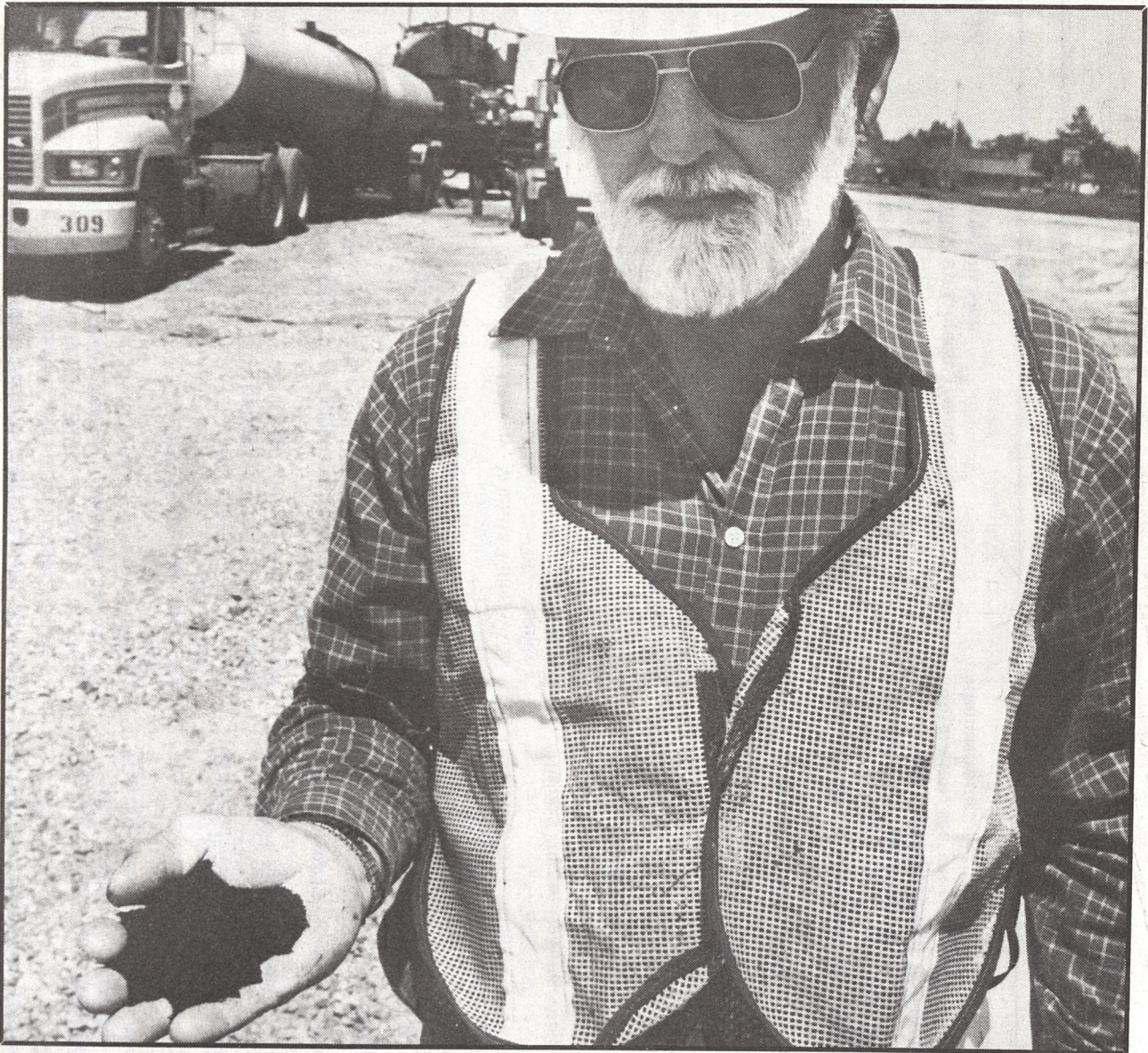


# TRANSPORTATION news



State Department of Highways  
and Public Transportation

JUNE 1990









From the  
Engineer-  
Director

**F**irst-class citizens make first-class organizations. I am convinced that this department has more first-class citizens than any organization of its kind. A good employee is also a good citizen, and a good citizen cares about things — including the community in which he or she lives.

We have untold numbers of people in all levels of the department who are classic examples of first-class citizens. They are active members of civic clubs, churches, and all manner of volunteer organizations. Many are appointed to hospital boards, water districts, zoning commissions, and other vital elements of modern life. Others have been elected to hold offices on city councils, school boards, planning boards, neighborhood associations . . . the list goes on and on.

My desire is that we all be the best citizens we can, and participate to the maximum extent possible. This says to the world that the department's people are concerned and care about their fellow man. Community involvement showcases the type people we have. I am proud of every one of you who share your time and talents with your communities.

There is a note of caution, however, that I need to address. Many times these appointed, volunteer, and elected groups deal with issues that directly or indirectly involve the department. These issues can be sensitive and controversial. Often, personal concerns can come into conflict with department policies.

When such conflict arises, we would never expect any person to withhold his or her personal concerns or opinions; on the contrary, good representation requires a free flow of ideas and arguments. However, a person should not hold himself out as a representative of the department unless he is authorized to articulate policy. Personal opinions should be identified as just that, and the name of the department should not be used to advance personal causes.

With these simple precautions, our many fine citizens can give their very best to both their communities and their department, without compromising either one.

## Department gets award for environmental beautification

The Texas highway department received a national award for environmental beautification April 19 in Washington, D.C.

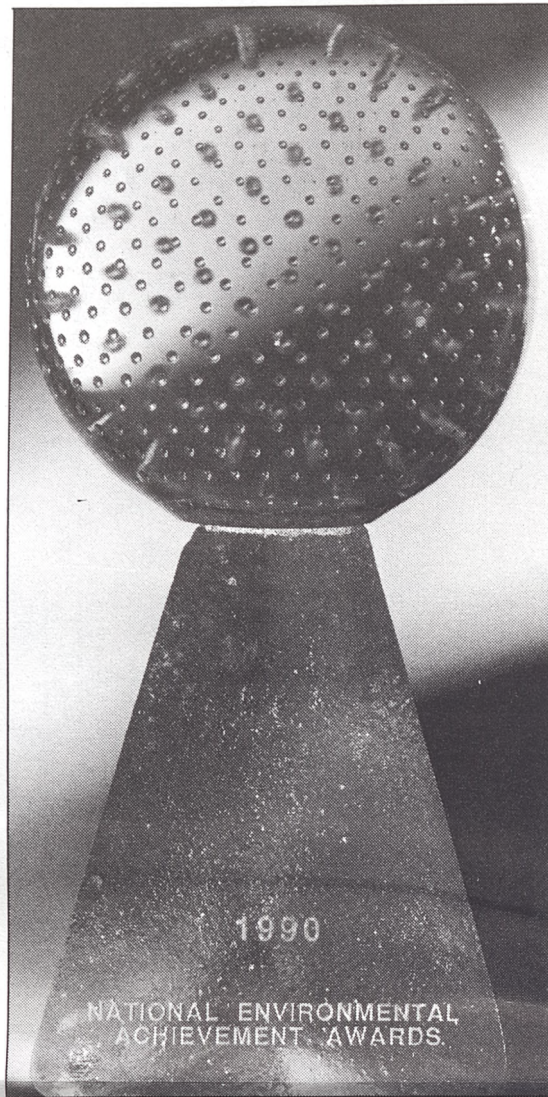
The National Environmental Achievement Award recognized the department's comprehensive antilitter program — the "Don't Mess with Texas" media campaign, the pioneering Adopt-a-Highway program, and other education and beautification efforts. The awards program was organized as part of the celebration of the 20th anniversary of Earth Day.

