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97-355

April 1997 Volume 22 Number 8 *

Beautification more than just bluebonnets

Meredith Whitten

Public Information Office

While bluebonnets get the most press, TxDOT's beautification efforts include more than just wildflowers.

In addition to the thousands of pounds of wildflower seed planted annually along Texas highways, the department is also a fervent tree planter.

In 1996, TxDOT planted 6,494 trees statewide. And while they don't play as obvious a role as wildflowers and grasses in vegetation management, trees serve a valuable function in Texas' transportation system. This is especially true in urban areas where miles of concrete turn cities into heat sinks.

"Because there is so much concrete and heat associated with urban construction, we like to plant trees and shrubs to soften that effect," said Craig Steffens, TxDOT's director of landscape design.

April 22 Earth Day

First celebrated 27 years ago, with the message "Give Earth a Chance." Celebrated annually, this day focuses attention on reclaiming the purity of the air, water and living environment on our planet.

April 25 National Arbor Day

The last Friday in April is reserved for providing Americans with the opportunity to learn more about the importance of trees in our environment.

Patrick Haigh, Dallas District landscape architect, said that the department is in a unique position to plant trees because of the large amount of right of way TxDOT maintains.

"Urbanization in general tends to remove trees," Haigh said. "But the large area comprising highway rights of way offers greater opportunities for tree planting."

Trees also provide a vertical element to miles and miles of flat roadway.

"Drivers can get 'highway hypnosis' so trees break up

the landscape," said Barrie Cogburn, landscape architect in the Design Division. "We place trees at established focal points, or we can decide what we want the driver to see and frame those views."

The department spends an average of \$10 million a year on trees and shrubs. "We plant big trees, so it's quite an investment," Steffens said. TxDOT tries to use native trees, such as Spanish oaks, live oaks and cedar elms and non-natives, such as crepe myrtles and Bradford pears, that adapt well. The trees are worked into the design of specific projects.

Trees require a lengthy establishment time. For the first two or three years, the department uses a temporary drip system to get the trees going. But once established, trees require little upkeep.

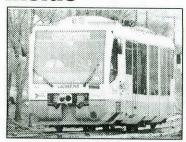
"They're not low-growing, so you don't have to worry about someone mowing through them, and for the most part they require no pruning," said Cogburn.

Haigh agreed. "Their impact is not just immediate," he said. "Wildflowers are short-term, but the cost (of planting trees) is justified by the long-term benefits." *



Trees, like the dogwoods framing these picnickers, are a vital part of TxDOT's beautification efforts. In urban areas, trees can help mitigate the heat-retaining efforts of concrete. In rural areas, they add visual interest and help fight "highway hypnosis."

Inside



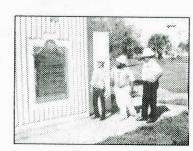
Capitol Metro gave Austin a taste of what a light rail system would be like.

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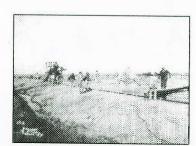


ISD's Photogrammetry Branch has been Retooled, and it's open and ready for business.





Laredo's San Dario Street project was just one Total Quality Initiative Award winner. Page 7



Take a trip back in time as we commemorate the department's 80th anniversary.

Page



These days, given all the public's caterwauling about inefficient, public-sector omnivores such as us, it behooves an agency to determine how it can improve efficiency. We were asked the question "How can TxDOT improve delivery of transportation services or reduce costs?" in a survey provided in early August 1996. It was additionally stated that survey responses would be made known to us in Transportation News.

As of today, seven months have elapsed. Would you please advise as to the status of this investigation? Surely, as a minimum, a summary of survey responses has by now been compiled.

What with today's public attitudes, sunset reviews, increasing privatization and the like, it sometimes seems that the USS TxDOT (at least as we have known it) is taking on water and slowly sinking; however, I take solace in such commendable efforts as the 1996 efficiency survey.

David J. Jessup Dallas District

David, thanks for your letter. The survey you refer to was adminis- tered by the Texas Transportation Systems Efficiency Advisory Committee. The committee was composed of 14 non-paid, private sector individuals appointed by the Texas Transportation Commission to review the department's operations and make recommendations for achieving efficiencies and cost reductions.

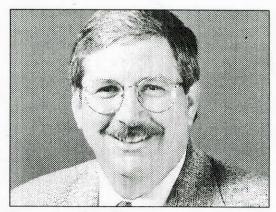
The committee used the information provided by TxDOT employees as one ingredient in making its recommendations, which were presented to the Transportation Commission on Oct. 30, 1996.

I was pleased that 711 employees returned surveys, offering 1,385 suggestions and comments. Some employees commented on only one issue, while some submitted multiple comments and recommendations.

The Senior Management Team recently completed its review of the TSEAC recommendations and submitted its comments to the Transportation Commission. The commissioners will decide which of the recommendations should be implemented.

The survey results will be reported in Transportation News, and we will also report on the recommendations approved for implementation after those decisions have been made by the commission.

We recently purchased a coat rack through the district warehouse. This is a contract item. The cost of the coat rack was approximately \$90. This does not include shipping and handling. This same item or another similar to it is priced for \$25 at a local hardware,



Bill Burnett Ask Bill

office supply or discount store. Also, about seven months ago our office got new carpet. Chair mats, another contract item, were ordered through the warehouse. Price ranges from \$30 to \$40 each. Local prices range from \$20 to \$25, with no shipping and handling charges. Due to limited availability or whatever reason, these items have not been received as of the typing of this letter. Would you please explain the policy on contract items and could something be done to change this?

Louis Garcia Odessa District

Louis, thanks for asking this ques-• tion. I contacted our purchasing personnel in the General Services Division and they inform me that the purchase of items on Texas State Term Contract is not a TxDOT policy. It is required

by law. The General Services Commission has the overall responsibility for the purchase of equipment, materials and services for the state. One of the methods of purchase authorized is the use of term contracts for all common items used by state agencies. Vendors are asked to bid to a minimum order stated in the contract with delivery to any location in the state. The vendors must include all freight charges. It just so happens that both of the items you are referring to in your question are offered by The Texas Industries for the Blind and Handicapped (TIBH). All state agencies are required by Title 10, subtitle D, subsection 2155.138 of the Texas Government Code to purchase items offered for sale to a state agency through the efforts of the chapter 122, title 8 of the Human Resources Code, i.e., TIBH. The fair market value prices of the items offered are established by the Texas Council on Purchasing from People with Disabilities as provided by section 0.12 of title 8 of the Human Resources Code.

While it may seem that you can purchase material cheaper locally, in most cases the quality is not the same.

Have a question you would like to ask Bill? Send it to "Ask Bill" at the Public Information Office, Greer Building, or e-mail it to JCARMACK. Please include your name and work phone number. We will withhold your name at your request, but Bill won't even consider answering anonymous letters.

An open letter from Texas Transportation Member David Bernsen

My five-plus years as a member of the Texas Transportation Commission have flown by. As a commission member I've been privileged to be a party to some monumental decisions and critical actions that will have an effect on generations of Texans to come. In doing so, I hope that I made a contribution to Texas' transportation systems and helped to make this a better department.

But the real credit for the department's achievements and successes belongs to each of you, and I'd like to personally thank you for the time you commit, the duties you expertly perform and the professionalism you project as you go about the task of building and maintaining the finest transportation network in the world. I wholeheartedly believe that TxDOT has the most innovative, hard-working, loyal and talented employees in the state, and I have been proud to be associated with each of you.

By far, the most rewarding part of my job as a commissioner was traveling across the state, meeting employees and witnessing firsthand the top-of-the-line, quality products and services you provide. From day one I have been in awe of the creativity, diligence and dedication that TxDOT employees bring to their jobs.

I thank you for your comments and suggestions over the past five years. I thank you for stepping up to the plate and providing quick and accurate information when we were in a pinch. And from the bottom of my heart, I thank you for your hard work and loyalty, and allowing me to represent you.

I also want to thank everyone who put together and attended my farewell dinner. Dinah and I are grateful for the leather attache case and Waterford crystal bowl you gave us and the many kind remarks and good wishes we received. These gifts will serve as lasting reminders of the wonderful friendships we have made during this period of our lives.

Sincerely, **David E. Bernsen**

Transportation News is published for employees and retirees of the Texas Department of Transportation, Contents are not necessarily the official views of, or endorsed by, TxDOT.

Call (512) 463-8588.

Published by the Public Information Office, 125 E. 11th, Austin, TX 78701-2483 Circulation: 17,850

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Trouble getting Transportation News?

PTN's Willrich gifted with overdrive

Grant administrator says her hard work is simply payback for help received

T housands of elderly and disabled Texans probably wouldn't be able to get to the doctor and the grocery store as well as they do now if it weren't for TxDOT employee Chris Willrich.

Willrich works in the Public Transportation Division (PTN) as the manager of the Elderly and Persons with Disabilities (E&D) Transportation Grant Program. This program administers funds to 305 private and public nonprofit providers throughout Texas who try to meet the transportation needs of this special group of citizens.

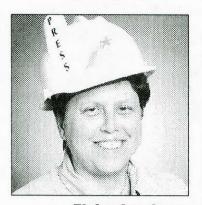
In fact, in 1995, about 4 million one-way passenger trips were provided by these nonprofit entities in 1,123 vehicles that were driven more than 15 million miles.

"We serve practically every county in the state," Willrich said.
"Out of all the public transportation programs, the elderly and disabled program has the most providers."

And with Willrich's steady hand on the E&D helm, the 25 district public transportation coordinators will administer close to \$3 million in grants during fiscal '97.

When she's not busy with the E&D program, Willrich assists division deputy director Margo Massey as the legislative liaison alternate. And in her spare time, she's bitten off some more responsibility on which to chew: she's the program director for the Women's Information Network (WIN). While this is not part of her official job description, it's a vital part of being a female TxDOT employee.

Finally, since she's still got plenty of energy, Willrich works



Eloise Lundgren

A Day in the Life

"I've seen a lot of changes in the short time I've been here," she said, "but I think, for the most part, they've been for the better. TxDOT is a strong, stable agency and I love working here."

Apparently, the feeling is mutual, at least according to PTN director Judy Byman.

"Chris is one of the most positive, hard-working individuals I've ever met," Byman said, and then added with a chuckle, "but then having several employees like Chris would put a lot of people out of work."

In 1996, Willrich decided she wanted to become a permanent part of PTN, so she applied for and got her current position. According to her, PTN is the place to be because the employees are all looking toward the future.

And that need to be visionary, she emphasized, is made more apparent to her every day as she commutes from Georgetown. "That drive proves to me daily that we need to utilize fully — and quickly — the various modes of transportation," she said.

When I spent the day with Willrich, she was anticipating a flood of calls from the districts about the POP. No, it's not a soda. "I just sent a memo to the public transportation coordinators with a deadline for submitting allocation requests," she said. "We have to submit a Program of Projects (POP) to the Federal Transit Authority so we can get the necessary funding to continue our E&D program."

District public transportation coordinators have a tough job, according to Willrich, and paperwork is only one of the hurdles.

"District coordinators have to submit quarterly reports to us," she explained. "Often, they have problems getting their providers, who don't understand the importance of paperwork, to turn in statistical information.

"It's somewhat easier in the larger districts because they have councils of government and metropolitan planning organizations that can take some of the load off," Willrich said. "But in the smaller districts, where a lot of our providers are groups like church organizations, there is a tendency not to understand the reason for paperwork."

