion.

Since November '95, ENV has explored the use of new technology with the installation of the first of two Geographic Information System (GIS) computers. The database for GIS eventually will include a wide spectrum of detailed environmental information about all 267,339 square miles of the Lone Star State. Working with data gathered from other state agencies, ENV's GIS contains detailed information about vegetation and soil types.

Information provided by GIS is invaluable in efforts to avoid, minimize and mitigate impact on the environment while planning, designing, constructing and maintaining Texas transportation system. Some of the first fruits this new information source produced were vegetation maps of each of the TxDOT's 25 districts.

In summer '96, ENV and the Design Division co-hosted an international team of architects, historians and a photographer to record valuable information about 41 historic bridges across Texas. Team members came from Canada, Hungary and the United States.

The team, working for the Historic American Engineering Record (HAER) — a division of the National Park Service — researched, measured and photographed some of the most unique bridges in the state. The surveys provide a permanent record of the state's most significant bridges for both the state's archives and HAER's permanent collection at the Library of Congress.

Educating people about TxDOT's environmental and historic preservation programs is an important function of ENV.

ENV produces a quarterly newsletter, *Envision*, and in 1996 held the first environmental coordinators conference. In addition, ENV conducts education campaigns such as Ozone Action Days. Employees are part of a multi-agency organization that produces the educational television program "Eye on Earth." The

Director Dianna F. Noble, P.E.

Main number (512) 416-3001

Sections Administration, Communications, Cultural Resources Management, Natural Resources Management, Pollution Prevention and Abatement, Project Management

Employees 65



program teaches environmentally friendly ideas to school children across the state.

Hazardous materials in the workplace can sometimes lead to serious problems. Cyanide contamination at TxDOT's Camp Hubbard was confronted by ENV staff. The site of a cyanide bath, once used as a cleaning and binding agent during highway sign production, became evident when cyanide began leaching through the concrete floor onto the ceiling and walls of the basement. ENV staff coordinated cleanup and sealing efforts at this site.

In an effort to make the environmental review process easier, ENV and the districts agreed to determine responsibility for various aspects of TxDOT's environmental coordination process.

ENV staff and district representatives met to discuss each step of the environmental review process and the qualifications of the people performing each task.

Tom Bruechert, Jeff Casbeer and Kim Jenkins of ENV's Natural Resources Management Section conduct a wetlands mitigation survey.

From these discussions, the group decided who will be responsible for completing each step. Eventually, ENV will meet and sign agreements with each district. ★

General Services Division

General Services Division (GSD) employees consider service their middle name as they strive to provide high-level customer service.

TxDOT spends millions of dollars each year purchasing products, materials and services. Employees in GSD's Purchasing Section are changing the way they do business in terms of legal requirements and new technology. These successes can be attributed, in part, to the fact that 80 percent of GSD's purchasing staff are now certified professional purchasers, making TxDOT the most technically competent purchasing group within Texas government.

GSD is planning full implementation of the Automated Purchasing System this year. Purchasing was also enhanced through the implementation of credit card purchases. Districts and divisions may make purchases less than \$1,000 on a credit card, eliminating the need for a purchase order.

GSD's Equipment Purchasing and Management Branch is responsible for TxDOT's fleet of more than 9,300 motor vehicles and 7,800 off-road and nonmotorized units. The districts and GSD contracted more than 33 percent of vehicle repairs last year. On the opposite side of this coin, the GSD General Shops Operation built a record 35 herbicide spray units for district use. Through Continuous Improvement efforts, the General Shops perfected the unit and can build a herbicide spray unit for less than the best unit on the commercial market.

GSD's management of TxDOT's fleet includes a rigorous preventive maintenance

program which has made TxDOT vehicles a popular commodity on the surplus market. GSD's Property Management Branch facilitates the disposal of surplus property, which generated more than \$7.5 million in 1995.

TxDOT displaced more than 2.1 million gallons of gasoline and diesel with alternative fuels in 1995, and 4,400 of TxDOT's vehicles can run on compressed natural gas or propane. GSD's Fleet Management staff coordinated with the Houston District to bid out a first-of-its-kind leased CNG public-fill station on TxDOT property. GSD fleet managers were also instrumental in encouraging Ford Motor Co. to deliver 434 vehicles to TxDOT with factory-installed alternative fuel capabilities, the first time for a major vehicle manufacturer.

GSD is responsible for another departmentwide environmental effort — the Recycling and Recycled Products Program. Since its inception in 1994, this group has developed a program for recycling white office paper, of which employees recycled more than 538 tons in 1995.

But TxDOT is more than paper. One very important element of the recycling program is a heightened awareness of recycling opportunities in road construction. GSD coordinated in excess of \$875,000 in grant research on the use of recycled materials in road construction which is now being used to conduct field evaluations of the most promising materials.

Contract laws and practices change regularly and keeping TxDOT employees up-to-date on legal and ethical changes is a challenge. The Contract Services Section designed and delivered two training classes for more than 1,200 district and division contract management employees.

The four GSD Regional Supply Centers (RSC) manage more than 6,000 items with a value of more than \$16 million. An important yet nonvisible function of the

Director Lawrence Zatopek

Main number (512) 416-2001

Sections Purchasing; Contract Services;
Facilities Management; Supplies; Services
Operations; Staff Services

Employees 365



Geoff Appold, TRV

supply operation is oversight of sign making at the Texas Department of Criminal Justice's Beto Facility at Palestine. The quality and effectiveness of the operation became apparent when more than \$4 million worth of speed limit signs were delivered on time to the districts.

Meeting district and division needs is GSD's paramount goal. Sometimes it takes a major rethinking of processes and reorganization of personnel to meet that goal. The old Buildings and Real Estate Section became the new Facilities Management Section and took over all building services and building maintenance functions for the Austin headquarters offices.

The Facilities Management reorganization also included new strategies to improve district customer service. The state was divided into six geographic regions with a facilities project manager and staff dedicated to each district. In addition, a new concept was implemented where 18 regional architectural consultants

GSD's responsibilities include managing TxDOT properties. Here, division planners work with Travel and Information Division staff during a relocation meeting.

were hired to design and oversee new facility construction for the biennium.

A snapshot of TxDOT facilities was provided through the completion of a Condition Assessment and Space Utilization Study. This study enabled Facilities Management staff to implement a new long-range statewide facilities plan and prioritization strategy and to complete the 153-square-foot compliance plan. ★

Human Resources Division

High-quality customer service guided the programs and projects implemented by the Human Resources Division (HRD) in 1996.

The division launched the Human Resources Management (HRM) Overview Program to provide an introductory overview of HRM's roles and responsibilities to human resources officers, division administrative managers, directors of administration and other professionals who administer human resources (HR) and related programs.

The two-day partnering meeting with division administrative managers and directors of administration resulted in action plans to address issues such as educating supervisors about policies, increasing involvement of districts in HR policy and program development, and communication between districts and divisions. In response to suggestions received at the meeting, HRD began publishing the TxDOT Employment Practices Bulletin in August '96.

Director Cathy J. Williams, PHR

Main number (512) 706-6300

Sections Administrative Management; Classification and Staffing; Employment Opportunities; Personnel Administration; Employee Relations; Training and Development

Employees 118

Three phases of the HR Retooling project were completed in 1996. About 400 department employees participated in visioning workshops, surveys, design teams and the Retooling core team. In April '96, the Business Process Retooling Phase 3 Report was published. The report recommends the following Business Improvement Projects (BIPs), some of which already have been implemented:

- Employee Personal/Payroll Records Updating Process,
- Employee Feedback Process, entailing a new performance planning and evaluation system, TxDOT Achievement Management System (TEAMS),
- Restructuring the classification process to make job descriptions broader and compensation rules more flexible,
- Employee satisfaction measurement process to include procedures for assessing employee satisfaction,
- Training and Development including consolidation of all department training functions and enhancement of the training process,
- HR policies and procedures to improve the process for developing and disseminating policies and procedures,
- Employment process improvement and acquisition of a new automated employment system, and
- HR quality assessment and reporting system to provide statistics to HR management and the Management Team.

The Administrative Management and Classification sections coordinated to put TxDOT Job Vacancy Notices (JVNs) on the Internet.

Geographic Classification Liaison Teams were established to enhance customer service to districts, divisions and special offices. The focus is to provide human resource personnel, supervisors and managers with advice and guidance on JVNs, promotions, reclassifications and classification issues.

During fiscal '96, employees received

more than \$10,000 in incentive bonus payments and certificates. Employees' suggestions saved the department \$304,358.44. The Texas Incentive and Productivity Commission devoted the entire September '96 issue of *The Incentive* to TxDOT's State Employee Incentive Program because of the program's progress and quality.

The Transportation and Civil Engineers (TRAC) program was launched in August '96 in 10 Austin-area high schools with a 50 percent or more minority population during the 1996-97 school year. The program aims to recruit more quality students for transportation professions and addresses the need for greater diversity within the work force. TRAC sends teams of TxDOT engineers to assist students in using a TRAC PAC, which consists of a computer, lab equipment and more than two dozen hands-on activities based on real-world transportation problems. In June and July '96, TxDOT trained 20 engineer volunteers and 16 teacher coordinators for the TRAC program.