Under the theme "Searching for Success," the awards program received nearly 1,000 submissions covering environmental issues from across the country. The entries were judged by the National Environmental Awards Council, made up of 22 nationally recognized environmental organizations, including Earth Day 1990, the National Audubon Society, the National Wildlife Federation, Renew America, and the Sierra Club. Entries were judged on the basis of program effectiveness, replicability, economic feasibility and sustainability, and meeting community needs.

Robert Dedman, chairman of the Texas State Highway and Public Transportation Commission, accepted the award in Washington. He praised the department's antilitter efforts, citing a 64 percent reduction in roadside litter since 1985, the year both Don't Mess with Texas and Adopt-a-Highway began.

"We are especially pleased that our Adopt-a-Highway program has been copied by 34 other states, and seven more are planning similar programs. Within Texas also, there have been a number of successful spin-offs, like 'Adopt-a-Beach,'" Dedman said. "This year during our annual spring cleanup, which we call the 'Great Texas Trash-Off,' volunteers in nine other states joined us to make it the first 'Great American Trash-Off.'"

The Texas program and other entries will become part of an "Environmental Success Index," to provide a continuing reference for



The National Environmental Achievement Award, a first-place trophy for environmental beautification, is the most recent accolade for the department's antilitter programs. (Photo by Kevin Stillman, Travel and Information Division)

people and groups seeking solutions to environmental problems. ★Karen LeFevre, Travel and Information Division

## Trunk system rules adopted

A set of guidelines to determine routes that will be part of a new system of four-lane, divided roadways in Texas was approved at the highway commission's March meeting.

The Texas Highway Trunk System, as it will be known, will link areas of major economic and defense importance with urban areas.

"This system will set the pace for much of our state's mobility in coming decades," said Engineer-Director Arnold Oliver. "We devoted many months to this project. The final rules were adopted after an extensive series of public meetings and written feedback from around Texas."

The trunk system is designed to link all cities with more than 20,000 population to deep-water ports of entry, principal roadways

from adjacent states, points of entry from Mexico, and tourist areas. The system will make maximum use of existing roadways and will be designed to reduce circuitous routing wherever possible.

"We're excited that the Department of Transportation in Washington and the American Association of State Highway and Transportation Officials have both suggested roadway systems of national significance," said Oliver. "The Texas trunk system closely resembles their concepts, so we believe we're a bit ahead of the game."

He said the next step for the department is to select the routes to be included on the new system, using the selection criteria just adopted. A public hearing will be held to get citizen suggestions on the routes. ★Marcy Goodfleisch, Travel and Information Division



## New sick-leave pool debuts with splash

By ROSEMARY NEFF  
Travel and Information Division

It's a thought that is usually banished as soon as it occurs: What would happen if I got really sick and couldn't work? No one likes to ponder the loss of a paycheck, or the medical expenses and the mounting bills that would follow.

Now, we might not have to.

A department sick-leave pool, which began operating at the end of May, will allow employees faced with catastrophic illness or injury — their own or an immediate family member's — to receive sick leave beyond what they have accrued. While on leave, the person continues to earn salary, accrue benefits, and maintain health insurance coverage, and the leave does not have to be repaid.

Each employee may contribute up to 24 hours of sick leave per fiscal year to the pool. Anyone with a catastrophic illness or injury may apply to use the pooled leave, regardless of whether he or she contributed. A person in need may receive either one-third of the pool balance, the required recovery period as estimated by his doctor, or 90 days, whichever is shortest.

"I'm really excited about it," said Carol LeFevre, employee relations manager in the Human Resources Division (D-13). "I think it's good that the department can reach out and help people."

Legislation passed last year called for each state agency to establish a sick-leave pool to protect employees from losing compensation. The Employees Retirement System, which administers the state's benefits program, defines catastrophic illness or injury as a severe condition or combination of conditions that affect the mental or physical health of the employee or members of his immediate family, require a doctor's care for a prolonged period of time, and force the employee to exhaust all leave time. Immediate family includes related persons living in the same household or those totally dependent on the employee.

No further definition of a catastrophic illness or injury has been adopted by the department, said LeFevre. Applications for using the sick-leave pool will be made to the district or division personnel officer and approved or denied on a case-by-case basis by the department pool administrator, to be named.

In making those decisions, the administrator will consider information in the required doctor's statement about the illness and its expected duration, LeFevre said, and written guidelines will develop over time from case histories.

LeFevre said she expects the sick-leave pool will be used for many of the same



conditions for which employees have used the existing extended leave program — cancer, heart attacks, major surgery, strokes, serious on-the-job injuries.

But there are a number of extra advantages to the pool. Extended leave, which will continue to be offered, benefits only employees with two years' service. It does not apply when members of the employee's family are ill, and it is limited to the amount of sick leave the employee had accrued at the time his illness began.

Now, qualified employees can use the sick-leave pool before applying for the extended sick-leave program.

They still must deplete their own stores of sick, annual and compensatory leave, but should apply for the sick-leave pool about 10 days before they expect to run out of leave, if possible.

Rules for operation of the pool were approved by the highway commission May 24. They will be published in the *Texas Register* before final adoption, and also have been distributed to each division head and district engineer. Employees who wish to comment on the rules may address letters to D-13 division head Les Clark before the end

of June.

This month, district and division personnel officers will receive training in how the program will work and supplies of the forms to be used: one to contribute leave, one to apply for withdrawal, and one for submitting a doctor's statement.

Employees may contribute leave beginning June 1, and applications for withdrawal will be accepted starting July 1. Contributions must be in increments of eight hours, so employees can contribute eight, 16, or 24 hours at a time. Retiring or terminating employees may also donate their unused sick leave, up to the limit of 24 hours per fiscal year.

An employee who contributes to the sick-leave pool, and then runs out of leave himself, may withdraw for his own use the contributions he made during that same fiscal year.

"We've all experienced coworkers who have suffered a catastrophic illness in their family. It's debilitating not just physically but also emotionally and financially," said LeFevre.

"With the sick-leave pool, we have a way we can help."★

## Laniers to sponsor beautification awards

An awards program founded by Lady Bird Johnson will continue to reward highway workers who foster roadside beauty, through the generosity of Robert and Elyse Lanier. Engineer-Director Arnold Oliver announced May 1 that the former highway commission chairman and his wife will continue the awards, given each year since 1970.

The former first lady recently announced that she is bowing out of the program to spend more time with her family.

While he headed the highway commission, Lanier took great interest in beautification.

Under his leadership, the department instituted a policy of making landscaping an integral part of every construction project. He also directed department staff to develop ways to fight the state's litter problem — resulting in the successful and widely copied "Don't Mess with Texas," Adopt-a-Highway, and other programs.

Each year, the former first lady presented a plaque and \$1,000 to the highway department maintenance supervisor judged to have done the best job of beautifying roadsides under his care. A runner-up