Willrich said the division tries to do everything possible to make life easier on the districts. "We hold conferences for information sharing and professional development," she said, "and we make district visits two or three times a month. We also crosstrain and try to handle as much paperwork as possible electronically."

The cross-training, Willrich explained, is so "we'll all know enough about each other's jobs so we won't ever have to stop or slow down our business because someone is leaving." Willrich is also working on a procedures manual for E&D to improve her program's effectiveness and efficiency.

In 1996, the division began decentralizing contracts so they could be executed out of the districts. "We're monitoring this to see how it's working," Willrich said. "There are a few bugs but we're working them out."

Willrich has nothing but high praise for district public transportation coordinators. "These folks must have good people and communication skills as well as an accounting background in order to do their jobs," she said. And sometimes, she said, their jobs can be dangerous.



5:30-9:30 p.m. as a Department of Agriculture telephone surveyor gathering statistics from ranchers and farmers. And we haven't even gotten to her family yet.

Why does she spread herself across all these diverse areas?

"I got where I am today because many people helped me," Willrich told me frankly, "and I want to pay them back, so I try to help others whenever I can.

"Besides," she admitted, "I like to keep busy."

Born and raised in Houston, Willrich moved to Austin 16 years ago with her husband, Frank, when he took a new job with a pharmaceutical company. After working at various jobs in the private sector, she went to work for the government on the 1990 census. Then, it was on to the Department of Housing and Community Affairs as assistant to the executive director and next to the Governor's Energy Office as the executive assistant to the director.

"I wound up at TxDOT as a contract employee in 1993," Willrich explained. "Bob Otto and I came here together with the Oil Overcharge Program, which was originally placed under the Management Services Office."

But in 1995, there was another reorganization and the Oil Overcharge Program moved to PTN. "It was fitting for the overcharge program to come under public transportation," she said.

Chris Willrich, second from right, helps check out

a van funded through the Elderly and Disabled

Grant Program. Wendie Abramson, left, and

Chance Isbell, second from left, are with the

Area Inc., which relies on the vans for client

services. At far right is Austin District Public

Transportation Coordinator Jenny Peterman.

United Cerebral Palsy Association of the Capital

Can TxDOT learn a lesson from Porsche?

has long been regarded as one of the best, if not the best, sports car manufacturer in the world. Forged by German craftsmen, their machines are widely heralded for their quality and extensive research finds owners to be extremely pleased with their cars. A company which began in 1930, Porsche has thrived on a philosophy which believes that success is founded in the best products, designed by the best engineers. In many ways, Porsche is a company that any organization would like to emulate. It seems strange, then, to think that in 1990, the corporation nearly collapsed under the weight of its own inefficiency.

While reading an article by J.P. Vettraino in Autoweek Magazine about Porsche's fall and rebirth, I was struck by the lessons these German engineers learned the hard way. Their experience is an interesting study in how beliefs influence actions in individuals as well as organizations and I think it also shows how success can pose its own subtle, yet potentially fatal, challenges to long-term survival. I feel these lessons are as applicable to an organization that produces highways for vehicles as it was to a company that produces vehicles.

As mentioned above, Porsche was founded with the philosophy that quality products result from quality designs. While these "top gun" designers produced wonderful designs, they paid very little attention to the process in which these cars were produced. As a result, the vehicles were not so much built as they were rebuilt. As Porsches came off the assembly line, hundreds of workers began fixing hundreds of assembly defects at a tremendous cost which was, of course, passed on to the consumer. In addition, Vettraino writes, "Since the Porsche 911 was launched in 1965, improvements to the car have been layered one on top of another. When customers wanted air conditioning, engineers came up with a good system, then said 'Install it.' The same went for ABS, air bags, ad infinitum. The result was a nightmare of complex assembly."

Another sign of inefficiency in their manufacturing process could be found in the large 28-day inventory of parts, many of which had to be repaired before they could be installed. Parts were stored in large racks which required a ladder to access. Substantial amounts of time and energy were wasted by workers simply trying to sort through a maze of parts to find the right one.

Despite the high cost of producing these cars (the 911 model rose to \$73,000), the company was very successful, although much of this could be attributed to a healthy world economy. When the recession hit in 1990, Porsche started floundering. On the verge of collapse and desperate to restore its position atop the sports car world, Porsche did what for them must have been almost unthinkable. They brought in a team of retired Toyota executives to teach Japan's lean production practices to German technicians who had previously believed they were the best in the world. The Japanese cut inventories to a seven-day supply, promoted the use of pre-assembled components and introduced "simultaneous engineering" practices in which designers, assembly engineers, purchasing agents and key suppliers were forced to work together to integrate the design and manufacturing processes. The result is a new, more economical (\$40,000 price tag) model which the company feels can live up to its traditional high standards for quality and performance. It also comes off the assembly line virtually free of defects requiring rework. Porsche officials believe this new model will be a "save-the-company

I think any organization can learn from

™ My Opinion



Mark Tomlinson Amarillo District Engineer

the experiences of Porsche and I feel the Texas Department of Transportation is doing things today to help keep us from ever being in a similar position. At Porsche, the institutionalized way of thinking was "We are the best." Implied in that thinking was, "We don't have to get better." I believe TxDOT is the best transportation entity in the world and we produce high

quality products for our customers. But we need to keep the humble attitude that says we will always look for ways to get better. As Vettraino states, "Today's economies dictate that how you make something of high quality is as important as the quality of the finished product itself."

Retooling is a structured process for looking at every aspect of the department's business and finding ways to make them better. Instilling Continuous Improvement not just as a concept, but as an ingrained way of thinking and acting, is a way to ensure that we never become so arrogant as to feel we can't improve. Treating our customers with respect and searching for ways to bring them outstanding service is how we can continue our history of great successes in this district as well as around the state.

Incidentally, after returning to Japan, all the former Toyota executives who had worked in Germany went out and bought new Porsches. * The DE's Corner is a new feature, in which Transportation News will reprint columns by Management Team members. Tomlinson's column originally appeared in Panhandle Roads, the Amarillo District's newsletter.

Swing bridge model graces maintenance office

Pearlie Bushong Yoakum District

While visiting his grandmother Pat Wilkinson in Sargent, Adam Hair became an avid watcher of the daily operations of the swing bridge which spans the Gulf Intracoastal Waterway.

Ten-year-old Hair was so impressed with the bridge that when he returned home to Austin and Patton Elementary School and learned he had a class project to do, his first thought was of the Sargent swing bridge.

His grandmother provided pictures of the bridge, and TxDOT's Matagorda County Maintenance Section provided copies of the original blueprints for the bridge. Understanding how the bridge operates the movable span, Hair planned his strategy with the finesse of a general preparing for battle. Making a list of the materials needed to build his model bridge, he enlisted the help of his mother in collecting the elements necessary to complete his project.

He began by cutting a board for the bridge to be built on; and, allowing for any mistakes, cut the board slightly bigger than the dimensions of the model. Then he glued the parts together. Parts needing paint received a coat of spray paint in the family's garage. Hair soon discovered that balsa wood was too light to use as the

base of the swing arm because it wouldn't hold the hinges. Gathering a piece of regular wood from his fort, Hair coerced his father into cutting it for him.

"The hinges are what made this project succeed," Hair wrote in the description of his project. "They allow the bridge to open and close."

The real swing bridge uses heavy cable wound around a turnbuckle to pull the bridge open and closed. Hair used a ribbon spool and some rusty, gray cord to accomplish the same thing with his scale model.

He completed the model by building a control tower, the two platforms on either end of the bridge, and making signs to inform the public "No Fishing From Bridge" and the clearance height of "16 ft. 11 in."

Upon completion of the bridge, Hair tested it to make sure it would open and close just like the real one.

"This was not an easy bridge to build, but it is worth the work to see your final bridge really work," Hair said.

His project received a grade of 100, and the working model now sits in the office of the Matagorda County Maintenance Section for visitors to view. *

Austin's Capital Metro demos light rail

Clare Hagerty

Public Transportation Division

After more than a decade of debate, the board of directors of Austin's Capital Metropolitan Transportation Authority voted on Feb. 24 to take one giant step forward in bringing light rail to Austin. Although the vote does not mean Capital Metro will begin building a light rail system immediately, it does mean that Cap Metro will spend between \$5 million and \$10 million on preliminary environmental and engineering studies that are expected to take up to two years to complete.

To garner public support for light rail in Austin, Cap Metro offered free rides daily Feb. 14-21 along three rail corridors in Austin. More than 11,000 area residents packed the German-made

RegioSprinter to near capacity.

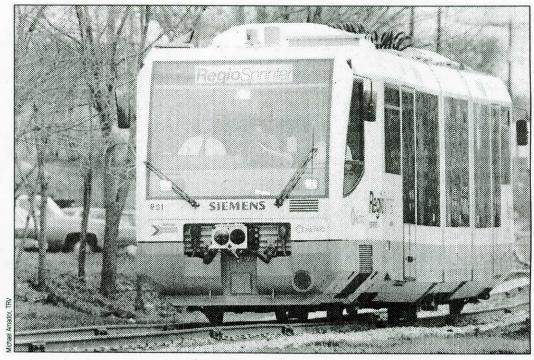
"As we work toward our goal of meeting the mobility needs of the people of Texas, I think we have to consider numerous public transportation options," said Judith A. Byman, Public Transportation Division (PTN) director. "Light rail is one more alternative to driving alone that can become a big part of the solution to our growing traffic congestion here in Austin. The bottom line is getting those lone drivers out of their cars and into the public transportation habit."

The first rail line, known as the Red Line, would run along existing rail from the city of Leander, northwest of Austin, through East Austin and into downtown at a cost of approximately \$182.3 million. Capital Metro plans to seek \$90 million in federal money and use reserves from its \$118 million annual budget to pay for the starter route.

In conjunction with the Austin Transportation Study (the local metropolitan planning organization) and TxDOT, Cap Metro recently completed a Major Investment Study (MIS) to determine priority corridors and preferred alternatives for rail transit development. The study concluded that the publicly owned Giddings-to-Llano line is the preferred alternative for initial development. The study also recommends developing a line connecting The University of Texas and downtown Austin with the planned Austin-Bergstrom International Airport.

Cap Metro's decision to move forward with studies of the light rail project comes despite opposition from some neighborhood representatives who live adjacent to the proposed line. Neighborhood concerns about noise, safety, diesel fumes and declining property values will be addressed in the next phase of the rail project, according to Cap Metro board members.

"We will work with the communities in this corridor to make sure we identify and understand the issues, and work with them on



Austin's Capital Metropolitan Transit Authority offered free rides Feb. 14-21 on the German-made RegioSprinter diesel train, above. At right, clockwise from lower left, Kim Herndon and **Kim Sanders, Texas Natural Resource** Conservation **Commission, and Paul** Moon, PTN, and Jenny Peterman, Austin District, take a ride on the train.



solutions," said board member Susan Handy.

Design work on the starter line could begin by 1999, with construction work and passenger service beginning sometime between 2000 and 2001. *

David Casteel named CHS district engineer

David Casteel has been named Childress District Engineer.

Casteel took the helm April 1. TxDOT Executive Director Bill Burnett said, "I expect great things from David in his new job as head of the Childress District."

Casteel served as director of transportation planning and programming in the Abilene District. He began his career at TxDOT in 1985 in Graham. He also worked in Vernon for the Wichita Falls District and served as area engineer in Big Spring in the Abilene District.