The Conditional Grant Program expanded Sept. 1, 1995, to include nonengineering disciplines and nonminority females. As of September '96, 158 people were participating in the 2-94 Temporary Recruitment Program. Since the program began in March '94, the department has hired 134 participants to regular full-time positions.

The Statewide Voice Response System (1-800 JOBLINE) went into operation in November '95.

The new courses offered by the Training and Development Section in FY '96 included:

- **Management Skills for Success:** This first course in TxDOT's Management Program was created for first-line managers/supervisors with emphasis on personal and time management, customer service, management/leadership styles and group dynamics,
- **Progressive Discipline:** A highly inter-

active course designed to teach TxDOT's progressive discipline policy and procedures to supervisors and managers, and

- **Leadership Through Continuous Improvement:** This second course in TxDOT's Management Program will be available in early 1997 and will provide information to assist managers in developing additional leadership skills.

Most of the efforts of the Personnel Administration Section in 1996 have been devoted to the decentralization of personnel and insurance transactions. Districts, divisions and special offices have the authority and responsibility to manage personnel and insurance transactions. This was a recommendation from the HR Retooling project. HRD trained 143 employees to process their own personnel and insurance transactions. ★

Information Systems Division

The Information Systems Division (ISD) provides information services to support TxDOT's administrative and engineering business functions. The division manages and operates TxDOT's central computer, software and network facilities. ISD provides information systems and the technical expertise to help department personnel use them. The division also manages telecommunications systems and provides photogrammetry services.

In October '95, the Senior Management Team approved ISD's recommendation to install GEOPAK civil design software for roadway design. Begun in 1993, this project provides TxDOT a standard civil engineering software.

ISD began training the 350 users in all 25 districts and four divisions. At full implementation of GEOPAK in fiscal '98, the number of engineering users is expected to increase to 2,000.

ISD technicians continued to develop and implement the Registration and Titling System (RTS). RTS is an automated point-of-sale system used by county tax collectors and their agents to register and title motor vehicles. When fully implemented, the system will serve more than 400 production offices. Approximately 125 microcomputer programs and 400 mainframe programs have been developed for RTS. More than 1,600 workstations have been installed in 234 counties statewide. Full implementation is scheduled for March '97.

Director Judy Skeen, P.E.

Main number (512) 465-7394

Sections Operations Systems and Telecommunications; Information Resources Planning and Security; Systems Coordination and User Support; Administrative Support; Business Systems Development and Support; Engineering and Survey Systems Support

Employees 360

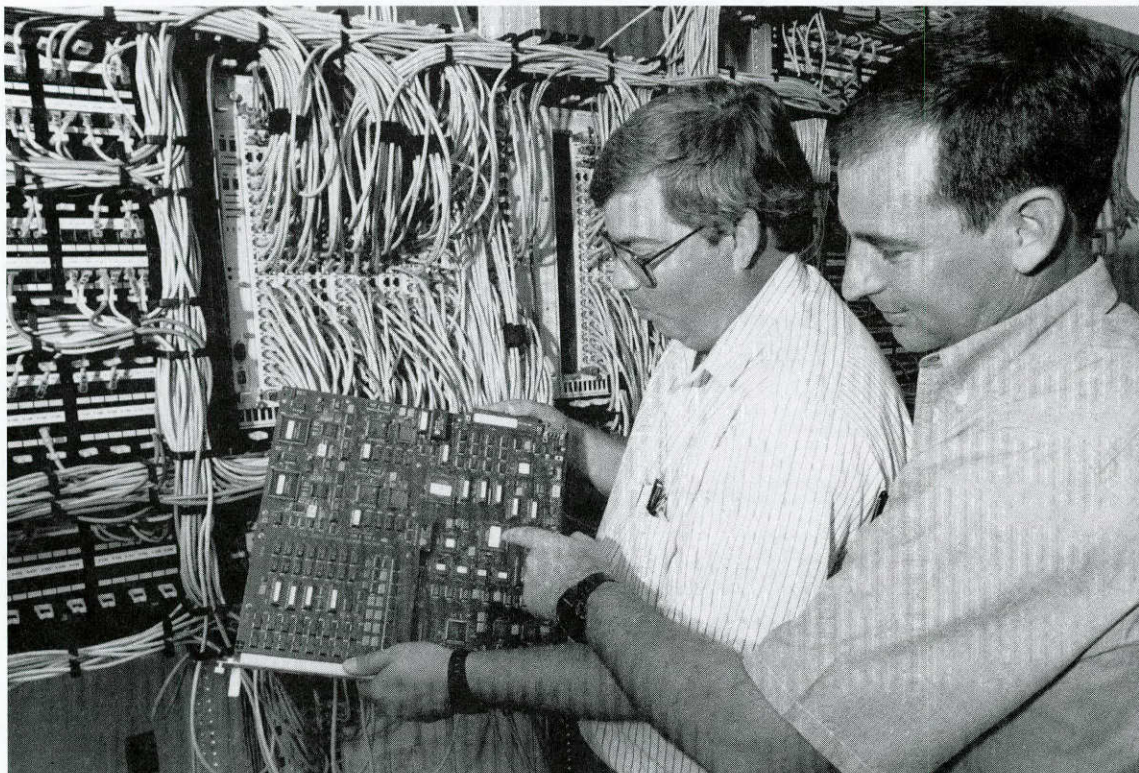
A new IBM 9021-962 mainframe processor was successfully installed at the central computer site in Austin. This computer can process 310 million instructions per second (MIPS) and has more than 1 gigabyte of main storage and 1 gigabyte of expanded storage. This additional processing capacity has provided significant improvements in the response time of on-line applications and the turnaround time of the batch workload.

An Internet Web server has been installed successfully at ISD and provides TxDOT-related information to a worldwide audience. An Internet FTP (file transfer protocol) server also has been installed and provides additional information to other government agencies and the public.

Local area networks (LANs) have been implemented in all districts and Austin headquarters. The TxDOT statewide LAN implementation will enhance the planning, implementation and coordination of office automation tools to support department information exchange. About 60 Novell file servers, 300 intelligent hubs and 5,000 workstations have been connected to TxDOT's enterprisewide LAN.

GroupWise, TxDOT's statewide e-mail system, was established in all districts and Austin headquarters. Sixty e-mail post offices and 5,000 user mailboxes deliver approximately 100,000 e-mail messages daily.

ISD continues its efforts to be prepared should a disaster cripple TxDOT's computer and communication operations. In June '96, a mainframe hot-site exercise successfully restored the TxDOT central site data center at the hot site in Philadelphia, Pa. As part of the exercise, the data network for the Wichita Falls, Dallas and El Paso districts was switched to the hot-site location without adversely affecting users in those locations. Approximately 40 ISD employees operated the hot site from the Austin Disaster Recovery Operations Center.



Stan Williams, TRV

The department's lights-dim project to reduce the requirement for manual intervention in the processing of mainframe applications continues to make progress. A project to automate the department's mainframe tape processing has reduced the manual handling of tapes and improved the throughput of batch workloads. The total number of third-shift operator-assisted tape mounts was reduced from an average of 300 per night to between 25-100 per night.

With the installation of PBXs in the Atlanta, Brownwood and Odessa districts, ISD completed the transition from analog to digital PBXs. The completion of this major project set the stage for TxDOT to take advantage of emerging technologies, such as computer-telephony integration, ISDN and videoconferencing by standardizing the voice-telecommunications platform throughout TxDOT.

With the introduction of voice processing within TxDOT, individual voice mail

Chris Pratt, left, and Mitch Pope provide technical support for the department's statewide LAN, including intelligent communication hubs like this one.

boxes and interactive voice response applications such as the TxDOT 800 job-line now are possible. Five systems throughout Austin service the divisions and special offices. In addition, eight district have installed systems.

Documentation for the Online Document Viewing System (ODVS) has been distributed to districts and divisions. More than 300,000 pages of output a month so far have been converted to ODVS to reduce the need for storing physical listings and reduce the time needed to locate reports and the specific data within them. *

International Relations Office

The International Relations Office (IRO) played a vital role in the Joint Working Committee (JWC) and the associated \$2.5 million binational border transportation study. JWC delegates developed a detailed scope of work for the study. In addition to initial data gathering and analysis, consultants provided computer hardware and Internet connections to Mexican border states to improve cross-border communication. To assist with this effort, IRO sponsored an Internet training course for Mexican engineers in El Paso in April '96.

Another JWC initiative was setting up state-level technology and information exchange between the United States and Mexican border states. At TxDOT, IRO expanded the Border Technology Exchange Program (BTEP). This program is funded through grants by the Federal Highway Administration (FHWA) and in-kind state contributions.

One of the most innovative technology exchange activities undertaken by IRO is Value Engineering (VE), a process which enables engineering teams to maximize the value of transportation projects. Usually, VE involves a multidisciplinary

team of professionals who examine all aspects of a transportation project. Much of the work is aimed at improving the quality of projects and their ease of use by consumers. In most cases, teams identify significant cost savings as well.

In 1995, IRO joined the Design Division (DES) to sponsor two VE workshops. Engineers, including TxDOT employees, from all 10 U.S. and Mexican border states attended. These workshops were followed by VE training in El Paso and Laredo in November '95. During the Laredo course, a team of TxDOT and Mexican engineers performed a small VE study on a proposed international bridge. They recommended many significant improvements while finding cost savings of more than \$500,000.