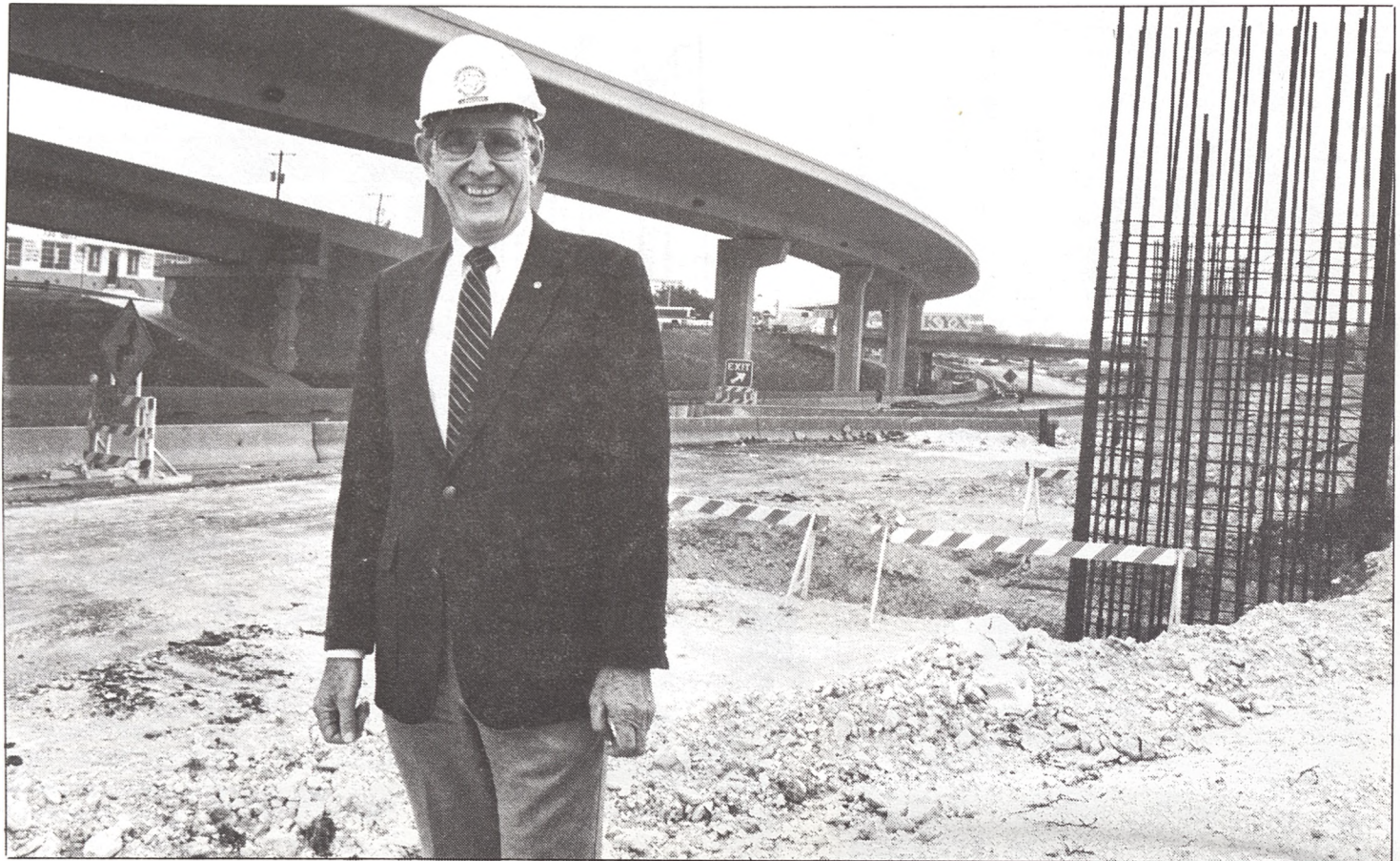
received \$500. A Scenic Preservation Award was presented to the highway district that best enhanced the natural beauty along its highways, and another award recognized success in propagating fall foliage and wildflowers.

Bob Lanier received the first Russell H. Perry Award from a coalition of transportation-related agencies at the Highway and Transportation Short Course last year. The award is for private-sector leadership in gaining public awareness of the need for adequate transportation facilities ★



# Lockhart 'railroaded' into career

Richard Lockhart compares his management style to that of a military commander: he relies on his staff for recommendations, but makes the final decision himself and then counts on 100 percent cooperation. (Photos by Kevin Stillman, Travel and Information Division)



*Dick Lockhart, born in San Antonio in 1930, has spent his entire 35 years with the highway department in his home district, where he became district engineer in 1987. A 1953 graduate of Texas A&M University, Lockhart served in the Army Corps of Engineers as a second lieutenant until 1955, and served in the Army Reserve for 20 years. Lockhart received the Gibb Gilchrist Award in 1986. He reviews his accomplishments and discusses the district's future in this conversation with Gina McAskill of the Travel and Information Division.*

## A conversation with . . . San Antonio District Engineer Richard Lockhart

### What got you interested in engineering, and why did you want to work for the highway department?

I always wanted to be an engineer. However, I was in high school before I determined that the kind of engineer I wanted to be was no longer a viable option — because I wanted to be a *locomotive* engineer. I grew up in a railroad family, and I thought the greatest thing in the world would be able to drive one of those big ol' beautiful steam locomotives. I still love them; I think the Texas State Railroad is the greatest thing in the world.

Anyway, I had construction jobs in the summers when I was going to high school, so I got interested in construction. I wasn't quite certain that I wanted to major in civil engineering at that time, but freshman chemistry made me definitely decide that I did not want to be a chemical engineer or a petroleum engineer. So I went to civil.

As far as the highway department is concerned, I believe it was between my freshman and sophomore years at A&M that I needed a job and the good ol' Texas Employment Commission routed me to the San Antonio Urban Expressway Office. I liked what I saw and liked what I did, and I asked them if I could go to work there when I got out of college.

### What other department positions have you held? Have you worked in any other districts?

It's a little unusual, but my whole career has been in the San Antonio District. I worked for the expressway office initially — that first summer job was field-party work, then I did some inspection work immediately

after graduation. I moved into what was then called the urban design office, and we were involved in the design and planning for a good portion of the expressway system in San Antonio, the initial phase of it. I spent some time in the North Bexar County residency, and after a while I took over the South Bexar County residency as resident engineer. Later, I was district construction engineer, district design engineer, and assistant district engineer.

### What was it like to come in as district engineer after Raymond Stotzer, since he was so well-respected? Was that a big problem for you?

Of course, Tom Walthall was district engineer for a short period after Raymond went to Austin to become engineer-director. But yes, it was a little bit of a challenge. People would always introduce me to someone as being the person that took Raymond Stotzer's place. I'd say, "Nobody can take his place." I truly believe that. I subscribe to many or most of the same principles that Raymond did, and operate in a similar manner. It's been easy in that respect, but it certainly has been a challenge to live up to someone as farsighted as Raymond was. He was a terrific man to work for.

### Who was most influential in your career?

There are a number of people who shaped my career with the department. Bob Lytton, who was the expressway engineer here when I first went to work [and later became district engineer - Ed.], gave me an opportunity to develop in the design area. Raymond had a great deal of confidence in me and gave me new challenges. Raymond always felt that if you had more than you could handle, you were busy and you were happy, and certainly he gave me that opportunity. So I think both of those people very definitely have made my career challenging and interesting and rewarding.



**Since the failure of the double-decker freeway in the recent San Francisco earthquake, have any questions come your way concerning the San Antonio downtown "Y" project and its extensive double-decking?**

Immediately after the San Francisco incident, the media wanted to know if our bridges would withstand those kinds of forces. We're in a zero zone as far as earthquake probability, so I don't think that's a real concern. The only concern in my own mind is that, though these sophisticated bridges that we're using in the "Y" are very functional and very beautiful, if one of them does suffer a catastrophic hit or something, we're going to have a real challenge in rebuilding one or replacing a span. It's not going to be a simple beam to be replaced.

**What do you consider your management style?**

The commander's staff in the Army is probably as participative as you can get in management. These people have to look at all the alternatives, and come to you with the pluses and minuses on each course of action and make a recommendation. The commander from that point makes a decision. But up to that point, they can fight and scrap for their point of view — in fact, they're obligated to do that. When the commander makes the decision, though, they've got to drop their point of view and give 100 percent support and loyalty to the commander's decision.

I suppose that's my style of management. I like to delegate, using a staffing procedure, to give us as much flexibility as we can. I rely heavily on my staff to follow the procedure I've just described, and then I make those decisions that it's my responsibility to make, and go on from there. I think that's the most sensible way you can operate.