Casteel is a graduate of Texas A&M University with a bachelor's degree in civil engineering. He also earned a master's degree in civil engineering from A&M as

part of TxDOT's Master of Science in Civil Engineeering program.

The Childress District, with 2,496 miles of state-maintained roads, comprises the counties of Briscoe, Childress, Collingsworth, Cottle, Dickens, Donley, Foard, Hall, Hardeman, King, Knox, Motley and Wheeler. As of January, the district had 13 construction projects under contract for a total of more than \$23 million.

"I am very excited about coming to the Childress District," said Casteel.

"Rural areas pose unique challenges and opportunities for engineers. The movement of local, tourist and heavy freight traffic must all be balanced. I look forward to working with the cities and counties in the area to meet this challenge," he said. *

Thomas Morley tapped to head new TQD Division

Thomas V. Morley has been named director of the Training, Quality and Development Division.

In this position, Morley will be responsible for the functions of the Continuous Improvement, Professional Development and Training and Development sections.

Morley received a bachelor's degree in political science and history from Texas A&M University in 1978, a master's degree in management from Webster University in 1986 and a master's degree in public administration from Penn State University in 1990.

He has more than 26 years experience in adult education and training programs.

Most recently, Morley was director of quality management at the Austin State Hospital. *

ISD photogrammetry open for business

Charlie Conner

Information Systems Division

The Photogrammetry Branch of the Information Systems Division (ISD) recently finished its Retooling efforts, and several changes have been implemented that will make the operations more responsive to department needs.

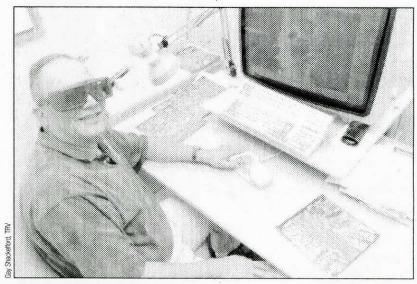
TxDOT no longer uses in-house resources for aerial photography. Instead, ISD administers these services through statewide contracts.

TxDOT still operates a photographic laboratory. The statewide aerial photography contracts will include photo lab work, but the department must evaluate the vendor's ability to produce quality prints and diapositives.

The ISD photo lab produces contact prints, diapositives and other photo products. The photo lab also produces enlargements for the department and the private sector from miles of archived film.

Aerotriangulation and map compilation processes have been streamlined to reduce production time. Two new software products have reduced dependence on the mainframe and eliminated file transfer handoffs. Compilation Section employees are trained in the new softcopy mapping system, reducing the time for compilation.

ISD recently hosted a forum to show the new processes to district mapping coordinators. There, ISD employees distributed a servicelevel agreement explaining the importance of ground survey data



Felix Varela of ISD's Photogrammetry Branch wears special glasses that allow him to see a three-dimensional image on his computer monitor.

and the ramifications of not providing data in a timely manner. The initial version of the User's Guide to ISD's Engineering and Survey Systems Product and Services was also distributed. This document addresses only the mapping products and services, but should be valuable in understanding what products TxDOT's provides and how to get them.

Judy B. Skeen,

ISD director, said the department's goal is to deliver all requested photogrammetric products by the estimated date, assuming that no mapping projects will take longer than eight months from the date of flight to complete.

"We are very excited about improving our turnaround times and see this as a win-win situation for all concerned," said Skeen. "We are eager to proceed with this more customer-oriented approach to performing our photogrammetry mission."

To request handouts or for additional information, call the Photogrammetry Branch at (512) 465-7473. ★

TQI stresses quality, teamwork and innovation

Roger Polson

Public Information Office

This is the third year for the Texas Quality Initiative Conference and it is still a process of evolution. In fact, by nature, TQI will always be evolving.

TQI began in 1995 with a series of four conferences around the state. The past two years it has been held at a single location, with the 1997 version in Corpus Christi. The initiative is a public-private collaboration intent on improving products, information and services within the state's transportation industry. This year's conference brought about 215 people (65 percent from TxDOT, 35 percent from industry) together.

Solutions to problems

"I think that this is a wonderful opportunity for the partners involved in the planning, design, building and maintaining of transportation systems to come together and find solutions to joint issues and problems or opportunities," said Annie Dadian-Williams, who has coordinated the event since its inception. "The key to this is to identifying the joint 'hot' issues/problems and getting the entire industry to participate in the solution."

That's exactly what the conference has become — one and a half days of intense breakouts focusing on a single area or issue. Issues teams at the 1997 conference embraced topics ranging from developing new Portland cement pavement specifications, making QC/QA hot-mix work, letting methods and electronic technology, and the use of local recycled materials — economic vs. performance.

Less technical issues included marketing TQI to make it more successful, using innovations and value engineering, and preparing for the new century with joint private/public training. Participants attended one of the issue team breakouts, giving them time to have a close look at their area of interest and develop action plans to address key issues.

"We will meet with all the issue team leaders in June to chart their progress. At the end of the year we will again ask the issue team leaders to submit the accomplishments of the teams," said Dadian-Williams. "Some accomplish the items outlined in their actions plans, some don't, and some are still continuing the work."

The breakouts were guided by a mix of TxDOT and industry facilitators.

"The first year of TQI we used TxDOT facilitators, the second year we used contract facilitators, this year we used a mixture," said Dadian-Williams. "We had two TxDOT facilitators and two from the contracting industry. FHWA, the Texas Transportation Institute and the Consulting Engineers Council each supplied one. This is the way to go."

Dadian-Williams said the TQI proceedings which document the meeting, and the issue action plans developed by the teams formed in each of the breakouts, will be sent to conference participants in April. Anyone interested in this information may contact her through GroupWise at ADADIAN or by phone at (512) 302–2348.

One of the conference's highlights was the Tuesday night awards banquet. The TQI awards recognize significant contributions in teamwork, quality and innovation (see article on page 7).

What's the future for TQI?

"We will have another conference," Dadian-Williams said. "The evaluations of this conference were very good. The Texas Quality Initiative Steering Committee has a good thing going. We have a few issues to work on," she said. "First thing is how to get more industry members to come, secondly the careful selection of topics. We don't want to replicate what other task forces are doing. We are more driven toward figuring out how can we work in concert with all. The steering committee is meeting in March and will be debriefing the conference, and deciding what to do next. This thing is still evolving."

National model

"We are promoting teamwork, quality and innovation as the standard practice within the Texas highway construction industry. That's what TQI is all about," said Bobbie Templeton, chairman of the Texas Quality Steering Committee. "We are striving for internal and external customer satisfaction at the highest level, and to deliver a transportation system that is a national model."

Sponsors for TQI include TxDOT, the Federal Highway Administration, Associated General Contractors of Texas, Texas Hot Mix Asphalt Pavement Association, Texas Aggregates and Concrete Association, Texas Chapter-American Concrete Pavement Association, Consulting Engineers Council of Texas, Texas Public Works Association, the Center for Transportation Research and the Texas Transportation Institute. *

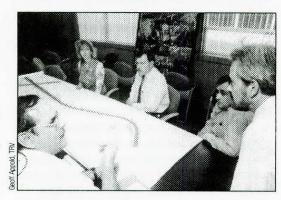
TQI Awards highlight of conference Internal, external customer satisfaction is driving force behind process

Roger Polson Public Information Office

TQI Award for Teamwork Laredo District San Dario Avenue Project

Every day, more than 59,000 vehicles pass along seven city blocks of Laredo's San Dario Avenue. The artery serves as a connection between the International Bridge and Interstate 35. The challenge: to remove the existing road and replace it with new highquality pavement — without a serious obstruction to the flow of commerce and traffic across a major U.S.-Mexico border crossing. Teamwork between TxDOT, the contractor and all major stakeholders was the key to a successful project.

From the beginning, TxDOT, project designer Brown and Root, and the contractor, J.L. Steel, met with U.S. Customs, the city of Laredo, Tex-Mex Railroad and local utility providers. At the first meeting, the contractor proposed a delay in construction



the reconstruction project to upgrade their facilities and improve service. The railroad company chose to upgrade its track crossing, requiring the contractor to phase its operations with the railroad's. The new crossing and new pavement were completed simultaneously.

Communication with the public and superior traffic control helped ensure safety for those traveling through Laredo. Even with somewhere between 1,200 and 1,600 heavy trucks traversing the area every day,

and 59,000 vehicles altogether, the project was completed without any recordable accidents. It was completed on schedule and within budget. The work even included enhanced landscaping and a landscaped park along the length of the project.

In the end, the all work was completed ahead of schedule,

under budget and without any recordable accidents.

The San Dario project has been selected as Texas' nominee to the National Quality Initiative awards to be presented this year in Salt Lake City.

Robert Murillo, of the Laredo engineering department, TxDOT project engineer Daniel de Luna and Area Engineer Juan Villareal inspect a monument placed in a park adjacent to the San **Dario Avenue project.**

to allow an adjacent project to be completed. This delay also gave the contractor time to review the traffic control plans, one of the vital elements of the project. The plan was revised, eliminating five of the original 12 phases.

Once the project was under way, daily coordination meetings continued to involve more than just TxDOT and J.L. Steel. Problems were identified, solutions were generated and action plans were implemented. The parties agreed that the safety and wellbeing of the traveling public was of the utmost importance. Through partnering, everyone involved in the project was able to keep safety at the forefront of their efforts. For J.L. Steel, the willingness of all parties to respond to the project's needs was essential.

This continuous communication was the key to success. Communications with the city kept the traffic lights coordinated and overall traffic control allowed vehicles to move through project. TxDOT kept citizens and adjoining businesses apprised of construction schedules. Close coordination between the prime contractor and subcontractors ensured that the work was completed in a timely and orderly manner.

Local crews from the Tex-Mex Railroad and the utility companies took advantage of

TQI Award for Quality Design Division Design Phase Value Engineering

TxDOT's Design Division and Engineering Management Services received the TQI

award for Quality for development of the Design Phase Value Engineering

Coming to the table, sharing information, getting the big picture. In design phase value engineering (VE), these aren't just catch-phrases. They are the basic building blocks for successful projects. VE brings together everyone involved in a project to find the most efficient and effec-

tive way to get the job done. This multidisciplined, team approach enhances communication, and better communication often yields better results.

VE uses a six-phase process to ensure that quality control methodology is applied in every study. This disciplined approach reduces the chance that a possible solution

SAT's Director of Transportation, **Planning and Development Julie** Brown (top left), and **District Engineer** John Kelly (standing) meet with members of the district's VE

will be overlooked. It also encourages participants from different backgrounds to look for solutions outside the box.

TxDOT first applied these principles in 1990, using VE on the Texas 375 project in the El Paso District. Since then, the department

has conducted more than 20 VE studies, offering proposals for better design and construction, reduced delays for the traveling public and more than \$125 million in cost savings. But efficiency is only one of many benefits of applying VE to project design. Another primary reason is that internal and external relationships are enhanced in the long term for project development.

Applying VE has had some surprising benefits as well. When all the players in a project examine how they can work together, the result can be a process improvement that will carry well beyond the project. For instance, the San Antonio District (SAT) has been heavily involved in developing a VE process for utility relocation. Working with San Antonio utility companies, a new process has evolved with excellent results.

"One of the goals of this particular process was again to reduce field changes and delay costs attributable to utilities during construction," said Julie Brown, SAT director of transportation planning. "One solution is to give the roadway contractor more control over the entire construction project. And since utilities are in the corridor, one benefit of this process is that it encourages utility companies to joint-bid with TxDOT. And it basically puts the control of the project in the contractor's hands. That's a very effective tool as far as working with the contracting industry in getting projects done efficiently and effectively."