In January '96, the Pharr District, in conjunction with DES and IRO, carried out the first full VE study on the U.S. 77/83 interchange. For the first time, Mexican engineers observed a study at all stages. The team recommended \$7 million in savings on a \$42 million project while improving the overall quality of the interchange. The unprecedented success of the Pharr study led to additional requests for VE studies by the Mexican border states of Chihuahua and Tamaulipas. In April '96, IRO and DES sponsored a VE study in Chihuahua, with the combined participation of TxDOT, FHWA engineers and 10 engineers from Chihuahua in the fields of roadway design, structures, traffic operations, pavement design, geotechnics and highway financing. The team evaluated a proposed 33 kilometer bypass project planned as a toll road around Chihuahua. The proposed limited-access highway would reroute traffic around sensitive areas of the city, including residential areas and schools.

According to Chihuahuan officials, the improvements recommended by the study exceeded all expectations. One such recommendation developed by the team

Director Henry Nevarés Jr.
Main number (512) 475-0716
Employees 7



involved construction of an at-grade railroad crossing rather than an overpass in one location due to the limited number of trains each day. This recommendation reduced the cost of the project by more than \$1 million. In addition, the team recommended a phased approach to construction, especially in regard to river and railroad crossings. This two-part construction process could reduce construction costs due to the amortization of initial bonds as the second phase is under construction. Overall, the VE team made recommendations resulting in nearly \$4 million in cost savings on a \$23 million project. Chihuahuan officials, including the director of communications and public works and the governor, were impressed by the results and the spirit of binational cooperation shown by the VE team.

IRO plans to continue fostering joint VE studies in other Mexican border states. VE represents one of the most persuasive arguments for technology and information exchange due to practical cost savings and tangible results. With VE, improvements

During an IRO-sponsored Value Engineering course in Laredo, a team of TxDOT and Mexican engineers studied a proposed international bridge. Partnering efforts such as this help improve efficiency at ports of entry like this one at Laredo.

and cost savings in the field can be combined with reduced project construction times. Greater project efficiency is achieved through increased planning and cooperation among project engineers and objective participants. This cooperative international effort is indeed a model example as TxDOT seek ways to develop a Texas-Mexico ongoing planning and programming process. ★

Legislative Affairs Office

The Legislative Affairs Office (LAO) monitors state executive, legislative and congressional activities and identifies proposed bills that may have an impact on the department.

LAO coordinates the analysis of proposed legislation, rules and regulations for departmentwide response. The office also develops and coordinates TxDOT's responses to requests from state and federal legislators, executive branch members, the general public and legislative agencies, such as the Legislative Budget Board. LAO assists the Texas Transportation Commission and Senior Management Team members in developing testimony for hearings.

The Federal Legislative Section worked closely with Executive Director Bill Burnett in his 1996 role as president of the American Association of Highway and Transportation Officials (AASHTO). Under Burnett's guidance, AASHTO established its position on the 1997 reauthorization of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). Burnett represented AASHTO before U.S. House and Senate committees on numerous occasions in 1996.

To prepare TxDOT for the challenge of 1997's ISTEA reauthorization, Staff Services Director Russell Harding and LAO worked with the STEP 21 Coalition, a group of other like-minded state departments of transportation seeking greater

equity in highway funding distribution. To define the debate, U.S. Rep. Tom DeLay of Houston introduced the STEP 21 Coalition's legislation, the ISTEA Integrity Restoration Act of 1996. If ISTEA used the objective formulas under this bill, Texas would have seen an average of \$165 million more per year in funding. U.S. Sen. John Warner of Virginia plans to introduce the companion legislation in the Senate.

To experience the repercussion of trade traffic that Texas must bear on behalf of the nation, Commissioner of Transportation David Laney invited members of the House Subcommittee on Surface Transportation to visit Texas' border area. As a result, the subcommittee came to Texas for the only hearings conducted outside of Washington, D.C. Laney spoke in Laredo; Burnett addressed specific border needs at the McAllen hearing.

The most important test facing the State Legislative Section has been the Sunset Commission's review of the department. Under the direction of the State Legislative Section, the entire department worked to provide the Sunset Commission with an accurate picture of the challenges TxDOT faces. The result thus far has been solid recommendations that will aid TxDOT in its day-to-day operations. The Sunset bill will be introduced in the Texas House and Senate at the beginning of the 75th Session of the Texas Legislature this year.

The State Legislative Sections has monitored multiple hearings held by the Legislature during the months between sessions. State analysts prepared testimony for both Commissioners and Senior Management Team members and worked closely with lawmakers and their staffs on initiatives. In addition to establishing schedules to implement legislation that passed in 1995, the section worked with the districts, divisions and special offices while researching issues significant to TxDOT that may arise during the next legislative session. ★

Director Coby Chase

Main number (512) 463-6086

Sections State Legislative; Federal Legislative

Employees 12

Management Services Office

The Management Services Office (MAN) helps TxDOT manage strategically, including coordinating the most comprehensive, multimodal assessment of Texas' transportation needs ever conducted by the department.

The detailed scenarios developed allow the Texas Transportation Commission and the Senior Management Team (SMT) to present the department's funding posture to state and federal officials and other audiences.

MAN coordinated development of the 1996 TxDOT Strategic Plan, more fully integrating it with the Legislative Appropriations Request and the Texas Transportation Plan. This year, MAN will offer workshops on developing business plans at the district, division and special office level that complement and allow for better implementation of the Strategic Plan. Employees also are incorporating strategic planning into TxDOT leadership classes.

MAN conducted specialized analyses for the SMT, including proposals for an Advanced Intermodal Research Center and an intermodal/multimodal cargo-tracking information system. The staff also reviews policies and procedures and conducts organizational analyses, such as the Optimum Department Staffing Task Force. MAN developed a database of TxDOT committees and task forces and regularly updates it to assist the SMT in making assignments.

Employees played key roles in conducting research and providing in-depth analysis for Management Team issue committees on topics such as becoming a true DOT. Through TxDOT's cooperative

research program, MAN addresses alternative transportation financing and optimum resource allocation.

MAN also provided support to the Transportation Systems Efficiency Advisory Committee (TSEAC), a private-sector group which make recommendations on cost-effectiveness and efficiencies to the Texas Transportation Commission.

MAN works with other divisions and special offices to refine performance measures and conclude which are the most critical to the department's success.

MAN partnered with Texas Southern University (TSU) to survey the general public, metropolitan planning organizations and other transportation stakeholders, and to conduct employee focus groups.

Another initiative involves integrating and analyzing employee input on improving operations and effectiveness. This includes biannual surveys conducted by the University of Texas School of Social Work, Management Team and employee surveys conducted by the TSEAC, the Report Card Survey from the 1994 Transportation Conference, Retooling TxDOT inputs, and results of focus groups conducted by TSU.

The Internal Policy Section, which moved from the Legislative Affairs Office in 1995, gives employees information essential to their job performance.

Department manuals were distributed on-line during fall '96 in concert with the Information Systems Division and manual developers. The system's attributes include ease of reading, retrieval capability, and archival features for historical and legal purposes.

Development of the TxDOT glossary is under way. This is a source of department-wide business terms, definitions, abbreviations and acronyms. Better communication and improved effectiveness of searches on the on-line manual system are among the glossary's benefits. ★

Director Joanne Walsh

Main number (512) 463-6087

Sections Strategic Management; Special Projects; Internal Policy

Employees 16

Materials and Tests Division

The mission of the Materials and Tests Division (MAT) is to serve as a cornerstone for materials quality for the Texas transportation system by providing service and expertise in materials technology.

The division strives to be a leader in materials technology as applied to design, construction and maintenance, and has the technical expertise to meet the changing materials needs of the Texas transportation system.

The division's 200 employees are divided equally between field and Austin-area operations.

The Austin office includes nine laboratory sections that test construction and maintenance materials, and administrative and technical functions to support the division's operations. Laboratory sections test more than 41,000 individual materials samples each year.

Field operations include in-plant inspection of structural members, sampling of various construction and maintenance materials, and inspection of limestone rock asphalt, bituminous mixtures and surfacing aggregates in commercial plants.

The division leads the department in the development of Quality Control/Quality Assurance (QC/QA) specifications in concrete pavement, asphalt binder, precast concrete, structural steel and lighting fixtures.

MAT works with the Texas Natural

Resource Conservation Commission (TNRCC) and the Federal Highway Administration (FHWA) on roadway recycling specifications, ground granulated blast furnace slag and partnering to reduce bureaucracy associated with recyclable materials. Everything from crushed bathtubs and toilets to crushed glass, bottle caps, ground-up rubber tires and carpet remnants is being researched for inclusion in recycled pavement mixtures.

In August '96, MAT's Bituminous and Asphalt sections moved to a new state-of-the-art Superpave Center in Austin, a result of combined efforts by TxDOT, the University of Texas and the Texas Transportation Institute. Superpave, considered the asphalt mix design method for the 21st century, is the overall asphalt mixture design and performance prediction system developed by the Strategic Highway Research Program (SHRP), and addresses both asphalt binders and bituminous mixtures. The center is one of five regional centers in the nation, established through a government/industry partnership.