**What do you think is the most dramatic change you have seen happen in the highway business since you've been in it?**

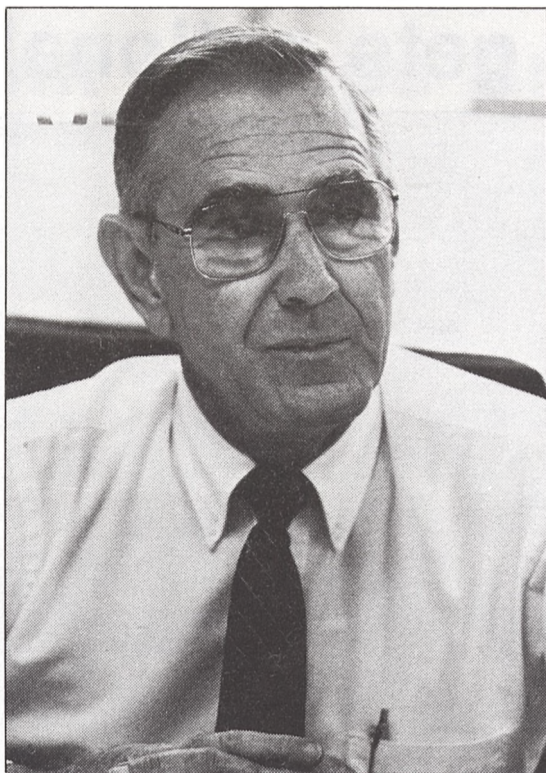
Automation. Without a doubt. I came to work when engineers had slide rules and trigonometric function books, and 10-place Friedan calculators were an absolute luxury. Some of the younger people regard a slide rule as an archaic object.

I think automation has made the most dramatic change, not only in our ability to accomplish more and get information that was never available before, but in our ability to view alternatives. For example, with aerial mapping, you can look at options we couldn't look at before because we had to do these things by field party.

**Do you regard automation as totally positive, or are there any drawbacks?**

The only drawback that I see, and certainly it's minor compared to the benefits, is that we've got a lot of kids coming up nowadays who have grown up with computers, and they tend to take the computer's output as gospel. Sometimes I feel they don't have the logic, the judgment that you gained when you had to do part of it in your head and part of it on scratch paper. When you may have made a wrong entry or a wrong assumption, you're going to get a wrong answer, but it doesn't strike them, "This can't possibly be right." The stock answer becomes, "Well, that's what the computer said." All we have to do is look at our credit card bill to know that numbers do sometimes lie.

I think that's something that our education system needs to recognize. I've talked with some of the professors at the universities,



“  
*We still have a world  
of work to do to stay  
ahead of traffic  
congestion.*  
”

and they see this as something that needs to be dealt with.

**There's been a lot of attention recently to the natural environment — endangered species, aquifers, and other issues. How will this affect your operations in the next decade?**

We need to be concerned about our environment — I don't think anyone would quarrel with that. But I think that we may be headed into an overkill situation for a while in that area, and it's going to be extremely costly. It's going to result in a whole lot of delays until we get some to some middle ground of acceptability between our quality of life versus the environment that we live in. It's a very sensitive issue.

Just within our own department, we've just seen a tremendous expansion in concern about handling and disposal of hazardous materials. And we're still sort of feeling our way around with the Texas Water Commission concerning underground storage tanks and streams and so forth. I think it's going to have a tremendous impact on our operations for a while, at least.

**Are there any plans for active traffic management strategies in San Antonio?**

Central traffic management is definitely on the way. The smart highway principle — we're getting into it very definitely now. Our construction projects are including what we hope to be adequate conduit to handle the cable or fiber optics or whatever, and some long-range plans have been developed. We're a little bit behind Houston and Dallas in that respect, but we're definitely into the implementation stage right now. It's a big

undertaking. The big problem with traffic management is funding at the local level, sharing costs.

**That requires a lot of cooperation between various governments. Has that kind of dialogue been increasing over the years?**

The cooperation between local governments and our department in San Antonio has always been outstanding. I couldn't ask for better cooperation than we get from Bexar County and the city in transportation planning. As far as traffic management is concerned, Gene Sparks, when he was traffic engineer here, was instrumental in setting up the corridor management team concept. That involves the cooperative efforts of many entities in the city, county, and state. Our current traffic engineer is still the chairman of the CMT. So we've got a long history in that respect.

**How do mass transit alternatives, such as high-occupancy-vehicle lanes or rail, figure into San Antonio's future?**

They're definitely being planned for. We have not reached a point where HOV lanes are warranted, according to studies that TTI (Texas Transportation Institute at Texas A&M) and so forth have made for us. But I think we're fast approaching that situation on some of our corridors.

VIA (Metropolitan Transit) is interested in rail or something of that nature. There's some possibilities there, but it's a way off, I think. We're certainly watching the experience in Houston and looking toward the point when we've widened for the last time and we need to go with the HOV or exclusive transitway. We have a good relationship with VIA as far as park-and-ride right now, and we've been very successful in that operation.

**What do you consider the project or accomplishment you're proudest of during your career here? What do you look on most fondly?**

There's two different areas I'd like to answer that in. I was involved in the planning and design of a very controversial project, the San Antonio North Expressway, now known as the McAllister Freeway (US 281). Then I was fortunate enough to be the project engineer on construction of the most controversial, middle section of it.

And in spite of all the doomsday sayings, it's turned out to be a beautiful project. It won third place nationally as an outstanding urban freeway for being compatible with the environment. That is something I'm really proud of. It was a vitally needed facility, and we proved to the public that we could blend it in very beautifully with the environment in a sensitive area.

I think that one of the biggest enjoyments I get in this particular position is working with our young people and giving them an opportunity to design a set of plans, go out and build that job, and develop themselves professionally. I think we've got a great bunch of young people moving up and I feel real good about the future of the department and certainly District 15.

**Are there any plans in your mind for leaving the department?**

Yeah, I'm not going to be Joe Battle (laughs). [El Paso District Engineer Battle has served 50 years with the department — Ed.] I haven't given any real serious thought to it at this time. I still get a lot of pleasure, a lot of enjoyment, and a lot of satisfaction out of what I'm doing, and I don't have any immediate plans to retire.



## JFK Causeway gets national recognition



Barge traffic in the Gulf Intracoastal Waterway continued without disruption during construction of the JFK Causeway, which opened in 1973. The causeway recently won recognition as the first precast segmental bridge in the United States. (Photo by Jim Allen, Materials and Tests Division)

By ROSEMARY NEFF  
Travel and Information Division

Seventeen years after it opened to traffic, the John F. Kennedy Memorial Causeway in Corpus Christi has received national recognition.

The American Segmental Bridge Institute, in its first national meeting, gave the department its 1989 Leadership Award for construction of the first precast segmental bridge built in the United States. Bridge Division (D-5) Director Luis Ybañez received the award in San Diego, Calif., in December.

Today, there are about 100 segmental bridges in the United States, said ASBI manager Cliff Freyermuth.

But the design was daring when planning for the pioneering causeway began 20 years ago.

"At that time, there wasn't any other kind of concrete construction that could span 200 feet," the width of the Gulf Intracoastal Waterway, said Deputy Director Roger Welsch, who as Corpus Christi construction engineer oversaw the bridge's creation. And steel could not be used because of its susceptibility to corrosion in the coastal climate.

Welsch recalls working with Travis Long, then district engineer in Corpus Christi, as well as D-5 personnel, Materials and Tests Division (D-9) inspector Jim Allen, and researchers at the University of Texas. Models were built to one-tenth scale and loaded to test the design's strength before fabrication of the components began.

The final creation uses cantilevered construction to join two 100-foot concrete spans with a 200-foot span that crosses the intracoastal waterway. The bridge segments were formed in a waterfront concrete yard and floated on barges to the construction site. The two lines of precast segments are connected by tautly stretched cable, and an 18-inch-wide concrete pour ties the two eastbound and westbound decks together.

"We were real proud of our bridge for coming together" in the middle as construction progressed from the piers inward, said Allen, area supervisor for D-9 in Corpus Christi. He said the segmental

design is often used today to reduce the number of bridge columns in dense urban areas with limited right-of-way.