TQI Award for Innovation Fort Worth District Asphalt Release Agents

The Fort Worth District (FTW) Laboratory was chosen the winner in the Innovation



category for its ground-breaking work on asphalt release agents.

FTW Laboratory Technician Paul Shover, Mark **DeLong of ChemMark Corporation and district** lab engineer Richard Williammee examine asphalt release agents.

Before 1989, hotmix asphaltic concrete (HMAC) crews used

Please see TQI, page 15

Department survives a rocky star

Editor's note: Hilton Hagan is a former Travel and Information Division writer. As his final assignment, he wrote a history of the department. It is excerpted here, the first of a series of eight installments to mark the 80th anniversary of the April 4, 1917 founding of the agency that would become the Texas Department of Transportation.

Hilton Hagan

The spring and summer of 1917 were hectic months for Gov. James E. Ferguson. He signed the Texas Highway Department into existence in April, and in the same month the United States entered World War I. In August, the Texas Legislature impeached him.

The department was created in direct response to the Federal Aid Road Act of 1916. Congress wanted to stimulate the building of a coordinated national system of roads, pretty much the same purpose as the legislation creating the Interstate Highway System 40 years later.

In 1916, the nation's highways were a patchwork of roadways built and maintained by state and local entities mostly for

Expert Engineer" was proposed; a bill was introduced for the appointment of a state highway engineer in 1907; another for a commissioner of highways in 1909. In 1911 and 1913, there were bills to create a highway department. They failed.

Public sympathy for better roads had been building since the 1890s. Ironically, much of the push for better roads came from an organization of bicyclists, not automobile operators. The cyclists wanted to extend the radii of possible travel from town beyond county borders and past the extent of a days travel for a horse and wagon — the two places where even so-so roads most often petered out.

By 1916, there were 3,617,917 motor vehicles in the United States. Like the bicyclists, car owners were beginning to agitate for better roads to give them a wider operating range. Texas had 14,286 vehicles in the 180 counties that registered cars in 1910. By the time the first statewide registration began seven years later, the number had grown to almost 200,000.

But before World War I, the roads in Texas were miserable. "Come to Texas if you ready with a proposed bill.

The bill cleared both houses and was sent to the governor. The act put automobile registration under the new highway department and the money raised would provide the state's match of federal funds. Registration fees were based on engines, 35 cents per horsepower with a minimum of \$7.50. Truck registrations were based on the carrying capacity of each wheel.

The owner was required to provide his own display of identifying numbers and they stayed the same, year after year. Motorists could show ingenuity in making the plates. Some were made of leather with the numbers attached with brass rivets. Painted wood was another favorite material. The state provided a metal validation seal to be attached to the front of the car.

A three-member commission was created to make policy for the department with one member designated chairman by the governor. Members got \$10 a day while on duty. Total pay was not to exceed \$1,000 per year.

Gov. Jim Ferguson appointed Curtis Hancock, an attorney from Dallas, to be the first chairman of the commission. Other members were T. R. McLean, a banker and farmer from Mount Pleasant, and H.C. Odle, a farmer and rancher from Meridian. The first meeting of the commission was on June 4, in a corner of the House chamber in the Capitol.

The first order of business was the appointment of George A. Duren as state highway engineer. Duren, a civil engineering graduate of The University of Texas, was to receive \$5,000 a year. The second and final motion of the first meeting was for adjournment. So much for business.



A paving crew works on State Route 12 (now Texas 359) in Webb County in the early 1920s.

local purposes. The only thing one could say uniformly about roads was that they were almost uniformly bad. The few paved roads there were ended miles from town, sometimes in mud holes and often just on the other side of a state or county line.

Proponents finally sold the idea of federal aid for highway construction using the constitutional power to "establish post offices and post roads." The act provided for construction of rural public roads, including any "over which the United States mails are or may hereafter be transported." Thus Congress didn't write many potential routes out of the act.

The act contained strong language that states must maintain the roads constructed under the act to high standards. So, in 1916 Congress insisted that each state have an organized, expert engineering agency — a state highway department — before receiving federal aid.

If Texas was slow to begin a state highway program, it was not for the lack of effort. An early Texas Good Roads Association passed a resolution calling for the creation of a highway department in 1913. As early as 1903 legislation had been introduced to create a Texas Bureau of Public Highways; two years later an office of "State"

want to see good roads," a turn-of-the-century Bell County farmer growled, "good and sandy, good and rough, good and muddy."

It was an era of almost no roads, really. What was there served the local area. Few travelers opted for the road to go any distance if a train ran there, too. Little had changed since 1895 when Gen. Roy Stone, the first director of the U.S. Office of Road Inquiry, told an audience in Houston that Texas had made less progress toward good roads than any other state.

No effective legislation pertaining to road improvement was passed by the Texas Legislature in the early 1900s, although law-makers did set the state's first statewide speed limit — 18 miles per hour in 1907.

In a lot of areas, road upkeep was left to those living nearby. Neighbors might tow a split-log "drag" down the road after a rainy spell to smooth out the ruts. Sometimes official roadwork was under the statute labor system. Every male from 18 to 60 was obliged to spend a few days a year working on the roads or to hire a substitute to do it for him. Sometimes county jail inmates worked out their sentences on the road.

So by 1917, Texans were ready to take advantage of the new federal program. When the 35th Legislature met in January, a reborn Texas Good Roads Association was Two-and-a-half weeks later at Mineral Wells, there was a longer agenda. The commission held the first public hearings and designated an 8,865-mile state highway network. The San Antonio Light said the network covered 6.9 percent of the total of 128,971 miles of public roads and streets then existing in Texas. The Light estimated that the construction of these miles would serve 89 percent of the population of the state and would extend into 248 of the 253 counties into which the state was divided. (Texas' 254th county, Kenedy, was not created until 1921.)

Six field divisions were mandated, at Dallas, Fort Worth, Amarillo, Houston, San Antonio and San Angelo. Highway engineering in those days borrowed a lot of technology and terminology from railroad construction. Railroads called their geographical units divisions, not districts. Thus, the department's first divisions were really districts.

Eventually, three division-engineers-atlarge were hired: H. M. Fooshee, who made his headquarters at Mount Pleasant; John P. Merriweather, working out of Abilene; and M. C. Welborn from Austin. Later, A. F. Sayers of Pecos became the fourth engineer-atlarge.

The first Austin offices of the department were set up in 1917 in the House chamber to take care of the first big task — statewide registration of motor vehicles. The department moved soon, though, because legisla-

t, now marks 80-year milestone

tors needed the chamber again in August for a special session. Some of them wanted to impeach the governor.

Except for motor vehicle registration, the department's early operations bore little resemblance to today's. Counties initiated highway construction projects and remained responsible for building and maintaining them even when federal funds were used.

The department's engineers reviewed the plans and inspected the work. Counties hired project engineers on a project-to-pro-

commission; the first gasoline tax, a penny a gallon, was levied with three-fourths going to highways and the remainder going to public schools; and the speed limit was raised to 35 miles an hour.

The Supreme Court ruled in 1925 that ownership of the roads is vested in the state. That gave the commission a free hand.

Gov. Neff looked upon the progress made toward a better highway network as one of the outstanding achievements of his administration: "During my administration there Camp Hubbard complex.

Earlier the department had gone out for bids on a monumental shopping list of other things needed for the new maintenance duty: 270 tractors, 450 trucks of various sizes, 500 four-foot Fresnos. Another big item was material to build 1,000 improved Wisconsin road drags — lumber, facing plates, angle braces, structural steel, grader blades, and assorted nuts, bolts and washers.

A road drag was a simple arrangement of

heavy boards faced with steel drawn by a team of mules or horses or towed behind a vehicle or a team to smooth down the ruts. The best time to drag was after a rain, before the mud dried into iron-like furrows. If the road drag seems crude by today's standards, so was the department's estimate of just how much roadway was out there to be cared for.

No accurate measurements had been made and estimates ranged from 16,000 to 18,000 miles. The miles listed in a breakdown from 1928 totaled a little more than 16,000: 96 miles

of concrete pavement, 1,060 miles of asphalt, 5,000 of gravel, shell, or stone, and 10,000 miles of just plain dirt.

The department hit the worst spots first, concentrating on counties where the maintenance was not up to standards in order to meet the federal deadline. Sometimes that meant leasing equipment and hiring men and teams by the day to handle the work initially.

Some counties, where the standard of maintenance was high enough, continued to look after the highways, even though the ultimate responsibility was the state 's.

The maintenance man's tradition of hard work, self-sacrifice and help to the motorists was born in this era. Gilchrist ordered men posted with teams at short, impassable stretches of certain highways after rainy spells. The men were instructed to pull motorists through these places to firmer ground. Gilchrist added that there was to be no tipping for this service.

At the end of the first full year of state maintenance, Ehlinger said the department had spent \$4.5 million. But he added that it was insufficient to protect the public investment. He estimated it would take about \$7 million annually to take care of "this vast highway system." Texas had about 16,000 miles of state highways compared to about

77,000 miles today.

At the end of Gov. Neff's administration, highway department revenues from all sources amounted to \$20 million a year, there were 3,500 employees of the highway department and contracts under the department's management accounted for 5,000 more jobs in the state.

In all, it looked like an auspicious

MORGANS SERVEE STATION C

ject basis. The engineer's job was over when the project was finished, unless the county hired him for another project.

By the time Pat Neff became governor in 1921, some \$100 million in county and district road bonds had been voted and state and federal grants had been awarded to the counties. In 1923, at the beginning of his second term, Neff declared that scarcely 100 miles of continuous pavement existed anywhere in Texas and that every good pavement ended in a mud hole. Indeed, Texas was faced with losing federal highway construction aid. In 1921, Congress passed a new Federal Aid to Roads Act requiring states to have exclusive control in design, construction and maintenance. Failure of a single county to maintain its portion of a federal-aid highway would be grounds for the secretary of agriculture to deny funding to the entire state.

Texas was not up to the standards, but work continued for a while because the secretary had the option of continuing projects until 1924.

That renewed public interest in the highway program. A group of good roads advocates met in the Senate chamber in April 1922 to promote an accelerated statewide highway program. Neff addressed the group, calling for a "big road building program for the state, not a little sick, puny one."

When the Legislature met the following January, it recognized that it would be impossible to build a connected system under the 1917 law, and passed some landmark highway laws: Commission terms were increased to six years with one seat becoming vacant each two years; registration fees were increased and earmarked for highways under the control of the highway

Traffic flowed smoothly down State Route 63 (now U.S. 190) through downtown Jasper in 1928.

was laid in Texas the foundation for a broad and extensive road-building program," he wrote later. "The day is not far distant when we shall have a comprehensive system of arterial highways, free from railroad crossings, shaded by beautiful trees, adorned with attractive shrubbery, lighted with electricity, and appreciated by the people as a thing of joy and beauty forever."

The department assumed responsibility for general maintenance on all state highways on Jan. 1, 1924. To prepare for the task, the number of divisions was increased late in 1923 to 16, with each division having control of about 1,000 miles of state highways.

Gibb Gilchrist became state highway Jengineer in spring 1924 as the department assumed new responsibilities. By September, Gilchrist reported that the organization of the divisions was complete, each with a division engineer in charge of maintenance and construction and two maintenance superintendents who looked after about 500 miles of roadway each.