The initial objective is to evaluate the basic mix design procedure, including production of Superpave mix designs to be used in upcoming overlay projects. Next, MAT will evaluate the Superpave shear tester and the indirect tensile tester to predict the performance of Superpave mixes. Data from the centers will answer questions about how various materials can be used. The centers will offer technical assistance, training on equipment ruggedness, training on Superpave mixture and binder and laboratory testing on a regional basis. The Superpave centers' success hinges on the cooperation between state departments of transportation, asphalt user-producer groups, universities and industry.

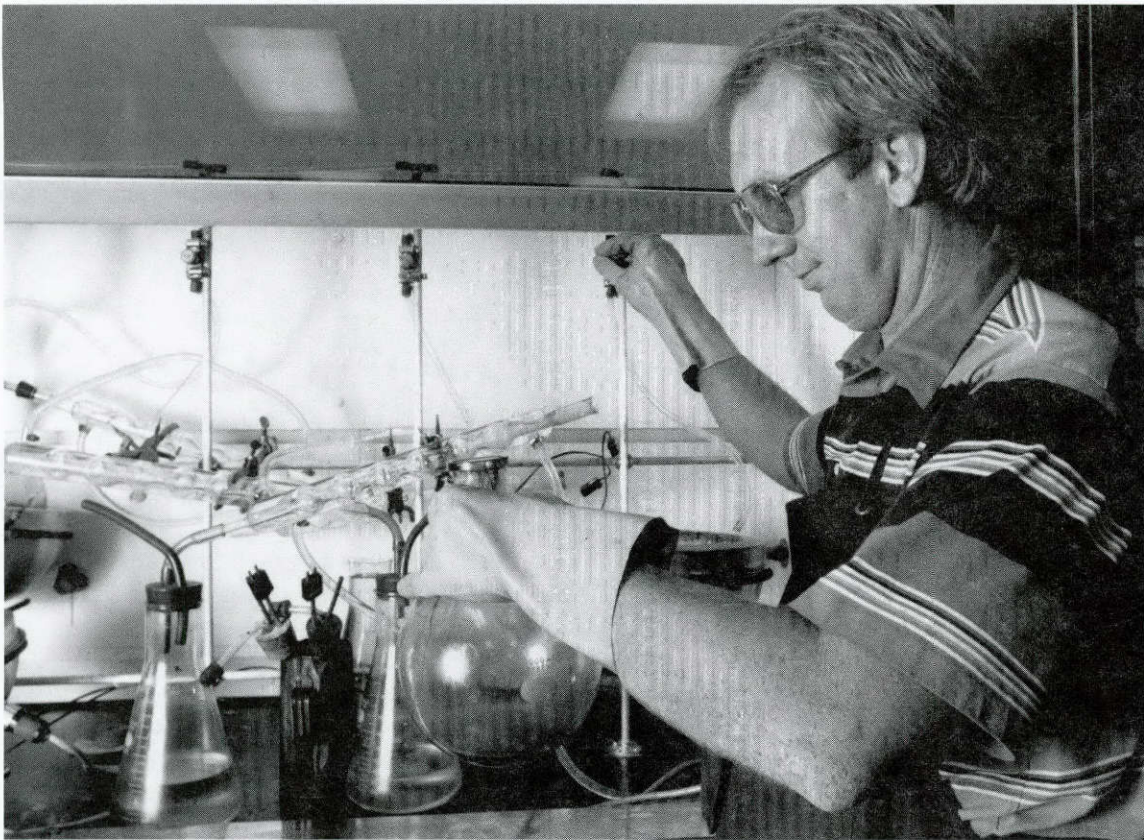
Darren Hazlett of the Asphalt and Chemical sections serves as chairman of the TxDOT Technical Working Group (TWG) evaluating asphalt products from

Director Katherine L. Holtz, P.E.

Main number (512) 465-7398

Sections Administration; Asphalt/Chemical; Bituminous; Business Management; Calibration; Chemical Instrumentation; Coatings/Traffic Materials; Concrete/Cement; Miscellaneous Product Fabrication; Precast Concrete Fabrication; Soils/Aggregates; Structural Operations; Structural Steel Fabrication; Traffic Systems/Illumination

Employees 200



Gay Stackelford, TRV

SHRP. The main product under evaluation for implementation is Superpave. TWG is conducting field trials of a specification to implement Superpave Binder Specification using a QC/QA approach.

The Business Management Section is active in conforming the national Construction Management System to departmental needs.

The Cement Section and the Chemistry Laboratory each have robots to perform monotonous tests requiring precision.

The Soils and Aggregates Section uses a

Ray Collins of MAT's Asphalt/Chemical Section runs an abscon recovery test at the division's new Superpave Center in Austin.

microscope to display test sample composites on a computer monitor and prints out the calculated results.

MAT employees use the latest technology and innovation in testing materials to ensure that Texas roads provide the quality needed to transport people and goods safely into the next century. ★

Motor Carrier Division

The Motor Carrier Division (MCD), created in 1995, consolidated transportation duties, replacing TxDOT's Central Permit Office and incorporating many duties of the Texas Railroad Commission.

MCD issues oversize/overweight permits, 72/144-hour permits and one-trip registrations, issues commercial motor carrier credentials, records motor carrier insurance filings, licenses vehicle storage facilities, issues operating registrations to international motor carriers, files performance bonds for transportation brokers, provides complaint resolution/arbitration between household goods carriers and their customers, and assesses administrative penalties for violations of motor carrier laws and department rules.

The division uses an 800 number to provide its service-focused approach. MCD partnered with other divisions and state agencies to give callers more options, including direct access to other areas of interest and regulation. Direct connections are available to TxDOT's Vehicle Titles and Registration Division, the Texas State Comptroller of Public Accounts' Office and the Texas Department of Public Safety.

MCD employees established a functioning division from two agencies without interrupting customer service. A 10 percent increase in oversize/overweight permits and a 137 percent increase in over-axle/over-gross weight permits between 1991-95 compounded this challenge. MCD employees responded to approximately



Carol Vinton, MCD

The Motor Carrier Division uses a toll-free 800 number to provide user-friendly, customer-oriented service.

2,000 permit-related requests daily during fiscal 1996.

MCD uses an automated system to issue motor carrier credentials and oversize/overweight permits. The system provides high-performance customer service and is one of the most advanced systems in the United States. This system helped the Commercial Vehicle Operations Branch issue credentials to more than 33,000 motor carriers with more than 266,000 vehicles during fiscal '96.

One component of the motor carrier credentialing system is the FileNet imaging project, which will reduce paperwork by 90 percent. MCD's automation enhancements represent TxDOT's first effort toward complete end-user application program development.

MCD's Compliance and Enforcement Branch is the first line of contact for public complaints or inquiry about motor carriers or vehicle storage facilities, and averages 600 phone calls per week.

Approximately 43 percent of these complaints result in formal investigation. Investigations are handled by Austin-area investigators and employees in four field offices. ★

Director Lawrance R. Smith
Main number (512) 465-3500
Sections Administrative Support;
 Commercial Vehicle Operations;
 Compliance and Enforcement; Human
 Resources; Technical Support;
 Oversize/Overweight Permit Operations
Employees 111

Motor Vehicle Division

The four sections of the Motor Vehicle Division (MVD) ensure a sound system of distributing and selling motor vehicles in Texas through licensing and regulating manufacturers, distributors, converters and vehicle dealers. The division issues the licenses necessary to market new and used vehicles in Texas, as well as dealer, manufacturer and in-transit plates.

The Administrative Section receives and processes complaints filed against a licensee by another. During fiscal '96, the Administrative Section docketed 31 complex contested cases, held 23 hearings and, including previous years' pending cases, issued seven decisions and settled 29 cases.

The Licensing Section issued 22,215 licenses and collected more than \$1,475,000 in license fees. This section became responsible for licensing independent vehicle dealers and issuing dealer, manufacturer and in-transit plates.

The Enforcement Section, whose investigators and attorneys enforce and prosecute violators of laws relating to the marketing of motor vehicles, received more than 3,400 written complaints from consumers and licensees, representing a more than 500 percent increase from FY '95. There were 891 formal dockets filed, resulting in more than \$1.1 million in civil penalties being assessed. At the close of FY '96, \$919,600 of these penalties had been collected.

The Enforcement Section vigorously pursued consumer complaints involving odometer rollbacks and failure to provide titles. The section also joined local, state and federal agencies in a crackdown on

unlicensed dealers. The Enforcement Section negotiated more than \$82,000 in reimbursements to consumers, up from \$5,700 in FY '95.

The Consumer Affairs Section administers the Texas Lemon Law. The Lemon Law protects a consumer who has purchased a new motor vehicle with a defect or condition that creates a serious safety hazard or substantially impairs the vehicle's use or market value before the manufacturer's warranty expires. It also applies to a used vehicle if the manufacturer's written warranty is still in effect. If the manufacturer, converter or distributor is unable to conform the vehicle to an applicable express warranty within a reasonable number of attempts, MVD orders that the vehicle be repaired, replaced or repurchased.