While it inaugurated a new era of bridge construction nationwide and drew visiting engineers for years after its completion, the JFK Causeway had more immediate effects at home.

It gave folks at Mustang Island their first evacuation route, replacing swing bridges that could not operate in high water.

"Another beauty of this construction is we never disturbed the canal traffic," since construction took place above the waterway, Welsch added.

The JFK Causeway, which carries 14,600 vehicles per day, has been relatively maintenance-free. A recent bridge inspection gave the structure a clean bill of health.★



# Trash-Off broom sweeps America clean

By LONA L. REEVES  
Travel and Information Division

Texas has been so successful in cleaning up its act with the annual Great Texas Trash-Off that it just had to share the fun. This year, the event's highway department sponsors asked the rest of the country to join the Great *American* Trash-Off.

The big cleanup broom swept through California, New Mexico, Texas, Louisiana, Arkansas, Mississippi, Florida, and Kansas on March 31. In our own Great Texas Trash-Off, the fourth annual event, 21,307 volunteers scoured 2,746 miles of highway. They left more than 41,000 orange trash bags in their wake.

Recyclable bags reminded travelers to "Care for California" as that state sponsored its first-ever cleanup. The governor proclaimed March 31 "Trash-Off Day." Representatives from the Department of Transportation, business and housing agencies, and the highway patrol helped 1,400 volunteers collect 4,500 bags of trash in all 12 of the state's highway districts. Former president Ronald Reagan and actors Bo Derek and Clint Eastwood participated in the cleanup.

Participants in the Louisiana Trash Bash cleaned everything from city streets to state roads. A week-long "everything goes" trash collection left attics, garages, and yards sparkling in its wake.

Arkansas' Great American Trash-Off stretched through a week of activities statewide. Volunteers in 362 Adopt-a-Highway groups cleaned 811 miles of state highways. The volunteers collected 12,453 bags of litter, or 92 dump truck loads. Randy Ort, public affairs officer, said word-of-mouth is helping the Arkansas program grow rapidly. Commitments jumped from 600 in February to almost 900 in April.

More than 3,800 people collected about 15,000 bags of litter in the Mississippi Trash Bash. A display built by 200 Highway Employees Against Trash (HEAT) members gave motorists a snapshot of the mountains of litter on highways today. Highway department employees also coordinated a Capital City Cleanup in Jackson.

"Florida is gaining steam," says Steve Liner of Keep Florida Beautiful. They just kicked off their Adopt-a-Highway program March 5, and already more than 200 miles have been adopted. This year's Great American Trash-Off activities centered on Orlando, but Liner is working diligently for a "phenomenal" turnout next year.

## Landscaping funds approved

A \$7 million landscaping program that provides the "finishing touch" on state highways was approved by the commission March 29.

"Texans have always been proud of our beautiful highways, and visitors to the state often comment on them," said Engineer-Director Arnold Oliver. "Well-planned landscaping not only improves the way a road looks, it also increases safety, decreases noise, provides effective erosion



Volunteers all across America, like these from Austin's 3M Club, took part in the Great American Trash-Off March 31. (Photo by Geoff Appold, Travel and Information Division)

The governor of Kansas attended a Trash-Off press conference featuring the Topeka Youth Project, a community service group. The Trash-Off was also the Sunflower State Adopt-a-Highway program's first big event since its start in December. A spokeswoman said 700 groups are already committed to adopted stretches of highway, and another 300 are expected by summer's end.

Kentucky and Arizona, which had intended to participate in the Great American Trash-Off, scheduled independent cleanups to coincide with Earth Day, April 22. A statewide radio campaign during Arizona's Adopt-a-Highway Week underscored the state's cleanup efforts. In

Kentucky's annual cleanup, 1,035 groups of volunteers cleaned 3,200 miles. The secretary of transportation pitched in with 37 office employees. Highway contractors also helped in the state effort.

But the national clean sweep didn't stop there. Many other states (mostly northern ones) constituted second and third waves of the cleanup, scheduling events in late April or early May with the onset of warm weather.

Already anticipation for next year's event runs high. The national trash-off will be a topic for discussion at the National Transportation Public Affairs Workshop, to be held August 5-8 in Des Moines, Iowa.★

### Ed Bluestein extends thanks

Ed Bluestein, former district engineer in Atlanta and Austin, wants to thank all the highway family members who sent him cards and letters during his recent illness.

Bluestein said he received so much mail that if he tried to answer it all, he'd be doing "more writing than I've done in my whole life." He was deeply touched by the outpouring of concern, he said, adding that he is recovering "beautifully."

Bluestein was district engineer in Atlanta from 1941 until mid-1952, when he moved to the Austin District. He retired in 1965. A portion of US 183 in Austin bears his name.



## TECH TRADE

## Old tires bouncing back as road surface

By ROGER POLSON  
Travel and Information Division

Imagine a wall, 25 feet tall, encircling the entire state. That's a big wall, even in Texas. But the 280 million tires that are discarded in the United States every year could build a wall that big.

Instead, engineers have found a better way to use some of the old tires piling up in landfills in every community in America. They're making asphalt-rubber, a paving material composed of asphalt cement and up to 25 percent crumb rubber, which is derived primarily from grinding up old tires.

Texas is a pioneer in the use of asphalt-rubber. Since 1983, more than 3.6 million tires have been put to work on Texas highways. In all, 85,000 tons of asphalt-rubber have been used on more than 3,700 lane miles, using 800 to 1,000 tires per mile, in 20 of the state's 24 highway districts. In February alone, construction contracts were awarded that will use more than half a million tires.

"Those who have tried this material have been encouraged by the results," said Bob Templeton, head of the highway department's Construction Division. "It seems to extend the life of the pavement."

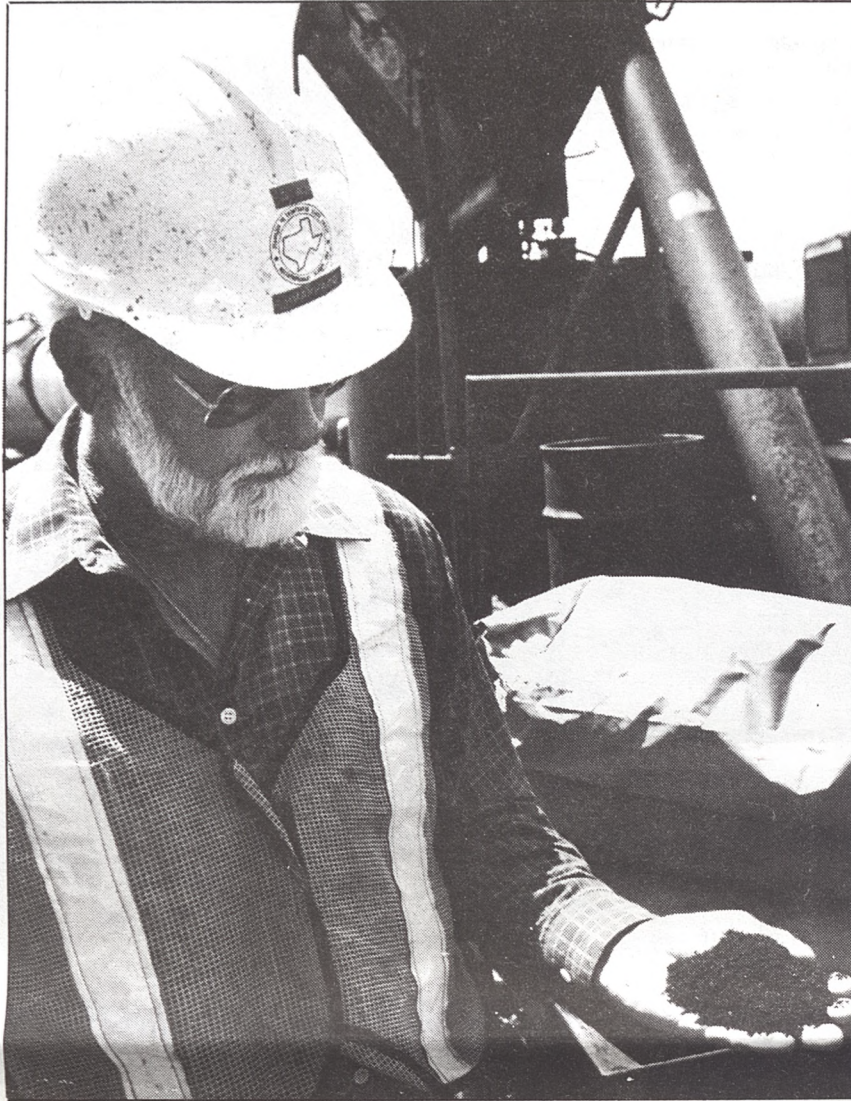
Asphalt-rubber was developed in the early 1960s by Charles McDonald, a highway engineer from Arizona. He was searching for a flexible material to seal cracks in deteriorating roads. The materials then used were too rigid. Under the weight of traffic, old cracks in the original surface "reflected" upward through the new surface. This reflective cracking demanded continuous attention.