There was a tremendous need for equipment to do the job, too. Leo Ehlinger, maintenance engineer in the Austin headquarters, reported that prior to 1924, the department had no maintenance equipment except a number of surplus army trucks from World War I, tractors, trailers and small equipment such as picks, shovels and axes.

Major equipment had been robbed of practically all removable parts by the time the state got it. To put the machines in working order, the department organized an Equipment Division on a corner of the National Guard's Camp Mabry in Austin. This was the birth of the department's

Please see History, page 16

Waco District lends an ear to contractors

Helen Havelka Waco District

When letters were sent to nearly 130 members of the contracting community, the Waco District (WAC) construction office had no idea how many people would want to attend a meeting to openly discuss construction issues.

Much to everyone's surprise, more than 80 accepted the invitation to talk construction.

"We thought enough of this meeting that we sent two people. We wanted to come and see how it went," said Bill Mayfield, vice president for the concrete division of Capital Excavation of Austin. "We think this is one more step to get partnering where it should be. I would like to see other districts do it."

District Engineer Kirby Pickett offered his own invitation to the audience. "We want to open our lines of communication with you," he said. "Mr. (Raymond) Stotzer, our former engineer director, would say 'pay the contractor for what he does. Don't pay him for what he doesn't do, and be fair.' That's my philosophy as well."

Fifteen discussion topics were submitted

by attendees, but during the three-hour discussion period there was not time to cover them all.

Vegetation establishment, time charges, materials on hand, subsidiary pay items, change orders and partnering received the most attention. Contractors and suppliers offered input and suggestions for the district to consider.

Some contractors saw the meeting as an opportunity to network. "It was informative and a way to get contractors together, not only those locally, but others," said Mike Lewis from JHL Construction of Gatesville. "There are not too many forums where contractors and TxDOT get together to visit. It (this meeting) fulfilled my expectations."

Others agreed. "We had no major issues, but the discussion was very interesting and useful," wrote George Williams from Florida Traffic Control Devices Inc. of Houston. "We are pleased to be a part of the meeting. A very good idea!"

Before the discussion, updates on construction and maintenance projects were presented. New letting dates and additional funding had changed some of the projects presented during the annual Associated General Contractors (AGC) forecast meeting.

Doug Huneycutt, WAC director of transportation planning and development, discussed some of the projects on the district's \$80 million schedule. Director of Maintenance Zane Webb gave an overview of the estimated \$6 million available this fiscal year in maintenance contracts.

Included in the day's activities was the presentation of the district's Construction Project of the Year to Austin Bridge and Road Inc. for its work on the Farm-to-Market Road 3470 project in Killeen. Five other projects were also recognized for excellent ratings.

Lunch was provided by the Texas chapter of the AGC.

"Overall, I thought the meeting went very well," said Doug Dillon, WAC director of construction. "We received a lot of good questions and comments from the audience, and think there is enough support to have one of these again next year."

In addition to this general meeting, the district offered to host industry specific meetings about hot-mix, base materials, barricades/traffic control and general prime contracting. Meetings on QC/QA hot-mix and flex-base have been scheduled. *

VTR unveils new registration renewal notice

Mike Viesca

Vehicle Titles and Registration Division

Making changes is no small task for the Vehicle Titles and Registration Division (VTR). VTR's primary customer base is made up of the 15 million Texas motorists who register their vehicles annually. "We always have to keep the end user in mind," said VTR Director Jerry Dike. "The things we do affect so many people that we can't afford to be careless."

VTR stayed true to its pledge when the time came to redesign the registration renewal notice. The division has done away with the multipart card Texans have received since 1970. The new form is similar in size to a tax, utility or credit card statement. Information is arranged in a format that's easier to read.

"We wanted to give motorists a renewal notice that's convenient to use," Dike said. "It was our goal to make these improvements without adding significant operational costs."

The new renewal notice simplifies registration. Key pieces of information are highlighted in red, including special instructions, fees and proof of insurance requirements. Space is available for TxDOT to print important messages if the need occurs. The name, address and phone number of the recipient's tax assessor-collector is printed on the form, providing a local contact for registration questions. Each mailing address on the renewal notice is printed with a bar code to assure accuracy and to speed delivery. And, for the first time, a payment envelope is enclosed so customers can renew by

Texas 121 study as possible toll road OK'd

A feasibility study of a possible 32-mile toll road connecting Fort Worth and Cleburne was authorized by the Texas Transportation Commission. The commission's action will allow the Texas Turnpike Authority to fund and conduct a study on the viability of constructing a toll road between I-35W and U.S. 67.

The toll road project would be in lieu of a TxDOT project to extend Texas 121 to help relieve traffic congestion in the area.

TxDOT has completed route location and environmental studies for the project, but, no segment of the proposed freeway has been constructed.

Cost has been the most significant obstacle to completing the project and state transportation officials view the toll road option as a possible solution to funding the project. *

These features were the very foundation of the redesign project. But, VTR wanted assurances of customer acceptance. So the division did what most private companies would do in the same situation — it hired a marketing firm to do observational research. During the summer of 1996, the vendor introduced the form to a series of focus groups in the Dallas-Fort Worth area.

"We learned so much from that research," Dike said. "There were some things we had overlooked because we were too close to the project. The focus groups were a great reality check, and we were able to make changes to the form where possible and practical."

"The renewal form was designed with a special PC program that has a 'what-you-see-is-what-you-get' capability," said David Paine, director of systems in the Information Systems Division. "We went through 40 versions of the renewal notice before arriving at the final product."

Feedback also came from the state's 254 county tax assessor-collectors, who are TxDOT's statutory agents for vehicle registration and titling. VTR showed prototypes of the renewal notice at tax collector conferences and meetings and asked these county officials to make comments and suggestions. "We believe the public will agree that the final product is more effective," Dike said.

Texas motorists whose vehicle registrations expire in May will be among the first to see the new renewal notice when it arrives by mail in early April. VTR has been working on a publicity campaign to educate citizens about the new form. The division has sent information to the state's major media outlets; VTR also sent sample news releases and other materials to the tax collectors for distribution to their own local media. The awareness campaign will be a year-long effort because Texas uses a "staggered" registration system.

TxDOT mails 15 million registration renewal notices each year, which is a huge logistical operation. "It took about 250 hours for us to print 1.2 million renewal notices for May," said ISD Director Judy Skeen. "That means approximately 60 million lines of text were printed by our high-speed laser printers." From there, the renewals went to the Texas Department of Criminal Justice, where inmates, working in a controlled environment, inserted and mailed the renewals to customers.

"This project wouldn't have been successful without the hard work and dedication of many employees in VTR and ISD," Dike said. "Our team approach has resulted in a registration renewal notice that's user-friendly and meets the needs of the department, our customers and the county tax assessor-collectors." *

ELP renovation puts icing on the cake

Blanca Del Valle El Paso District

The El Paso District (ELP) recently finished renovating more than 3,000 feet of Interstate 10 in the downtown area and now is putting the decorative icing on the cake. Elected officials were handed hard hats, painter's overalls, paint brushes and paint, then told to "get to work." Well...not exactly.

State Sen. Eliot Shapleigh, Mayor Pro Tempore Raymond Telles, along with city representatives Jan Sumrall, Chuy Terrazas and Stan Roberts, showed their support for the beautification project by painting a few streaks of color on rip-rap along a selected area of I-10.

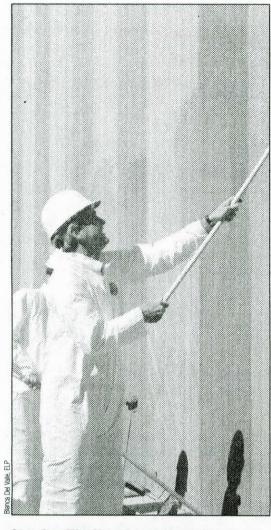
"What you're seeing here are elected officials and the community working together to get things done," Shapleigh said. "This freeway will hold 18 percent of all NAFTA traffic. It is important to make transportation work in El Paso."

"We talk about improving the quality of life, but we never stop to think of beautifying our own city," Telles said.

ELP has improved the character of the underpass zone by introducing color on the structures. This has been accomplished by painting the overpasses and the support structures. The long retaining walls will be painted in a mural-like pattern which will accentuate the movement along the highway.

TxDOT landscape architect Richard Mason designed an abstract representation of the surrounding landscape. There will be three separate murals, one eastbound, one westbound and one along the downtown

Mesa exit. Mason said he took a more abstract approach in the artistry instead of making the murals extremely detailed.



State Sen. Eliot Shapleigh wields a paint roller on a section of a newly renovated stretch of Interstate 10 in the El Paso District. Shapleigh joined other officials taking part in a recent beautification project.

"El Paso has a wonderful tradition of murals," Mason said. "We wanted to create an abstract interpretation as a reflection of the border heritage."

The design on the long wall is a doublemultiple exposure of the Paso del Norte landscape which provided for the setting of El Paso as a bridge between two cultures. There are a series of mountains bisectioned by the pass with the Rio Grande flowing along side. The design begins on both ends, with the duplication of the graphic representation of the Sunset Heights mural (a sunset), previously installed. The design then plays off of the native geographical landform of the desert (tan), leading up to the mountain (terra cotta) with the irrigated fields (green) adjacent to the river (blue), both the upper valley and the lower valley, then transmitting outward is the permanent desert (tan) and the mountains (terra-cotta).

The mural is outlined with the massive open sky and an occasional white cloud. The three murals were designed to develop a visual continuity to join all three walls into an overall visual design for the concrete canyon corridor. Overall, 3,000 square yards of vertical retaining walls will be painted.

"The new murals will give visitors a better sense of the dynamic culture in our community," said Susan Patton, vice president of community affairs for the El Paso Chamber of Commerce. "These murals will make a positive statement about the vibrancy of our community."

ELP District Engineer Eddie Sanchez said, "I've received a lot of good comments about the colors. Painting the freeway walls is a very common type of approach

throughout the state, especially when you are blending old and new construction." *

Instead of big leagues, injury leads to Big D

Sharon Reiter Dallas District

If it hadn't been for an elbow injury, Joe Thompson of the Dallas District design section might have been headed for the big leagues.

Thompson started his career with TxDOT 34 years ago in the Dallas District Design Office. He moved to the McKinney Residency and Northside Residency before eventually returning to the district in his current position. But long before his days with TxDOT, Thompson had considered a career on the mound.

"When I was in high school in Bryan, I was basically the only pitcher on the team," said Thompson. "While there, we won the state championship. That got me a half baseball scholarship to Texas A&M University."

Baseball was not the only sport Thompson excelled in. He also took his 4A high school basketball team to All State and averaged 22 points per game. A&M also offered Thompson a half basketball scholarship, which he accepted.

"I only played basketball at A&M as a freshman. After that, I focused on baseball," he said.

And focus he did. It was 1959 and the University of Texas was the dominant team in baseball. However, with Thompson's help, A&M swept a three-game series from UT to win the Southwest Conference. Thompson and the team recently were honored for their achievement.

"The athletic department reunited us this past Easter and treated us to a nice dinner and introduced us before one of the games," said Thompson.

The Southwest Conference was dissolved last year, and the teams were divided among other leagues. Thompson said being a part of the Southwest Conference meant a lot to him.

"I hated to see it end, but it was inevitable," said Thompson. "It was the best thing for the economy."