During FY '96, the Consumer Affairs Section received and processed 1,207 complaints. Employees also participated in the production of a video titled "A Consumers Guide to the Texas Lemon Law," which is distributed to consumers who file a complaint. It also is used as a marketing tool by TV stations that promote public affairs. The video guides the viewer from the beginning of a problem with the vehicle through mediation with the help of a MVD consumer advisor to the hearing by an administrative law judge if the matter is not resolved. The Consumer Affairs Section also participated in TxDOT's public awareness booth at the State Fair of Texas by distributing literature and souvenirs to remind the public of Texas' Lemon Law. ★

Director Brett Bray

Main number (512) 505-5100

Sections Administration; Enforcement; Licensing; Consumer Affairs

Employees 65

Multimodal Operations Office

The Multimodal Operations Office (MMO) is responsible for project planning, policy and operations pertaining to water transportation, freight and passenger rail, bicycles and pedestrians. The office deals with issues affecting multimodal and intermodal planning in Texas and assesses current and future multimodal and intermodal demands.

Texas is one of the country's largest maritime states, with a dozen major seaports and more than 1,000 miles of inland waterways. Texas ports account for half of the state's foreign imports and exports. The Gulf Intracoastal Waterway (GIWW) contributes another 100 million tons of cargo, of which 70 percent moves along the Texas segment, making it the third busiest waterway in the nation. This translates into 17 percent of the state's gross product which is linked to water transportation.

The Waterways section coordinated its first Texas Ports and Waterways Conference. Conference topics included port development issues, opportunities and challenges for ports under the Intermodal Surface Transportation Efficiency Act, and the importance of rail to maritime activities.

MMO also conducted a Texas Ports/State Agencies Forum to improve communication and understanding between the Texas port industry and state agencies.

As GIWW's nonfederal sponsor in Texas, MMO became a member of two Interagency Coordination Teams (ICTs). As a member of the state/federal ICT for the Corpus Christi Bay to Port Isabel reach

of the waterway, TxDOT helps scope more than \$4 million in studies that evaluate the impacts of dredging and disposal in that region. The second ICT membership involves the implementation of the new, 50-year dredged material management plan for the waterway as it crosses the Aransas National Wildlife Refuge.

MMO provided support for the State Executive Advisory Committee for the waterway. The committee, chaired by TxDOT Executive Director Bill Burnett, strives to resolve critical and operational state issues affecting the waterway.

Texas ranks first among the states in railroad mileage, third in the number of individual rail companies, third in freight carloadings and is served by two Amtrak passenger trains. MMO's Rail Projects Section serves as the primary point of contact for rail passenger — intercity Amtrak and regional/commuter — issues. This section hosted a multistate forum to ascertain the public's views on Amtrak service.

The section also coordinates an origin-destination study of travel patterns in the Austin-San Antonio Interstate 35 transportation corridor which will be completed in 1997, to be followed by a commuter rail study to determine the feasibility of regional rail passenger trains for operation through Georgetown, Austin and San Antonio.

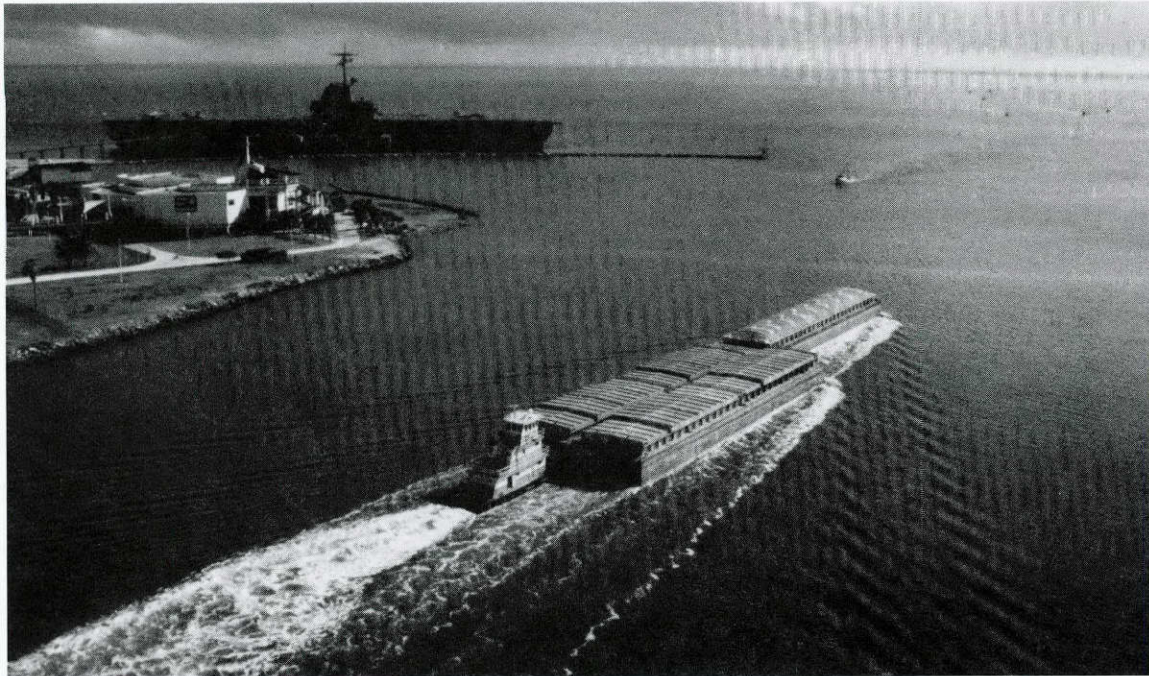
The section hosted the 24th annual meeting of AASHTO's Standing Committee on Rail Transportation. Rail Projects analyzed anticipated effects of the Union Pacific/Southern Pacific Railroad merger application filed in 1995 and made recommendations. Rail Projects assisted the creation of the Northeast Texas Rural Rail Transportation District (freight only) with technical assistance and guidance on obtaining state-appropriated funding. The section advises senior management, legislative staff and district offices regarding rail issues, including those involving right of way or track relocation. In addition, the

Director James L. Randall, P.E.

Main number (512) 416-2349

Sections Bicycle/Pedestrian; Gulf Intracoastal Waterway; Multimodal Projects; Rail Projects

Employees 8



CHH Boes, CPP

section co-chairs the Interagency Abandoned Rail Corridor Committee.

MMO's director chairs the Toll Facility Criteria Task Force. Established by Burnett, the task force is an internal TxDOT group charged with developing the initial criteria by which candidate toll facility projects will be identified.

Bicycle and pedestrian coordination is also part of MMO. Programs guarantee that these modes become a regular part of TxDOT's policies, programs and procedures.

The Texas Transportation Commission has recognized the importance of pedestrians and bicycles, especially in urban areas.

The Multimodal Operations Office is the nonfederal sponsor of the Texas portion of the Gulf Intercoastal Waterway, the third busiest waterway in the nation.

All district engineers have appointed a district bicycle coordinator. Input is provided by the state bicycle coordinator and TxDOT's Bicycle Advisory Committee. Six citizens appointed by the commission serve on the advisory committee and make recommendations on bicycle issues. ★

Occupational Safety Division

The Occupational Safety Division (OCC) is responsible for the department's self-insured workers' compensation insurance program, the employees' safety/industrial hygiene program, aspects of hazardous materials' involvement that affect employee safety and health, the resolution of tort claims against the department, and liability insurance for claims arising from motor-driven vehicle and road-building equipment use.

The lost-time injury rate is a key indicator in determining how well an organization controls on-the-job injuries. Compared to other state DOTs, TxDOT's lost-time injury rate is one of the lowest in the country. Fiscal '96 should have one of the lowest lost-time rates in the past 20 years.

The Workers' Compensation Section was streamlined and field representatives reduced to six. A new reporting system was implemented and a special instructional forms packet distributed in March '96.

Substance-abuse testing escalated, due primarily to the Human Resources decision to include safety-sensitive employees on the list of those requiring testing. There were 4,201 alcohol tests and drug specimens taken during '95, compared to 5,427 alcohol/drug tests given through July '96.

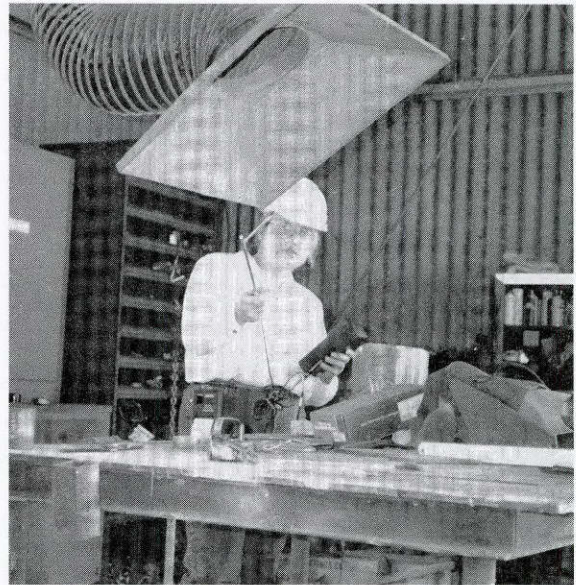
A new Information for Examining Physicians Manual for doctors giving pre-employment physicals has been upgraded. Copies are being provided to human resource officers and physicians who perform TxDOT's physicals.