Adding rubber to asphalt provided the elasticity, but the high cost of rubber made the material too expensive for widespread use. After trying various materials, McDonald came upon the idea of using old tires as a cheap source of rubber and began experiments with mixtures and application techniques.

McDonald's patented "band-aid" patches were placed in the Phoenix area to test their effectiveness in stopping cracks. The results were promising. The main problem encountered was application — the material was too thick to be applied by conventional asphalt spreaders. The next decade was spent adapting equipment to allow the hand-applied "band-aids" to be stretched to the larger areas needed for highway construction.

In 1975, the Arizona Department of Transportation placed several test sections of asphalt-rubber. The successful experiments have resulted in the use of the material in at least 35 states, Canada, Europe, and Australia.

Texas began using asphalt-rubber in 1976. A survey by the Asphalt Rubber Producers



Yoakum District blending inspector A.C. Grahmann holds a handful of crumb rubber, one ingredient in a new paving material that mixes asphalt cement and ground tires. The machinery behind Grahmann blends the asphalt and rubber to make the material. (Photo by Kevin Stillman, Travel and Information Division)

Group (ARPG), has found that the installation of an interlayer of asphalt-rubber between the old road surface and a seal coat of new asphalt pavement has eliminated reflective cracking on Interstate, primary, and secondary routes for the last 14 years.

The report concludes that "asphalt-rubber reduces maintenance costs by its resiliency, flexibility, and ability to seal a surface. It also resists oxidation age hardening that normally destroys a pavement without constant maintenance."

Asphalt-rubber serves as a moisture barrier, protecting the road base and surface from excess water. Because it is stickier — more cohesive — than conventional asphalt, mixtures can be formulated that allow for a more porous surface.

"The surface has little valleys that allow the moisture to trickle off to the side of the road rather than accumulating in puddles," Templeton said. This coarse mixture decreases glare during rain and allows tires to grip the surface better, thus reducing skidding and hydroplaning.

Another benefit determined by researchers in Belgium was a 50 percent reduction in noise after old pavement was covered with asphalt-rubber.

As a contractor who specializes in asphalt-rubber construction said, "Recycling is part of the appeal, but the end result is it gives you a better road."

Because of the cost of processing the tires, asphalt-rubber costs about 40 percent more than conventional asphalt. But surfaces treated with asphalt-rubber last two to three times longer, according to ARPG estimates.

New state legislation requires contractors to purchase tires recycled in Texas if they are available and if the cost is not more than 15 percent higher than non-Texas sources. But no one in Texas currently grinds old tires.

Only six facilities exist nationwide. In 1989, they turned out 18 million pounds of crumb rubber from about 1.8 million tires, a small percentage of the 280 million tires discarded annually.

"The legislation may create some impetus to develop this material in Texas," said Templeton. "Maybe when the inventors get hold of this they'll come up with a better way to produce the rubber crumbs."

Aging highways in need of repair and growing mountains of discarded tires are separate problems, but they can share a common road to a solution.★



## Wood, Beierle get first new D-18 awards

By **JEFF CARMACK**  
Travel and Information Division

Two new awards, created by the Maintenance and Operations Division (D-18) in honor of two former employees, were presented for the first time at the 1990 Safety and Traffic Conference in Austin.

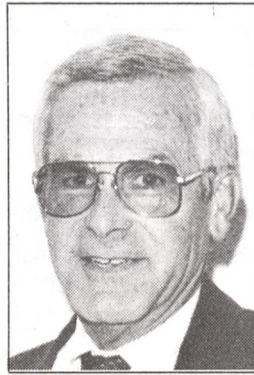
The Richard H. Oliver and Gene W. Sparks awards were created by D-18 to recognize employees who make significant contributions to safety and traffic operations field, said D-18 director Bob Hodge.

Leon Wood of the Amarillo District was the first recipient of the Oliver Award, and Harvey Beierle of the San Antonio District received the first Sparks Award.

Wood is a 25-year veteran of the department. He joined the Amarillo District as a draftsman, and later served as assistant to the district traffic engineer and traffic safety specialist. In 1984 he began managing the traffic engineering office, and in 1987, district reorganization brought all traffic-related operations under his supervision. Wood now serves as manager of district traffic operations, including traffic



Beierle



Wood

engineering, radio and signal shop, sign shop, and district striping operations.

In presenting the Oliver Award, Hodge commended Wood for his efforts in developing traffic management teams, communicating traffic engineering principles to local government and law enforcement officials, and furnishing expert testimony in litigation.

Beierle joined the department in 1951 as a maintenance section clerk in the San Antonio District office. In 1961 he was promoted to traffic signal technician, and promoted again in 1964 to his present position as district

roadway maintenance supervisor.

Hodge recognized Beierle for assisting in the development of a statewide guide for loop detector installation and operation, serving on the task force that created traffic signal maintenance training courses, and contributing to the Dynamic Arterial Traffic System (DARTS).

Although both the Oliver and Sparks awards were given this year, they will be presented on an alternating basis beginning next year.

Gene W. Sparks was a graduate of Texas A&M University and started in the San Antonio District in 1953 as an engineering assistant. He served as design engineer and district design engineer in the San Antonio District, and was later named assistant chief engineer of maintenance operations. He died in 1982.

Richard H. Oliver started with the department as a traffic engineer in the Austin District and as district traffic engineer in the Corpus Christi District. He was later engineer of traffic in the Austin District, retiring in 1987.★

*Joni Haugen of D-18 contributed to this story.*

## Wichita Falls' Jack Conley named 'Roadrunner'

"Pretium habemus quod tendemus."

Jack Conley can't read Latin, but that didn't keep him from readily accepting a department award April 19 in Lubbock, naming him 1990's foremost travel-information authority.

Conley, who heads the department's Texas Travel Information Center on Interstate 44 in Wichita Falls, was singled out by fellow tourism workers for this year's "Roadrunner Award." Although the name and Latin inscription are tongue-in-cheek, the award's honor is distinctive in the Texas travel industry.

Milton Meharg of Austin, director of Texas Travel Information Centers across the state, said the Latin inscription roughly translates to, "Getting paid for telling people where to go."

The award ceremony highlighted the 35th Annual Texas Travel Counselors Conference. More than 200 travel counselors, writers, editors, photographers, and tourist industry representatives from the commercial sector exchanged information and honed their skills for the upcoming summer travel season.

Don Clark, director of the Travel and Information Division, cited Conley as an outstanding tourism professional. "Jack is dedicated to Texas," said Clark, "and after all, that's our best product."

Clark said Conley "sells" Texas daily to visitors at the Travel Information Center, then shares his 20-year store of tourism knowledge with area citizens on his own time. "On a recent occasion," Clark related, "Conley presented four tourism programs to different groups in one day."