Sadly, it was the championship game that ended Thompson's baseball career. He injured his arm his sophomore year and was unable to continue playing. But, the legacy continues through his son, Craig. Craig played baseball and basketball for Lake Highlands High School. Like his father, his baseball team achieved the title of All State Champions, and All District in basketball. And, like his father, he wants to pursue a career in civil engineering if he doesn't become a professional baseball player. However, he may never make it to the drafting table if things continue the way they are for this shortstop.

"Texas Tech had offered Craig a full baseball scholarship, which he accepted," said Thompson. "Then, the school that is generally in the top 10 in the nation, Stanford University, called and offered him a full scholarship. So, I guess my son's going to California now."

Quality athletes are not restricted to Thompson's side of the family. His brother has a son he's rather proud of as well. Brooks Thompson, who used to play alongside Shaquille O'Neal before Shaq was traded to the L.A. Lakers, is Thompson's nephew.

"My brother lives in the same neighborhood as (former Dallas Maverick) Jason Kidd," said Thompson. "Maybe Craig can do that for me one day."

No one should feel sorry for Thompson because he didn't make it to the big leagues. He says he's perfectly happy with the way things turned out. * This story originally appeared in Express Press, the Dallas District's newsletter

Great Texas Trash-Off gives state spring cleaning

Linda Levitt

Travel and Information Division

Spring cleaning will take on a whole new meaning April 5, when more than 112,000 Texans will scourstate highways, county roads and city streets and parks in the 12th annual Great Texas Trash-Off (GTTO).

Statewide, 1,700 Adopt-a-Highway groups will pick up litter on highways. Keep Texas Beautiful volunteers in 100 communities will concentrate on city streets and parks. Altogether, the volunteers expect to collect more than 8 million gallons of litter.

The one-day event is designed to alert Texans to the state's litter problems and to encourage people not to toss their trash by providing examples of litter-free areas.

"Imagine what Texas would be like if we had no litter," said Doris Howdeshell, director of the Travel and Information Division. "That's the intent of the Trash-Off — to remind people of the state's natural beauty and to provide cleaner, safer roads, streets and parks.

The effort of thousands of volunteers is an inspiring reminder that if no one tossed their trash from car windows, no one would need to pick up after them."

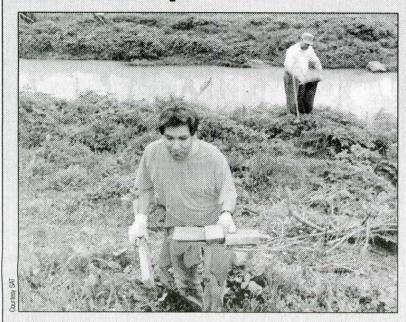
The GTTO coincides with the wildflower season, and this is the twelfth year that volunteers have devoted a day to "getting the bottles out of the bluebonnets." It also kicks off Keep Texas Beautiful Month throughout the state.

The trash-off is part of TxDOT's "Don't Mess with Texas" public awareness campaign. The litter prevention program, which includes Don't Mess with Texas, Adopt-a-Highwa, and a grassroots partnership with Keep Texas Beautiful, Inc., works to change the attitudes — and the behavior — of would-be litterers. By reducing the amount of trash on state highways, these programs are saving taxpayers \$2 million to \$4 million in litter pickup expenditures.

Keep Texas Beautiful is a not-for-profit environmental group of a network of private citizens, communities, industries, civic groups,

schools and government agencies. *

River cleanup



District Engineer
Tony Arredondo,
front, and Brian
Taylor were among
14 TxDOT employees
taking part in the
San Antonio River
Cleanup in March.
More than 1,000
volunteers picked up
22 tons of trash
during the third
annual cleanup.

San Antonio Deputy

Employees now have access to on-line manuals

Once this issue of Transportation News hits the streets, most TxDOT employees should have access to the TxDOT online manuals. To get access, double click on the install.exe file inside the w:\manuals subdirectory. A dialog box will appear. Click on the install button and TxDOT Online Manuals program group will be added to your computer. The system will alert you when the install is complete and then you can exit from file manager.

Wanted: Your story ideas

Has your work unit accomplished something extraordinary? Does your co-worker have a wacky hobby? Is there something you'd like Transportation News to cover?

If you answered yes to any of these questions, you've got just what we're looking for.

The T-News staff is looking for news tips and feature ideas from employees across the state.

You don't have to be the next James Michener. In fact, you don't have to write much more than your name. Just send us your story idea, any information you have about the subject and a contact name and phone number and we'll get our staff working on it. You can use GroupWise by sending an e-mail to MWHITTEN, or send your ideas via interoffice mail to T-News, Public Information Office, Main Office. *

To open the TxDOT manuals, look for TxDOT Manuals program group, double click on it and then double click on the books icon. This will launch DynaText and show a screen with all of the Functional Manual System collections. Individual manuals will be inside the collections. In the next few months, keep an eye on the following collections for new publications:

- Audit collection for the Internal Audit manual;
- Information Resources collection for the "Internet Use" chapter of the Information Services manual;
- Communications collection for the TxDOT Glossary and the Communications manual;
- About Online Manuals collection for the TxDOT Reader Guide;
- Finance collection for the Voucher manual;Human Resources collection for the
- Occupational Safety manual; and

 Procurement collection for the Mater
- Procurement collection for the Material and Supply Management System (MSMS) manual.

Let the Management Services Office know what is good about the books and what needs improvement. E-mail your comments to STUTT, CCONVERS or RWEBRE. Send comments or questions about the manual contents to the manual's originating office. *

Spectacular wildflower season predicted

Texas roadsides should have an abundance of wildflowers this spring.

TxDOT landscape experts predict a bumper crop of bluebonnets, Indian paint-brushes, lemonmints and other native flora.

For those searching for prime wildflower locations, TxDOT is offering assistance through its toll-free travel information hotline at (800) 452-9292.

Callers may get directions to some of the state's best wildflower spots this spring and information about wildflower festivals and other springtime events throughout the state. The service will operate until early May from 8 a.m. to 6 p.m.

"The determining factor for a successful wildflower season is the amount of rain enjoyed by a region during the preceding fall and winter," said Craig Steffens, TxDOT's director of landscape design. "Wildflower plants actually start their growth process prior to the spring season. So the fall and winter downpours that we've had should provide a beautiful and bountiful wildflower season."

TxDOT has given Mother Nature a helping hand with wildflowers, according to Steffens.

"Our maintenance crews work yearround planting thousands of wildflower
seeds and coordinating mowing schedules
to allow native plants to mature. These vegetation management techniques help to prevent soil erosion, conserve water and save
money while, at the same time, producing
some of the most beautiful rights of way in
the United States," he said. **

Beautification Awards set April 1

The 1997 Highway Beautification Awards will be presented April 1 at 9 a.m. at the Austin Marriott at the Capitol.

The awards were created in 1970 by Lady Bird Johnson to recognize maintenance workers for outstanding efforts in landscaping, preservation of wildflowers and maintenance of picnic areas.

The awards are held in conjunction with the annual Maintenance Conference.

For more information, contact the Construction and Maintenance Division at (512) 416-2500. ★

Sensors gives LBB crews jump on bad weather

Penny Mason Lubbock District

Bad weather is synonymous with lack of sleep. But, thanks to a sophisticated, computerized weather system, maintenance foremen and technicians in the Lubbock District are catching more winks.

Steve Ferguson, Ralls roadway maintenance supervisor, is one of those lucky people getting more sleep on bad weather days. Instead of staying up all night, Ferguson and his crew can check the computer periodically to see if a storm is on the way.

"It's a great system," he said. "At least we know when something is coming in."

Ferguson admited that the system could be better if the sections had access to the radar.

"That would be even better," he said. "I believe district maintenance is working on that."

For now, maintenance supervisors have

access to a number of weather statistics. The information is transmitted via computer through the six sensors placed on the roadway earlier this year. The sensors transmit information such as air temperature, dew point, relative humidity and wind direction. They sensors also register the freezing point on the road, the surface temperature and the condition — dry or wet or icy — of the roadway.

These sensors can give maintenance crews a headstart on sanding and salting the roadways, said Ted Moore, Lubbock Ddistrict maintenance engineer.

"The information is updated on the half hour," Moore sainoted. "When the maintenance supervisor sees that the temperatures are dropping, and precipitation is likely, they can dispatch a crew to start treating the bridges and roadways. That way, they get a jump on Mother Nature."

There are two sensors at each site, Moore said

"The sensors also register ground temperatures at three inches and 12 inches below the surface," he said.

Moore said that the best part about the program is its flexibility.

"There are graphs and tables where you can check on specific sites or compare data from one sensor to another," he added. "You can also look at one day or go back and check the data for a month or for a year."

The Lubbock system is compatible with the one in Amarillo, he said.

"We can call the Amarillo sites and see what's going on north of us," he said.

Including the forecast capabilities, the system cost the district \$280,000.

"But it was money well spent," said Moore. "With this system we are better prepared. We can get a jump on the weather."

Not to mention that the crews can get more sleep. That has to be the greatest benefit. ★ Reprinted from Vision, the Lubbock District newsletter

Structures used in bridge program as diverse as Texas

Ralph Banks, P.E. Design Division

From end to end, the types of Texas terrain and climate are almost as vast as the state itself. Because of this variety of conditions and circumstances, each bridge site has its own set of possibilities.

Prestressed bridges, which are precast are favored in many cases because site form work is reduced and bridge construction and erection is quicker.

The I-shaped pre-stressed concrete girder typically is used for medium to long spans. However, a cast-in-place concrete deck is required with attendant form work construction and transport placement of concrete on site.

Prestressed concrete box girders are often used for short to medium spans. Typically, a cast-in-place concrete deck is not required, but the application of some type of traffic-wearing surface is needed.

The box beam allows a bigger waterway opening under the bridge because the section is more shallow.

Prestressed concrete "tee sections," which are actually "double tee" in shape, can serve with application of only a wearing surface.

This type is usually limited to short to medium spans because of handling and transport requirements. One characteristic of all precast, prestressed concrete pieces is that they must be transported to the job site and handled with heavy equipment. For job sites in remote areas or where impractical or cost prohibitive and intermediate span lengths will suffice, more conventional cast-in-place concrete bridge types are often used. Currently, the preferred bridge type in such cases is the pan form concrete girder. Prefabricated metal forms are re-used from project to project.

The girder stems and deck are cast together as a composite section. Where more shallow sections are needed and short spans will suffice, the cast-in-place concrete slab is often used. The monolithic slab acts as both the deck and girder elements.

The concrete multiple box culvert is commonly used where the waterway opening requirement is relatively small, and the channel is shallow.

The key is to identify the type of structure that will be the most serviceable, cost-effective and advantageous for the chosen site and the demands of traffic. TxDOT has let to contract 173 bridges and bridge classified culverts in 1995-96 to replace deficient bridges on county roads and city streets across the state. *

TxDOT plays role in emerging VIVDS technology

Vehicle detection is a critical part of traffic control systems. Roadway efficiency of roadways can be greatly improved or reduced depending on the condition of vehicle detectors.

The most widely used vehicle detectors in traffic signal and freeway management systems are inductive loops. However, loops are not the perfect solution. Inductive loop installation requires that slots be cut into the pavement. Slotting operations cause a disruption of traffic flow, but that is not the biggest problem. Saw cuts can allow water to enter the subgrade, which can cause voids or can weaken the load-carrying capacity of the soil. Therefore, pavement that has been saw cut often cannot withstand heavy traffic and fails prematurely.