Director Ed Sims

Main number (512) 416-3400

Sections Liability/Insurance Claims; Tort Claims; Workers' Compensation; Safety/Industrial Hygiene; Hazardous Materials/Automation

Employees 35



OCC industrial hygienist Rose Ann Lulewicz tests air flow in a welding shop exhaust system.

OCC revised and published the Occupational Safety Manual in August '95. New programs were included to reduce accidents and injuries.

OCC assisted in industrial hygiene testing, and expanded the role of the industrial hygienist, which resulted in task-specific evaluations of ergonomics in the workplace.

Training programs have been developed, such as Bloodborne Pathogen, Hazardous Materials Awareness, Crew Leader Accident Prevention and Safety Point of Contact Accident Prevention. OCC also participated in the Human Resources Division's Maintenance Supervisor Training in Austin and FY '97 New Employee Orientation Training for division and special office employees.

OCC continues to work with districts, divisions and special offices to make their safety programs stronger. The division conducted 16 safety/hazardous materials surveys and 11 requested briefings on OCC responsibilities for district supervisors. ★

Office of General Counsel

The Office of General Counsel (OGC) serves as chief legal counsel to all TxDOT offices, commission members, senior managers, management team members and their staffs.

OGC provides legal services in every functional area, running the gamut from construction and maintenance to human resources, civil rights, vehicle titles and registration, motor carriers and the environment. These multifaceted subjects can even include criminal and family law issues.

The office serves as TxDOT's official liaison with the Texas Secretary of State and the Texas Register. As the department formalizes its operating policies and procedures, OGC has played a key role in the required administrative rule-making process. Most recently, this has involved implementation of motor carrier regulation, international bridge permits, employee training and education, salvage dealer regulation and transportation corporation operations. To enhance the quality of TxDOT's administrative law position and to ensure compliance, OGC has provided monthly updated compilations of department rules to senior managers and is developing a process for continual review of existing rules to ensure their accuracy, relevance and validity.

Director Ed Shaddock
Main number (512) 463-8630
Employees 10



Gay Stackelford, TRV

As the department formalizes its operating policies and procedures, OGC has played a key role in the required administrative rulemaking process.

OGC continues to research and interpret previously enacted legislation and to assist in the development and review of proposed and enacted legislation. OGC coordinated the department's review of the recently enacted Transportation Code, which recodified the majority of transportation-related statutes into a single code, the first such recodification since 1925.

OGC lawyers preside over public hearings, certify open meetings notices and agendas, serve as counsel at advisory committee meetings, prepare requests for attorney general opinions and open records decisions, and respond to inquiries from the governor, the Legislature, other state agencies and local governments. ★

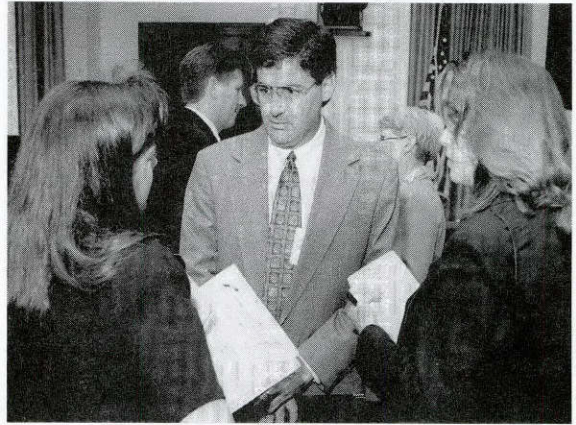
Public Information Office

Effective communication is the key to success. With that in mind, the department's Public Information Office (PIO) strives to communicate clear and accurate information about department programs and policies to its internal and external audiences.

The office hosted the 30th annual National Transportation Public Affairs Workshop in August '96, bringing together communication directors from 38 state DOTs, the American Association of State Highway and Transportation Officials, the Federal Highway Administration and the private sector for three days of professional development and breakout discussions. The workshop focused on issues key to transportation such as reauthorization of the Intermodal Surface Transportation Efficiency Act, public involvement and research. The 125 attendees from Texas and across the nation applauded the conference as important, relevant and educational.

With the University of Texas at Austin, the office sponsored a Public Relations Certification Course in May '95, the first of its kind for TxDOT and UT. Regular regional meetings, an annual business meeting at the Transportation Conference and biannual statewide conferences keep TxDOT's communication lines open and up to date.

The Media Relations Section participated in a UT-sponsored seminar on Open Records in October '96. This seminar brought a mixture of media representatives, legal experts and government



Randall Dillard, manager of PIO's Media Relations Section, talks to reporters following a meeting of the Texas Transportation Commission.

communicators to discuss ways to open channels of communication and understand the complex workings of the state's open records statutes.

PIO developed an employee training module, Effective Communication with the Media, to explain ethical and professional responsibilities when dealing with the news media. The office also published the department's Public Information Handbook which provides guidance in all areas of departmental communication.

The Community Relations Section studied the possibility of an Austin-area TxDOT volunteer program. The result was a plan to extend and recognize volunteer efforts of Austin-area employees. PIOs are participating in a retooling project to improve the department's statewide public involvement process. In order to improve the department's complaint resolution efforts, PIO implemented a statewide 800 telephone line to direct callers to the nearest district office for assistance.

The Organizational Communications Section publishes Transportation News, Pocket Facts, Management Team profiles, the Public Information Coordinator (PIC) and other publications aimed at department employees. ★

Director C. Eloise Lundgren
Main number (512) 463-8588
Sections Administrative; Community Relations; Media Relations; Organizational Communications
Employees 16

Public Transportation Division

To support and promote public transportation throughout Texas, the Public Transportation Division (PTN) embarked on a transit campaign in early 1995 that used a variety of marketing tools to raise awareness about the benefits of using public transportation.

Working with transit operators, metropolitan planning organizations, and other state and local agencies, PTN developed a statewide marketing plan that strengthened the division's customer service relationship with the transit industry.

Included in this partnering effort were plans for bolstering the Try Transit Week statewide promotional campaign held each May. Among the goals of Try Transit Week are educating Texas drivers about alternatives to driving alone and reducing the number of single-occupant vehicles (SOVs) on Texas roadways.

PTN's Try Transit Marketing Team developed an animated public service announcement (PSA) for television and distributed it to stations statewide to enhance public transportation use. This "Don't Be An S.O.V.!" PSA was conceived, produced and distributed with the support of the Texas Transit Association, the Austin metropolitan planning organization and the Houston Metropolitan Transit Authority.

The statewide marketing plan also included the development of a van pool promotion program using "commuter bucks" from Vanpool Services Inc. to provide commuters with an incentive to join van pools in Austin, Corpus Christi and Fort Worth. Commuter bucks were distributed to the appropriate transit agencies through the TxDOT public transportation coordinators in each of these districts.

One of the more innovative marketing tools the division recently used is the World Wide Web, giving Internet users instant access to information related to Texas transportation. The division created a home page in the fall of 1995 which provides updated information about transit funding, training classes, conferences, publications and other information about public transportation across the state.

Because the department is required to prepare a biennial report on projected public transportation financial and resource needs for the state Legislature, division staff compiled transit operator profile information to include in the Public Transportation Profiles and Projections Report 1998-2001.

For the first time, the division developed a level of service (LOS) concept for the plan and asked operators to describe the service that each provides based on service characteristics defined by the Transit Operators Advisory Committee. Operators then were asked to estimate how much it would cost to operate at each level of service. This process received the support of the Texas transit industry, as well as positive attention nationally.

To provide better customer service and to broaden department awareness of and involvement in transit activities, many public transportation functions that formerly were carried out by PTN have been shifted to the districts. Districts now process contracts between TxDOT and transit operators, and many other decisions previously made by the division are carried out by the districts. Meanwhile, PTN has shifted its focus to planning, marketing and education, and training and technical assistance. ★

Director Judy Byman

Main number (512) 416-2812

Sections Administrative; Planning; Grants

Employees 18

Research and Technology Transfer Office

The Research and Technology Transfer Office (RTT) is a key part of TxDOT's world-renowned research program. Since TxDOT began its formal research program in 1943, implemented research has influenced every mile of Texas' roads. On average, TxDOT coordinates \$10 million in research at state-supported universities, part of the nation's largest cooperative transportation research program.

The program has produced technologies to design, construct, maintain and operate a more economical, safer intermodal transportation system. In June '95, TxDOT radically changed the way it pursues research.

RTT restructured its research program to better coordinate and streamline the research cycle (less time from proposal to results), tailor findings to needs and projected trends, and emphasize implementation.

Coordination is vital to the program's success. No one can afford to duplicate research accidentally, yet coordination between related projects with different focuses can yield better results than if those same projects are performed separately. The new structure gives more opportunity to engineers and planners to select research projects.

RTT expanded the study areas from five to nine subjects; coordinated long-range research planning; moved decision-making authority downward; and created opportunities for innovative implementation.

The new program lets nine Research Management Committees (RMCs) choose what to study and to approve changes to projects. District engineers or division

directors chair the RMCs.

The Research Oversight Committee (ROC) replaces the R&D Committee, prioritizes RMC funding, oversees TxDOT's Long-Range Research Plan and fosters research program diversification.

Each RMC has a long-range plan. RMCs convene Technical Advisory Panels (TAPs) for input on long-range research plan topics. TAP membership consists of TxDOT personnel with expertise in specific topic areas, Federal Highway Administration personnel, university professors and researchers, local government officials and industry representatives.