Among accomplishments, Conley was cited for superior personnel training, taut fiscal management, and frequent "extra-mile" service to travelers in distress.

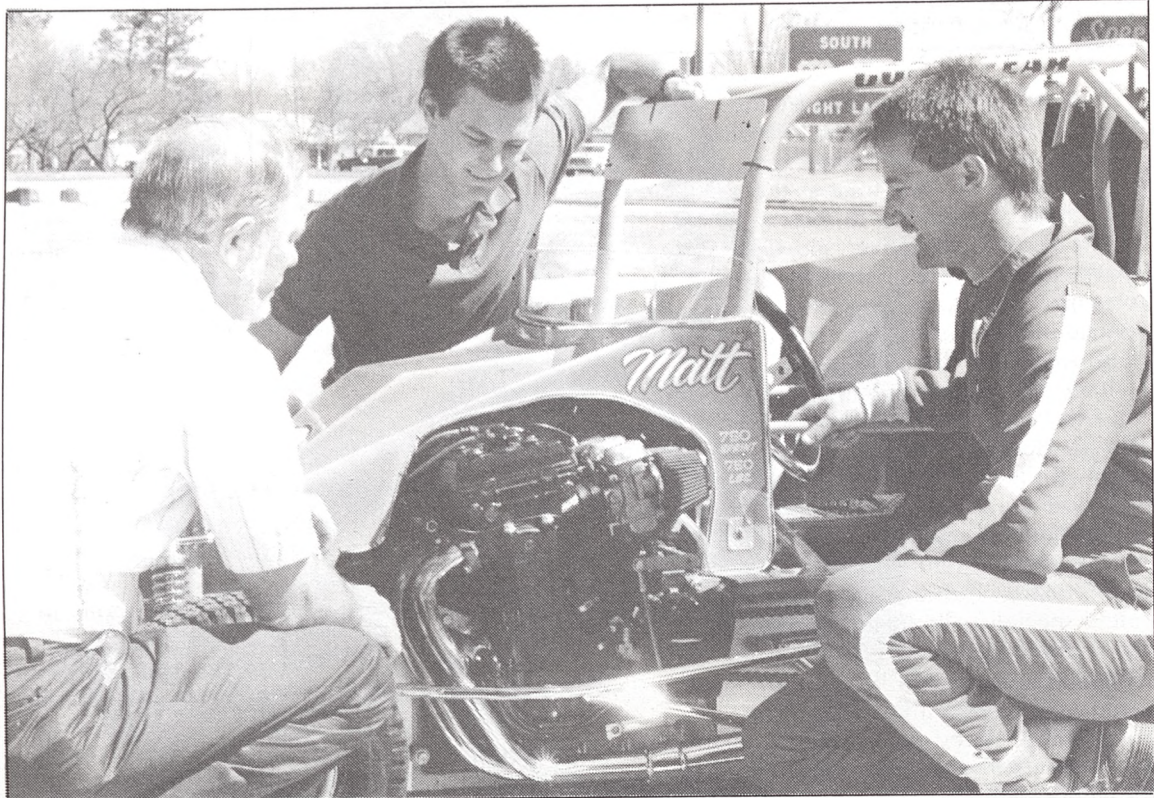
Asked to comment about the award, Conley said, "The fact is, there's just nothing like Texas, and I enjoy telling people about it. It's a great job!"★**Richard Pierce, Travel and Information Division**



Equipment and Procurement Division employees Gerald McLeod, Karen Koopmann, Carolyn Flores, Mary Helen Mordica, and Sherry Kolb compete in the talent segment of the D-4 Chili Cook-Off held April 28. The group took first place in showmanship. (Photo by Kevin Stillman, Travel and Information Division)



## Wichita Falls family 'flips' over racing



Virgil Smith, Wichita Falls District equipment supervisor, and sons Mark and Matt examine the mini-sprint racer Matt drives in competition in Texas and Oklahoma. (Photo by Dale Terry, Wichita Falls District)

By DALE TERRY  
Wichita Falls District

"When your car starts flipping over and over, about all you think about is when you are going to stop. It all happens very quickly, but it seems like it takes a long time, like it's slow motion."

That's about all you get out of 25-year-old Matt Smith on the subject of flipping a race car, something he's done more than once.

Smith operates the "back end" of the Wichita Falls District's center striper during the week. But, on weekends, he's behind the wheel of a small, exceedingly fast race car known as a mini-sprint. Both endeavors come naturally for Smith.

His dad, Virgil, is the district equipment supervisor at Wichita Falls and a 24-year veteran of the department. The senior Smith raced cars for 30 years on drag strips and circle dirt tracks of North Texas and southern Oklahoma. And wherever he went, young Matt followed.

Dad raced well, winning a track championship one year and placing in the top five at two tracks for five straight years. Now he's the chief mechanic and sponsor for his

son, and the rest of the Smith family also shares the racing fever.

Starting at age 8, Matt Smith raced moto-cross, flat-track, and cross-country motorcycles all over Texas and Oklahoma. He switched to four-wheeled vehicles two years ago.

His first year as a mini-sprint driver saw him finish sixth at both Lawton and Fort Cobb, Okla., tracks. Last year he finished fifth, and this year, he's going for the top.

Smith's mini-sprint resembles a midget racer but is smaller, weighing only 750 pounds. Powered by a 750cc dual overhead cam Kawasaki Ninja engine, with modifications, the car develops 107 horsepower and reaches speeds of 80 mph on the straights. His car is in the "Super Class," which pits him against the fastest cars and best drivers in a three-state area.

"The pay isn't too great, but I can't think of anything else I'd rather be doing," Smith says with a wry grin. "I'll be racing as long as I enjoy it." Smith races "for the fun, the competition, the sense of accomplishment, and for the satisfaction I get from it."

It's a time-consuming hobby, and leaves no time for other interests, he said. "I'm still single, so I can work on the car two, three,

or even four hours a night. Most of my friends are in racing, so I help them and they help me. It works out great."

Smith says people interested in mini-sprints can get "into the business" for about \$2,500, but it takes \$6,000 to \$8,000 to be competitive. "We spend all our money on cars," he said. "But you can't put a value on the satisfaction and fun we have racing."

That fun is shared by the rest of the Smith family. Twenty-year-old Mark, who works in the Wichita County (East) Maintenance Section, is also on the racing team. He enjoys the mechanical end of the enterprise, although, like Matt, he's won his share of motorcycle racing honors. Then, there's mother Gaila, who keeps the firesuits clean, feeds the crew, and organizes things so there are no glitches on race day.

Another team member is on his way up the ladder: Ten-year-old Michael is following in his brothers' tracks on motorcycles. He hit the race circuit as a rider when he was 5, and won the moto-cross titles at Lawton when he was 7 and 8.

Maybe Michael will keep on doing what comes naturally to the Smith family and embark on his own highway department career in a few years.★

## Tyler motorists taking part in travel survey

By LAURA RAYBURN-WHITE  
Tyler District

Just when Tyler residents thought they were through with the census, another questionnaire is arriving in the mail. This one is a travel diary in which drivers will be asked to log all their journeys.

The travel diary is part of a federally funded, half-million-dollar survey being conducted by the Houston-based engineering consulting firm Wilbur Smith Associates.

Information about traffic patterns and habits, gathered by the Tyler Urban

Transportation Study Travel Survey, will be used to help set priorities for the allocation of both state and federal money for roadway improvements. The data will also be used for future travel forecasting and planning.

The survey consists of several elements. In the home survey, area residents will be given a one-week travel diary and asked to log destinations and routes traveled. An external survey will include roadside stops at 32 locations around Tyler, where motorists will be stopped and interviewed about their travel habits, or given a questionnaire to fill out.