Recent developments in off-road detection technologies have produced viable alternatives to inductive loops. One of the most promising technologies is video imaging vehicle detection systems (VIVDS). VIVDS use cameras to monitor detection zones and report the entrance and exit of

traffic from the zones. The systems can count and classify vehicles, as well as give flow information such as vehicle speeds and headways. The use of this type of information can have a tremendous impact on how control systems operate in the future.

TxDOT is involved in this evolving technology on several fronts. Evaluation projects are ongoing in the traffic signal area in the Austin, Laredo, San Antonio and Waco districts, while Houston, Dallas and Fort Worth have been evaluating systems for freeway use.

At this stage, the VIVDS development for intersection control is ahead of freeway applications because freeway systems rely more on the accuracy of data (vehicle counts) than does intersection control, which relies more on the detection of vehicle presence. Both systems are promising, but still require additional work.

A recently completed research project gives guidance about the implementation of these systems (camera placement and anticipated accuracy). The results of this research are being used in the next generation VIVDS specification now under development. A new research project has just started that will develop an application guide, not only for VIVDS, but also for other detection alternatives as well. In addition, the National Transportation Communications for ITS Protocol project is developing a common communications protocol for detection systems which will greatly improve the interchangeability of the types and brands of detectors used in management systems.

Traffic management systems rely on detection now more than ever before. The ability of detection systems such as VIVDS to provide detailed information, not only about traffic volume, but also about the characteristics of the vehicles, will be a critical element in the operation of the roadways of the future. The Traffic Operations Division is working with the districts to ensure that TxDOT will be in a position to take advantage of this technology as it emerges. * Reprinted from Quarterly FDO Bulletin, the Field Operations newsletter

Service Awards

April

Abilene 20 years Bennie D. Harvey Garry L. Jennings William D. Rister 15 years Gary R. Cypert 10 years Harold G. Cannon Jimmy Marquez 5 years Donnie L. Cornutt

Amarillo 40 years Donald D. Day 20 years Jackie L. Bailev lames E. Ford 15 years Lloyd A. Hare Jr. Lee P. Landes Cecil C. Rich II 5 years Kenneth S. Brewster Donald W. Burgin Linda D. Reimer

Atlanta 15 years Thomas O. Campbell

Austin 30 years Bobby C. Fitzgerald 20 years Terrell N. Eulenfeld Clayton E. Seidel 10 years Leonard J. Bobrowski Jr. John F. Hellinghausen Donald A. Leclerc Rodney D. Matthews Travis W. Remmert

Beaumont 30 years Joseph E. Smith 20 years Travis R. Cupples Dana S. Stephens 15 years Acil J. Diffey 10 years John B. Hood

Brownwood 15 years David R. Bennett Donald H. Harrison

Bryan 35 years Bernard J. Klawinsky Curtis J. Newton 20 years Patrick T. Williams 15 years Curtis L. Beckham 10 years J. T. Anthis Jr. Roberto P. Estraca Sammy Martinez Dennis W. Schroeder Keith E. Zwernemann

Childress 25 years Terry L. Keener 15 years Vicky T. McBride

Corpus Christi John W. Stringer 15 years Rene Longoria Rosie S. Lopez Sharlotte L. Teague 10 years Ignacio J. Hinojosa 5 years Ethen D. Swisher

Dallas 25 years Deborah B. Burgess Fred Iones Willard L. Simmons 15 years David M. Grooms Raymond G. Hicks 10 years Ramon Barreiro Bobby L. Lawson Karen S. Ronning 5 years William H. Catchings Jr.

El Paso 15 years Juan M. Ortega 5 years Richard N. Rose Jr.

Fort Worth 25 years John L. Sharpe 20 years Thomas J. Jackson 15 years Clennon D. Rosewell 10 years Gary W. Baird Rudy M. Estrada Jesus G. Galvan Justin L. McKinley Tommy R. Stacy Dicky J. White

Houston 25 years Mills D. Wood 20 years Walter D. Torres Nolan W. Wunderlich 15 years Magnolia G. Davis Charles E. Grant Jr. Johnny L. Guice Eddie L. Horace Keith R. Robison 10 years Douglas H. Blaine Pearle H. Gray John D. Hernandez Debbie F. Smith 5 years Robert C. Flinn Joe E. Hendrix Dennis A. Johnson Anis A. Merchant Juraj G. Spakovsky Victor K. Tsai John C. Williams

Laredo 35 years Felix Rodriguez Jr. 15 years Jaime G. Ledesma Gregory C. Newman 10 years Jorge Medina

Lubbock 30 years Jerry R. Moore 25 years Durwood G. Payne 20 years Louis Aguilar Jr. Tommy D. Hickman 15 years James R. Kelley 10 years Roy C. Mason 5 years Cynthia K. Ratliff

Lufkin 30 years Thomas F. Dobbs 25 years Gary J. Cowart 20 years Myrtice R. Kyle 15 years Eddie D. Kennedy Roy B. Sanders Jr. Sonny J. Tippett 10 years Randy G. Pierce 5 years Louis C. Parten

Odessa 15 years Jerry K. Ford Jackie C. Lambert 10 years John I. Jaquez Jr. 5 years James L. Jenkins

Paris 15 years Reza Bazazzadeh 5 years Jesse L. Fleming Jr

Pharr 25 years Manuela E. Castillo 15 years Robin L. Longwell Jose E. Lopez Jr. 10 years Calixto Mora Jr. 5 years Sandra S. York

San Angelo 35 years Jerry L. Smith 25 years Ernest R. Gomez 20 years Charles M. Thompson 10 years Jerry D. Vandivere

San Antonio 35 years Jimmy L. Wehmeyer 30 years Margaret A. Richards 20 years Clay R. Smith 15 years Craig E. Clark Bryan R. Vickery 10 years Guadalupe A. Martinez

Tyler 30 years Glenn R. Price 15 years Kenneth R. Christian Kent M. Clark 10 years Robyn E. Capps Phyllis S. Newton Ronald G. Smith 5 years Judith S. Matney Anthony J. Moran William S. Perry Mark A. Pike Shannon E. Standard

Waco 35 years Bobby D. Roberts 25 years Ernest G. Karnowski 20 years James C. Johnson William A. Smith 10 years Roddy W. Hale Helen M. Havelka Harold B. Shilling Brian K. Smart Robert A. Tealer

Wichita Falls 30 years Fred D. Hill Linda L. Proctor Joseph B. Blair Kenneth J. Mitchell 10 years Peggy R. Royston 5 years **Hugo Flores**

Yoakum Design 30 years 15 years Marvin J. Michalec 20 years 10 years Michael L. Drozd Luke Grant 15 years

Myrtle S. Schomburg 10 years Mark J. Kusak Barry A. Mikeska Mark E. Wendel 5 years Marla M. Jasek Gregory L. Polasek

General Services 25 years Alvin J. Helmers 10 years Anthony B. Harper 5 years Maria R. Awad L.F. Jones

Budget and Finance 5 years Sylvia C. May

Business Opportunity Programs 10 years Patricia A. Merrill Sherri Russell

Construction and Maintenance 10 years Richard F. Kirby George Lueck

Joseph B. Gomez Mary T. Cano-Arroyo

General Counsel 5 years Pamela A. MacKenzie

General Services 25 years Alvin J. Helmers 10 years Anthony B. Harper 5 years Maria R. Awad L. F. Jones

Human Resources 30 years John R. Jones 10 years Ron J. Petter Ladell G. Wood 5 years Judy L. Barnes

Information Systems 20 years Anthony H. Compton 15 years Cathy A. Zumwalt 5 years Barbara J. Kullenberg

Materials and Tests 20 years Richard G. Kubitza 10 years Hector Marquez 5 years Robert A. Hankins

Occupational Safety James E. Baker

Traffic Operations 20 years Janie P. Light

Transportation Planning and Programming 15 years Stephen O. Haizlip

Travel and Information 5 years Michael A. Amador Martin C. Lange Joseph H. Slocum Jr.

Vehicle Titles and Registration 30 years Ben E. Dillon Jr. 15 years Alberta R. Byers Janie B. Lowe 10 years Cindy J. Grisham Margie L. Montgomery Rebecca B. Ramirez 5 years Rhonda S. Henzi Elizabeth L. Ruiz Jeannie T. Walker

Calendar

April Highway Beautification Awards, Austin, CMD 1-2 Statewide Maintenance Conference, Austin, CMD 2-3 Superpave+ and QC/QA Regional Seminar, Odessa, MAT Great Texas Trash-Off, statewide, TRV 6-10 AASHTO Standing Committee on the Environment Spring Meeting, Austin, ENV 9-11 Texas Airport Operators Conference, Austin, AVN San Jacinto Day (holiday) 21 23 Commission Meeting, Austin April Memorial Day (holiday) 27-30 Transportation Planning Conference, Corpus Christi, TPP 29 Commission Meeting, Austin June Spring Research Management Committee Meeting, Arlington, RTT 9-13 13th Annual TxDOT Internal Audit Conference, Austin, AUD 19 Emancipation Day (holiday) 23-27 TP&D Conference, Austin, TPD 26 Commission Meeting, Austin July Independence Day (holiday) 31 Commission Meeting, Harlingen/McAllen August 27 LBJ's Birthday (holiday) Commission Meeting, Austin 28 September

25

Texas/Mexico Border Conference on Border Safety, South Padre Island, PHR 3-5

Commission Meeting, Austin

October Commission Meeting, Austin

November

Commission Meeting, Austin 20 27 Thanksgiving (holiday) 28 Holiday

Decembe

Commission Meeting, Austin 18 25 Christmas Day (holiday)

TQI

Continued from page 7

diesel fuel and other solvents to remove asphaltic mix from plant equipment, truck beds and laydown equipment. That year, the U.S. Department of Transportation banned the use of diesel for that purpose. Diesel and solvents harm the environment and can contaminate groundwater. Diesel also softens asphalt, leading to potholes and other pavement degradation.

Prior to 1989, diesel was the standard for asphalt removal. In fact, up to 50 million gallons of diesel a year were going into the ground across the nation because of the practice.

The Fort Worth District laboratory took on the mission to find a replacement — an asphalt release agent that would be safe for the environment and workers, and not detrimental to the HMAC. When the district began this project in 1994, no test procedures existed for release agents — not through TxDOT, ASTM or AASHTO.

"Two and a half years ago, we basically started out with a blank sheet of paper," said FTW Laboratory Supervisor Richard Williammee. "With the assistance of Paul Shover, one of my laboratory technicians, we've developed test procedures from

scratch. We feel that we now have the most stringent testing in the country."

FTW's lab developed a procedure that includes three laboratory tests. After checking the MSDS sheets to make sure the product isn't harmful or flammable, the lab procedure begins with a seven-day stripping test. One of the most stringent stripping tests in the country, it ensures that the release agent will not strip the asphalt or be detrimental to the mix. The stripping test is followed by a mixture slide test and an asphalt performance test. These three tests gave lab personnel a good indication of what products might work well.

After the lab testing was finished, the products were taken to the field to see if they would really work. FTW enlisted the assistance of the Dallas District special maintenance crew which performs full-scale asphalt paving operations. With a full-size laydown machine and all the equipment used for asphalt paving, the crew was able to check out the agents under actual conditions.

The result of this teamwork is that a variety of products have been identified that are safe, effective and reliable in cleaning asphalt from equipment without harming the mix. Working with the Materials and Tests Division, FTW has created a test proce-

dure using all four tests to evaluate and approve release agents. The procedure became available for statewide use in September '96 and is being reviewed for national acceptance by ASTM. Because of its thoroughness and innovation, the asphalt release agent testing procedure has garnered praise from suppliers, the construction industry and other state department of transportation.