Moving decision-making to the RMC level speeds action and improves decision quality. Expanding the committee study areas allows the RMCs to focus their efforts. This tighter focus should help get research findings into the field faster because the findings should be tailored to existing needs or projected trends. The creation of the role of program coordinator (PC) should keep research on track. The PC is an RMC member assigned to a long-range research goal and serves as a direct link between the RMC and all project directors whose projects fall under that goal.

The project director (PD) is the TxDOT employee responsible for overseeing the technical aspects of a research project. Under the revised research structure, the PD's role remains the same, but PDs now will promote and monitor the use of project findings for three years after the project ends.

Two innovative implementation strategies show promise:

- The Road to Recycling Project (9-1509) — More than 13 recycling projects from various RMCs are under one implementation umbrella; and
- "Know Your Vital Signs" Campaign (TTI 0-1261) — Several state agencies are cooperating for widespread implementation of TxDOT research results. ★

Director Jon Underwood

Main Number (512) 416-2901

Sections Administrative; Implementation/Engineering; Technology Transfer and Information Services

Employees 16

Right of Way Division

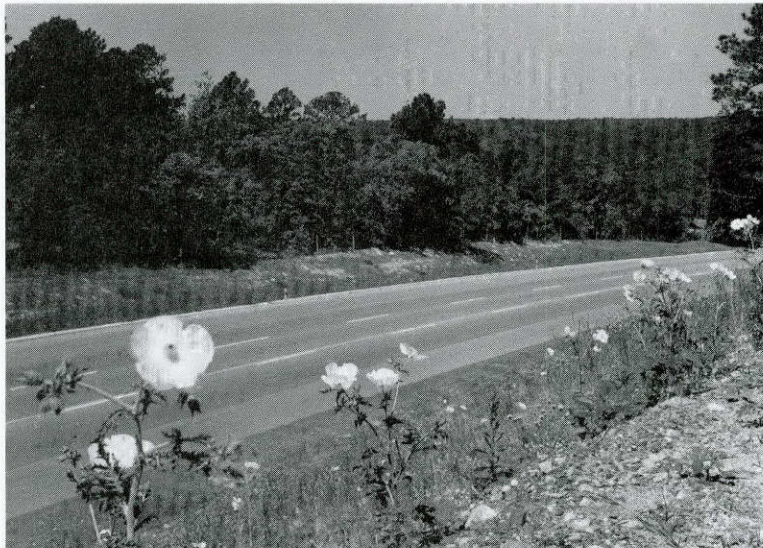
Bidding and letting contracts for consultant work are an everyday occurrence at TxDOT. Districts and divisions do it all the time. The use of consultants for the acquisition of needed right of way is, however, new to the Right of Way Division (ROW).

In the past, district and division right-of-way personnel were responsible for the acquisition process. This included functions such as surveying, preparing right-of-way maps and plats, appraisal work, negotiating with landowners, administering the relocation assistance program, sale of purchased improvements, and relocating or adjusting utilities.

For some time, ROW has explored the use of consultants to perform some — if not all — acquisition functions. Under federal guidelines, TxDOT maintains the responsibility to assure that the acquisition process complies with regulations and laws. ROW employees supervised, monitored and approved the consultants' work. Consultants would do most of the field work and other functions previously performed by TxDOT personnel.

The first step in the process was to contact the General Services Division (GSD) for a crash course in bidding procedures. GSD proved invaluable in getting ROW headed in the right direction.

The first contract bid and let to consultants for right-of-way work occurred in the San Antonio District. With this limited



Acquiring and maintaining right of way are vital to the department's operation. There are more than 1.3 million acres of right of way on the state system.

contract the consultant made initial contacts and offers to landowners on a project. The contract was completed successfully.

The next contract awarded was in the Paris District on a small 17-parcel project. This contract was significant because most acquisition functions were contracted out, marking the first time in ROW's history that consultants performed almost all acquisition functions. Other consultant contracts are scheduled to be awarded in the Waco and Dallas districts.

ROW supports the use of consultants for the acquisition of right of way as a method to aid the districts in accomplishing TxDOT's overall goal of building transportation systems as efficiently and economically as possible. ★

Director Gary Bernethy, P.E.

Main Number (512) 416-2901

Sections Appraisal, Engineering; Information Systems; Legal and Resource Management

Employees 54

Traffic Operations Division

The Traffic Operations Division (TRF) conveys the information people need to use the state's transportation system, and works to decrease the severity and number of traffic crashes by managing the state traffic safety program.

Its work affects not only motorists, but also users of commercial vehicles, railroads, pedestrians, bicycles and high-occupancy-vehicle lanes.

TRF's Railroad Section is working with districts to identify locations where highway traffic signals are pre-empted by or interconnected with railroad active warning devices. Efforts are also under way at these locations to see if there is enough time for traffic to clear the tracks before the train arrives at the crossing.

The Railroad Section also held a partnering session with Union Pacific Railroad, representatives from various TxDOT divisions and the Federal Highway Administration to develop and implement a process to install safety devices and other improvements at rail-highway intersections.

In November '95, the National Highway System Designation Act removed federal

speed limits on the state-maintained system. Working with the districts, the Traffic Engineering Section coordinated the effort to speed-zone all 77,000 miles on the system. As of September '96, all Texas highways had been speed-zoned and all new speed-limit signs had been put in place.

In summer 1996, the Traffic Engineering Section worked with the Public Information Office and the districts to kick off the "Give Us A Brake" campaign. Modeled after programs in other states, the campaign aims to raise awareness of the need for safety when approaching highway construction or maintenance zones.

The 74th Texas Legislature expanded the Logo Information Sign Program to cover all Interstate highways statewide except those in metropolitan areas. Working closely with the Office of General Counsel and the districts, the Traffic Engineering Section saw the number of Texas logo signs double to about 600 statewide.

The section also is revising barricade and construction standard sheets to incorporate Revision VI of the Texas Manual on Uniform Traffic Control Devices.

The Texas Transportation Commission adopted an Intelligent Transportation Systems (ITS) Deployment Strategy in May '96 to guide TxDOT in developing these systems. The Traffic Management Section worked closely with the ITS Committee to develop the strategy.

The division also has worked with the San Antonio District on the district's Model Deployment project implementation. The Model Deployment Program is a U.S. Department of Transportation initiative to demonstrate fully integrated intelligent transportation systems. San Antonio was selected as one of four Model Deployment sites nationwide.

The Traffic Management Section continues to work with several districts in the development of ITS systems.

Director David T. Newbern, P.E.

Main number (512) 416-3200

Sections Management Support; Railroad; Traffic Engineering; Traffic Management; Traffic Safety

Employees 117



Courtesy TRF

Charlie Comparini and Sherrill Schulle inspect a railroad signal installation, part of a process to install safety devices and other improvements at rail-highway intersections.

The I-10 Corridor Intelligent Transportation Study is under way in Texas and Louisiana and will be overseen by the Traffic Management Section. The study will examine appropriate ITS applications for freight movement in the corridor between New Orleans and San Antonio.

The Traffic Management Section directed the completion of a radio consultant

study, which recommended a number of improvements to the department radio communications systems. These recommendations will be implemented over a 10-year period.

The Texas Traffic Safety Program won several national awards, including the Administrator's Award of Excellence from the National Highway Traffic Safety Administration, a 1996 Buckle Up America Award from the American Coalition for Traffic Safety and two awards from the American Association of Motor Vehicle Administrators.

In fiscal '96, the Traffic Safety Section worked with district traffic safety specialists to award more than 500 Project Celebration grants. These small grants — usually around \$300 — are awarded to junior and senior high schools for alcohol- and drug-free end-of-the-year events.

The Traffic Safety Program also was very successful in obtaining grant funding. In fiscal 1996 the program received approximately \$500,000 in grants from private and public sources to augment the state's traffic safety efforts. ★

Transportation Planning and Programming Division

The Transportation Planning and Programming (TPP) Division completed several projects in 1995 and 1996 that contributed to the transportation system of Texas.

The Intermodal Section completed the first Texas Transportation Plan in January '95. The adopted plan comprises two elements: policy and technical analysis. In July '95, the Texas Transportation Commission adopted the first set of 77 actions, the other 133 actions were acted upon in 1996. The Multimodal Planning Team has lead in the implementation of the adopted actions.

The Programming and Scheduling Section held a statewide public hearing on the project selection process and received commission approval for the 1997 Unified

Transportation Program, the department's programming document for the next 10 years.

The section also significantly altered the contract construction program approval and announcement process. In the past, requests for allocation dollars in construction programs were prepared by the responsible division and sent to the commission at various times. This resulted in calls being sent to the districts whenever a new program was approved. Now, the commission receives the requests in one comprehensive program. By streamlining the approval process in this way, project development becomes solidified, federal funds are used efficiently and the intermodal transportation network in Texas is strengthened.

The Data Management Section supports the Texas Reference Marker System, which will become a cornerstone of TxDOT's Geographic Information System (GIS). This section keeps the automated county maps that serve as the GIS basemap current. In addition, this group administers the Highway Performance Monitoring System (HPMS). HPMS information is delivered to Congress annually and is the means by which TxDOT receives approximately \$1.2 billion, or about one-third, of its revenue. Data Management also certifies the public road network mileage to the Federal Highway Administration and the state treasurer for the distribution of road maintenance funds.