Issue Team Award

The TQI Steering Committee recognized one of the issue teams that was formed during the 1996 TQI Conference. There were 29 issue teams formed from the seven breakout sessions. The steering committee asked each team leader to report on their accomplishments and chose the team formed from the breakout group studying Using Innovations and Value Engineering to Expedite Projects. The team addressed the implementation of value engineering during the design, prebid and construction phases of project development. The members of the team included team leader Joe Graff, CMD, and team members Sandy Wesch-Schulze, DAL; Steve Perez, LBB; Jerry Barnes, Austin Bridge and Road; Audis C. Hill, Williams Brothers; and Rosendo Garcia, PHR. *

Willrich

Continued from page 3

"For example, you might have a case where a provider is misusing or not using a vehicle," she said. "A coordinator will have to go confiscate the vehicle, and that is always a touchy situation."

Willrich can't hide her enthusiasm for her job or her family either. Her life is centered around her three children — David, the oldest, an helicopter pilot with the Texas National Guard; Jennifer, who is majoring in education at Southwest Texas State University; and Steve, a Georgetown high school junior defensive lineman who wants to play football for the University of Nebraska — and one-year-old grandson Tyler.

"Jennifer wants to teach fourth or fifth grade in the New Braunfels area," she said, "and I really hope Steve will get a scholarship to play football at Texas A&M where his cousin played."

Willrich plans to be extremely active during her term on the WIN

"I want to see this organization work harder toward increasing its membership by increasing awareness about itself," she said. "I hope to help schedule more workshops and expand the speakers program to appeal to all levels of female employees.

"WIN is a great networking organization," she concluded. "It really helps women help each other."

Gee, she sure is into that "help" thing. *

In Memoriam

Carl N. Abraham, Maintenance Technician III, retired from the Houston District in 1977, died Nov. 16, 1996.

John V. Adams, Maintenance Technician I, retired from the Abilene District in 1972, died Dec. 28, 1996.

Hearl A. Albritton, Maintenance Technician III, retired from the Tyler District in 1980, died Dec. 7, 1996.

Louie C. Alexander, Engineering Technician IV, retired from the San Angelo District in 1975, died Jan. 26, 1997.

Alvin L. Atchley, Maintenance Technician III, retired from the Houston District in 1981, died Jan. 13, 1997.

Willie T. Barrett, Bridge Tender, retired from the Houston District in 1970, died Jan. 2,

Vester Beasley, Maintenance Technician III, retired from the Dallas District in 1987, died Dec. 12, 1996.

Daniel L. Beralek, Purchasing/Supply Officer I, retired from the Waco District in 1993, died Dec. 14, 1996.

Buel E. Berry, Maintenance Construction Foreman III, retired from the Waco District in 1976, died Jan. 30, 1997.

Ealon Y. Bogard, Engineering Technician III, retired from the Lufkin District in 1983, died Jan. 7, 1997.

James B. Brady, Maintenance Construction Supervisor II, retired from the San Antonio District in 1973, died Jan. 21, 1997.

Lincy D. Clemmons Jr., Maintenance Technician II, retired from the Fort Worth District in 1993, died Jan. 21, 1997.

Billie R. Edwards, Maintenance Technician III, retired from the Beaumont District in 1985, died Jan. 20. 1997.

Nomie Hann, Maintenance Technician III, retired from Dallas District in 1983, died May 16, 1996. Karl A. Jensen, Marine Technician III, retired from the Houston District in 1993, died Jan.

Harvey L. Johnson, Maintenance Technician III, retired from the Waco District in 1976, died Dec. 28, 1996.

Melvin J. Maltsberger, Maintenance Construction Superintendent II, retired from the San Antonio District in 1985, died Jan. 15, 1997.

Johnnie V. Miller, Engineering Technician IV, retired from the Amarillo District in 1975, died Jan. 16, 1997.

Robert J. Miller, Maintenance Technician IV, retired from the Pharr District in 1995, died Jan. 14, 1997.
Edward A. Morrow, Maintenance Technician

II, retired from the Dallas District in 1969, died Jan. 14, 1997.

Alvie L. Putman. Maintenance Technician III.

retired from the Dallas District in 1974, died Jan. 11, 1997. **Hubert E. Rich**, Maintenance Technician I.

retired from the Brownwood District in 1970, died Nov. 12, 1996.

Wilton M. Robertson, Roadway Maintenance Supervisor, retired from the San Angelo District in 1994, died Dec. 16, 1996.

Theadore A. Sams, Maintenance Technician III, retired from the Houston District in 1991, died Feb. 7, 1996.

Emilio Solis, Maintenance Technician II, retired from the Corpus Christi District in 1986, died Jan. 15, 1997.

Wallace W. Taylor, Engineering Technician III, retired from the San Antonio District in 1975, died Nov. 26, 1996.

Alfred E. Zerm, Maintenance Technician III, retired from the San Antonio District in 1995, died Dec. 6, 1996.

Retirements

December Dallas

Tom Gallagher, Roadway Maintenance Supervisor V, 26 years Donnie G. Newman, Motor Vehicle Mechanic

III, 12 years

Houston

Ronnie E. Parker, Maintenance Technician IV,

January

Information Systems Division

James R. Carter, ADP Programmer III, 8 years

February Tyler

Donald E. Chitty, Maintenance Technician III, 18 years

March

Austin

William E. Mitchell, Maintenance Technician III, 10 years
Bobby W. West, Maintenance Technician V,

26 years

Beaumont

James L. Revia, Maintenance Technician IV, 25 years Motor Carrier

Joyce Churchwell, Administrative Technician I. 26 years

Transportation Planning and Programming Kenneth W. Morris, Administrative Technician IV, 26 years

Letters

This is a letter of gratitude and appreciation for the efforts of Mr. Darryl D. Hall last night. I had the unfortunate problem of sustaining a flat tire while returning home from work on U.S. 59 at 10:15 p.m. last night. The conditions that night were miserable and vision was difficult. I was attempting to notify AAA of my predicament when your officer pulled up behind me and offered his assistance. Needless to say, I accepted, since my experience with changing flats is not extensive and attempting to do so in my opinion, could have been life-threatening. Mr. Hall proceeded to divert traffic and change the flat tire efficiently and expeditiously. Moreover, it was carried out in a professional and sincere manner that I greatly appreciated. While I hope I do not have future mishaps that require your services, it is comforting to know that there are people who care and provide assistance in times of need. Your officers should be commended for their work even if it was "just performing their duty."

David W. Mercer, M.D. Houston

Darryl D. Hall is a Courtesy Patroller II in the Houston District's Transporation Operations Section.

On March 5 I was returning to College Station from New Orleans when my car suddenly died on I-610 westbound on the North Loop between Irvington and I-45. Fortunately, I was able to coast into the emergency lane adjacent to the median and turn on the flash signal. I sat there for some time, knowing that I was in a dangerous situation and needed help. Fortunately, Mr. **Gordon Wright** spotted my car and stopped to assist me. He very graciously offered to take me off the expressway to a place where I could call to arrange for towing.

What impressed me about Mr. Wright was not only his concern for my immediate safety, but his regard for the fact that I would need a safe place where I could have

access to a phone and wait for a tow truck and taxi. After considering several possibilities, he identified a gas station where he felt I would be safe, and, indeed, everything worked out well. After arranging the towing, I took a taxi to the Saab dealer, rented a car and returned to College Station.

Mr. Wright's concern for my well-being impressed me so much, that I asked him for the name of his supervisor, so that I could write a letter of appreciation. You are fortunate to have an employee of Mr. Wright's sensitivity, and I am most grateful for the assistance he provided.

Sally T. Knight College Station

Gordon Wright is a Contract Administrator II in the Central Houston Maintenance Office.

I would like to commend **Mr. Downs** who works in the Genoa Maintenance Office, 702 FM 1959, for his help in providing a safe construction site operation.

On March 18, 1997, I was traveling from Ellington Field west on FM 1959 connecting to I-45 North. There on the road that curves to feeder I-45N were two private construction companies who, in my opinion, were creating an unsafe road hazard on a Texas road. There were private vehicles parked on the road and construction personnel in the area. I only saw about three traffic cones warning the upcoming traffic.

I personally met with Mr. Downs and discussed the unsafe road situation. He in turn advised me that he would investigate the problem.

This morning, as I was driving the same direction, I was surprised to see the area with the proper traffic signs, traffic barrels and indicating arrow lights warning the oncoming traffic.

Mr. Trietsch, I am positive Mr. Downs made it possible for this particular construction site to be able to warn and protect motorists to drive carefully.

Thank you for having personnel like Mr.

Downs and others in your department who respond to private citizens' problems and/or complaints.

Eduardo Garcia

William A. Downs, a Roadway Maintenance Supervisor V, is the maintenance supervisor of the South Harris Maintenance Office, Houston District.

I just want to take the time to thank one of your employees who not only helped me when I had car trouble recently, but just really made my day. Thank you **Steve Schmidt**.

Karen Grinnell

Steve Schmidt is a guardrail inspector in the Austin District's North Travis County Area Engineer's Office.

I would like to commend your crew in the Panhandle. The supervisor and several others went to great lengths to assist one of our trucks that had a dangerous mechanical problem in the Panhandle. The truck was fixed and back on the road in a matter of a few minutes. We at Loomis, Fargo & Co. Amarillo, again, would like to say thank you the Texas Department of Transportation in the Panhandle.

Gary Wojtek Operations Manager, Loomis, Fargo & Co.

Wojtek was referring to the Amarillo Districts Panhandle Maintenance Office in Carson County.

BULK RATE U.S. POSTAGE PAID AUSTIN, TEXAS PERMIT NO. 3753

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beginning for a new and expanded role in the department. But not for long. Barred from holding office in Texas, ex-Gov. Ferguson remained immensely popular. His wife, Miriam, became governor in 1924 and the department was almost instantly in turmoil. She appointed a new highway commission and it took office on Feb. 16, 1925.

Gilchrist submitted his letter of resignation shortly before the new commission took office. Ehlinger also resigned.

Each of the three part-time highway commissioners received \$2,500 a year and, together, they exercised nearly absolute administrative powers. They took over the hiring of local maintenance superintendents and section foremen from the field engineers. Official records show that all division engineer jobs and posts in the department's top administration in Austin turned over at least once during 1925.

Some of the newcomers had no experience in road work. "Many of them were what I would call broken down war horses and second rate politicians with some influ-

ence in their communities," Ehlinger fumed. "Some were men who would do what they were told to do, regardless of whether it was ethical or not, and some were not exactly honest." Maintenance rapidly went to pot and, true to its warnings, late in 1925, the U.S. Bureau of Public Roads shut off all federal highway aid to Texas.

Soon, word of wrongdoing in the high-way program reached the ears of Dan Moody, the state's attorney general. Moody moved against a couple of contractors for using state-owned machinery for private work. He didn't have much success in the courtroom, but managed to bring the goings-on on the commission to the front pages. It also brought Moody to the public's attention, and in 1926, he was elected governor, defeating Ferguson.

Moody took office early in 1927 and appointed his own slate to the commission.

The three he named — Ross Sterling, Cone Johnson and W. R. Ely — are credited with setting the high standards of integrity, professionalism and personal conduct within the department that have continued through the present. *

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