Maintaining and integrating the division's databases has become increasingly challenging as new and old technologies must be merged to produce comprehensive information for decision support. Linking the graphics and database information into an interdependent system is a major effort under way. Data Management recently began using Global Positioning Systems (GPS) data to update the automated maps.

The Traffic Analysis Section completed

Director Alvin R. Luedecke Jr., P.E.

Main number (512) 465-7346

Sections Administrative; Data Management; Intermodal Planning; Programming and Scheduling; Traffic Analysis

Employees 174



Stan Williams, TRV

Rodney Coursey sets an accumulative count recorder (ACR) on a highway ramp to count vehicle axles as they cross the tubing. More than 70,000 ACR counts are made around the state annually.

With all the emphasis being placed on the North American Free Trade Agreement, TPP is working on several feasibility studies on various corridors in the state. These studies include Corridor 20 (U.S. 59 from Texarkana to Laredo), a study from Lubbock to Interstate 10, and from Amarillo to the Texas border, and input into the Corridor 1 and 18 studies. ★

an extensive traffic count in Corpus Christi in 1996. This section also completed a travel survey for San Angelo to determine modes of travel to this city.

This section continues to improve the turnaround time for traffic data and analysis that the districts request. And, for the first time, in 1996 the section produced a statewide map depicting the locations of all permanent traffic data collection devices. This will enable the districts to know the locations of these devices when planning future construction projects.

Travel and Information Division

During 1995-96, the Travel and Information Division (TRV) worked to enhance the state's tourism program and entered into a memorandum of understanding (MOU) with the Texas Department of Commerce (TDOC) and Texas Parks and Wildlife Department. The MOU calls for a cooperative endeavor among the agencies involved in promoting Texas as a leading travel destination.

Information on traveling in Texas became available to the global community in September 1995 with the premier of an Internet Web site (<http://traveltex.com>). An interactive map allows viewers to pick from the seven Texas regions and access information through an indexed, electronic version of the Texas State Travel Guide, the Texas Calendar of Events and other sources. TxDOT and TDOC also produced an interactive Texas CD-ROM program, designed as a marketing piece to entice potential travelers.

The 12 Travel Information Centers (TICs) continue to provide front-line service to nearly 4 million visitors a year. All TICs are staffed by professional travel counselors who distribute travel literature and provide routing assistance and information on events, attractions, points of interest and road conditions. Emergency road condition information is also available on a toll-free 800 line. This service was upgraded recently to include automated response features as well as an option for Spanish-speaking callers. Travelers also can access road condition information via the Internet.

Plans are on the drawing board for new Information Center facilities in Orange,

Texarkana and Waskom. Travel counselors at the Wichita Falls TIC moved to a new building in July '96. The facility includes a deck overlooking the Wichita River and an audiovisual room.

In 1994 and 1995, TRV fulfilled more than 1 million inquiries for travel publications. These requests are generated by TDOC's tourism advertising, public inquiry and TxDOT's toll-free travel information line. Travel inquiries are fulfilled with the Texas map, Texas State Travel Guide and the Texas Accommodations Guide.

Several other travel publications were redesigned, including Texas: A Quick Look and the Texas Capitol Guide. The new Capitol Guide offers an overview of the restoration which was completed in 1995 and is full of facts about the Capitol's history and points of interest. Wildflowers of Texas and the Texas Campground Guide both have new designs as well.

As the official state travel magazine, Texas Highways is a major force in Texas tourism. The magazine won a certificate of appreciation in the 1995 National Historic Places & Landmarks Committee Contest and won the Gold Award for best photo feature and Bronze Award for best overall design from the International Regional Magazine Association.

Beginning with the July '96 issue, the single issue price for Texas Highways increased to \$3.50, and the annual subscription rate was raised to \$17.50. The rate increase allows the magazine to meet its legislative mandate of balancing costs with revenues, without compromising quality.

The Texas Highways Travel Passport program continues with more participating businesses than ever. Free to all paid subscribers, the passport card entitles its bearer to discounts at participating hotels, restaurants, tourist attractions and other businesses that cater to the traveling public.

Director Doris Howdeshell

Main number (512) 467-5900

Sections Audiovisual Production;
Automation Services; Travel Publications;
Travel Services

Employees 119



Geoff Appold, TRV

The division's Audiovisual Production Section provides photographic and video services to the department. Audiovisual materials and programs produced by the section reflect the department's high standards and enhance the services the division provides to the public.

The multimedia show "Transportation: the Vital Link," which opened the '95 Transportation Conference, was awarded Best of Texas certificate of merit from the Texas Public Relations Association. Two videos produced by the section also won awards in the last year: "Sam Spare Investigates" won first place in AASHTO's Public Affairs Skills Contest and two Ozone Action Day public service announcements received the Silver Reel at the International Television Association convention. The section's newest production, "A Bridge of Vision," documents the construction of the Hartman Bridge across the Houston Ship Channel.

Photographic archives, portraits, travel photography and documentation of department operations are housed in the division's Photo Library. The library's collection increased substantially in May '96 with the addition of slides formerly housed at TDOC's Tourism Division.

The department's litter prevention pro-

TRV travel counselors at the Wichita Falls TIC moved to a new building in July '96. The facility includes a deck overlooking the Wichita River and an audiovisual room.

gram celebrated several landmarks with the 10th anniversary of the Adopt-a-Highway program and the Don't Mess with Texas public awareness campaign. The programs joined forces on April 13, 1996 for the largest-ever Great Texas Trash-Off, in which an estimated 130,000 volunteers picked up 7.25 million gallons of litter. Four new Don't Mess with Texas public service announcements were produced in 1995 and 1996. ★

Vehicle Titles and Registration Division

The Vehicle Titles and Registration Division (VTR), largest of all TxDOT divisions with 449 employees statewide, is responsible for all motor vehicle registration and titling activities in Texas. The registration and title processes collect approximately \$2.4 billion: \$300 million to local county government, \$600 million to the state's Highway Fund and \$1.5 billion to the General Revenue Fund.

Fifteen million vehicles were registered in the state in 1995. Each year, VTR sends registration renewal notices at the rate of more than 1 million per month. Additionally, VTR offices — which include Austin and 17 regional offices around the state — get 1 million telephone inquiries per year, 500,000 customers enter division offices statewide and employees answer about 500,000 pieces of correspondence.

The state's 254 county tax assessor-collectors serve as statutory agents of the department as well as primary partners and customers. They issue motor vehicle registrations, accept title applications, and

collect and report applicable fees. Most counties now process these transactions with the Registration and Title System (RTS).

RTS is a point-of-sale system linking county tax offices to the department's mainframe. This eliminates many of the steps that were once necessary to complete a vehicle registration or titling transaction. The automated system leads to immediate results, such as updating registration records within 48 hours. VTR also now can issue a vehicle title within five days of receiving an application. With RTS, the department can provide current, accurate information to law enforcement and other users of motor vehicle data. Statewide implementation of RTS should be completed early this year — with 2,200 workstations in 400 locations.

Motorists who want to personalize their vehicles purchase vanity license plates through VTR. The collegiate specialty plates are popular, too, along with those for antique vehicles and those recognizing Purple Heart recipients. In 1995, the Legislature approved several additional specialty plates, including those recognizing the Olympics, Legion of Valor honorees, and peace officers killed or wounded in the line of duty. The division's Special Plates Branch processes 151,000 renewals for specialty license tags and receives 41,000 new applications annually.

As part of its ongoing dedication to customer service, VTR redesigned the registration renewal notice, making it easier to read. Other improvements include a customer receipt, the tax assessor-collector's name and phone number, and a return envelope. Each renewal notice features a bar code that, in future, will make it easier for the county tax offices to process. VTR will begin distributing the redesigned renewal notices in spring 1997.

The division also plays a role in international matters, particularly the North American Free Trade Agreement

Director Jerry L. Dike

Main number

Sections Administration; Customer Information Services; Field Operations; Human Resources; Internal Review; Management Support; Microcomputer Support; Operations; Production Data Control; Public Information; Registration Audit; Registration and Title System; Special Plates; Special Services; Title Control System; Vehicle Data Management

Employees 449



Michael Amador, TRV

(NAFTA). Legislation gave VTR the responsibility to issue annual registration and temporary permits to Mexican motor carriers and commercial vehicles that enter Texas. VTR employees have participated in many meetings along the state's border cities to educate and inform residents from the United States and Mexico on matters of registration compliance and other related issues.

Internally, VTR uses Continuous Improvement (CI) to be more efficient with its limited resources. Employees are involved in several ongoing teams covering topics such as employee morale, special plate registration and staggered apportionment registration. VTR managers have studied their operations closely to learn the best ways of meeting growing customer-service demands.

Employees in VTR's Special Plates Branch process 151,000 renewals for specialty license tags annually, and receive 41,000 new applications. Pictured from left to right are Robert Haapanen, Diane Wolfe and Delia Rodriguez.

VTR uses the department's high level of standards in strategic planning as a benchmark to serve its large customer base. Employees make every effort to ensure the public gets the attention and service it deserves and has come to expect from TxDOT. ★

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