A special generator survey will examine high-density traffic areas, such as shopping centers, the Tyler airport, and hospitals. In a workplace survey, which is expected to begin in September, selected employers and employees will be interviewed. Finally,

taxicab and commercial truck drivers will be surveyed in another element of the study.

Dale Spitz, Tyler District urban planner, is excited about the study. "Updated information in this area has been needed for quite a while. The last traffic survey in the Tyler area was done more than 20 years ago," said Spitz.

Rick Mobley, project coordinator for Wilbur Smith Associates, said the analysis of the survey should be complete in the first quarter of 1991.★



## Traffic management residency created in Dallas

By JAY KEMP  
Dallas District

The Dallas District recently established a freeway traffic management residency unlike any other in the state.

Dallas District Engineer James Huffman said the new residency was created to meet the needs of the traveling public and maintain mobility in the Dallas District.

The new residency will be responsible not only for the design of construction projects, but also will handle the construction and maintenance of these projects.

"With the diversity of this type of operation, we needed a separate organization to manage the traffic programs," Huffman said. "Our district has been involved in freeway management in the past, but never to the extent we're attempting now."

Heading the new operation is Resident Engineer Harold Watters.

"I'm excited about this residency because I think we're setting precedent within the highway department," Watters said. "Sometimes it's difficult because we run into problems that nobody has ever encountered, and we don't quite know where to turn. But

even when I consider all the obstacles we have faced and will probably run into in the future, it's still worth it."

Although the residency has a skeleton crew now, Watters will eventually manage a staff of civil engineers, electrical engineers, design engineers, and maintenance technicians.

Despite the small crew, the new residency has many projects well under way. Some of the traffic programs Watters' residency oversees are:

- surveillance, communication, and control systems that will include closed-circuit television cameras fixed on freeways, remote control changeable message signs, and vehicle sensors in the pavement;
- interim surveillance, communication, and control systems for roadway construction projects.
- incident response activities which will include Motorist Assistance Patrols;
- a traffic management control center that will monitor the freeways and be staffed by technicians and operators 24 hours a day;

- coordination of the Dallas District traffic management team, which includes traffic engineers from the surrounding cities in the Dallas area.

Many of these programs will be tested in conjunction with the reconstruction of North Central Expressway south of Interstate 635, which is set to begin this spring.

"Using North Central Expressway as a prototype is advantageous in many ways," said Operations Engineer Andy Oberlander. "In order to have freeway traffic management on an areawide basis, countless logistical problems must be solved. This 10-mile corridor is the perfect place to start."

Oberlander, with assistance from Design Engineer Mike Bostic, is currently designing the infrastructure for surveillance, communications, and control systems for North Central.

Watters said motorists in the Dallas area will benefit the most from establishment of the new residency.

"We are definitely committed to improving mobility in the Dallas District as we head into the 21st century," said Watters. "I'm glad to be a part of it."★

## Two Austin-area students get \$1,000 TAME scholarships

Two Austin-area high school students are \$1,000 closer to engineering degrees, thanks in part to department-sponsored chapters of the Texas Alliance for Minorities in Engineering (TAME).

Omar Muñoz, a senior at Austin's Travis High School, and Kammie Rodriguez, a Georgetown High School senior, were recently awarded \$1,000 scholarships by TAME to attend the universities of their choice. Muñoz plans to attend the University of Texas at Austin and Rodriguez will go to Texas A&M University.

Both students are members of their schools' TAME chapters, which are supported by department employees. José Hernandez, a Construction Division (D-6) engineer of special assignments, is the industry representative for the the Georgetown chapter. His assistant is Rolando Besa, a D-6 engineering assistant. Oscar Rodriguez, Austin District lab engineer, is the Travis High industry representative.

The department's involvement with TAME began in 1988, when it started to develop a program in each district promoting engineering careers among minority students.

## Texas Highways nets two awards

*Texas Highways*, the state's official travel magazine, has received the Regional Publishers Association's top award for magazine covers. The honor was one of two awards presented to *Texas Highways* at the association's annual meeting in Sedona, Ariz.

The award-winning cover, on the September 1989 special "Travel Texas History" issue, featured an evening photograph of the Alamo shot by staff photographer J. Griffis Smith. The photo, designed by *Texas Highways* photo editor Bill Reaves, presented a dramatically lit Alamo, with door ajar, inviting readers to

Oscar Rodriguez said the department has been aggressive in backing TAME. "The department has taken a real strong role on doing our part in working with students and committing someone from each district to working with students."

TAME gives minority students an up-close look at the field of engineering and works to help them obtain the schooling they need to become engineers. Funding for TAME scholarships comes from donations from sponsors in the private sector.

The department's support of the alliance is not completely altruistic. The engineering student of today could be the department employee of tomorrow. The department recognizes this fact and supports TAME, at least in part, to ensure a sufficient number of engineers in the future.

Also assisting Rodriguez, Hernandez, and Besa are Andrew Rodriguez (Oscar Rodriguez's brother) of the Highway Design Division and Marcus Galvan of the Bridge Division's BRINSAP (Bridge Inspection and Appraisal) program.★**Jeff Carmack, Travel and Information Division**

enter.

In the category of overall publication design, Art Director Ernest Jordan's work was recognized with an award of merit.

Also at the association's annual meeting, members elected *Texas Highways* publisher Herman Kelly president of RPA for the coming year.

The Regional Publishers Association's 33 member magazines focus on specific geographic regions. They include *Vermont Life*, *Arizona Highways*, *Texas Parks and Wildlife*, and *Ireland of the Welcomes*.★**John Cagle, Travel and Information Division**

## New titles aid in war against auto theft

The highway department is waging a high-tech war on the increasing problem of auto theft in Texas. Its most powerful weapon is a 7-inch-by-8-inch piece of paper.

The department's Division of Motor Vehicles recently started issuing vehicle titles that are more difficult for thieves to alter or counterfeit. Without an authentic-looking title, a thief can have difficulty selling a stolen vehicle. And if convicted of title fraud, he can receive up to 10 years in prison and a \$10,000 fine, tougher penalties enacted last year.

Nearly every element of the new title — its colors, ink, paper, background design, and even hidden messages — has been improved to make fakes or alterations more obvious. State-of-the-art security features include: complex colors and a multicolored lithograph with the state's outline that make reproduction extremely difficult, inks that are difficult to erase and a background design that is highly sensitive to erasure, the paper reacts to chemicals commonly used to alter titles, and the word "void" becomes prominent when the document is copied.

Odometer information has been added to the new title to conform with federal law. The title states whether the mileage reading reported in title transfer documents is accurate or is less than actual mileage.

The bigger, better title emulates a model document designed by the American Association of Motor Vehicles for use in all states.

Current titles are still valid. The new titles are being issued to people who transfer ownership of a vehicle.★**Ronda Baker, Travel and Information Division**



# Brownwood floods give rise to heroism

By JEAN SPARKS  
Brownwood District

Attempting to rescue a motorist from floodwaters in Brownwood last month, Bill Johnson suddenly found himself in need of rescue.

Johnson, maintenance construction supervisor in Comanche County, had been assisting stranded motorists and inspecting flood damage caused by a six-hour downpour that resulted in a record 19.2-inch rainfall in the county. Near midnight, he drove his car into high water to pick up a man whose car had stalled.

As the pair headed west across South Copperas Cove Bridge, about 15 miles northwest of Comanche, a sudden rush of water stalled Johnson's car.

Johnson knew that L.C. Smith and Odis Holsenbeck, maintenance technicians from Brownwood, were nearby in their dump truck, so he called them on the radio.

Smith heard him say, "L.C., come and push me out. I am behind you."

Smith drove his 10-yard dump truck through the swift, rising water to push Johnson's stranded vehicle backward across the bridge. Because he couldn't see over the hood to determine how close he was to the front end of Johnson's car, he asked Holsenbeck to get out on the truck's hood and direct him.

Even with Holsenbeck "riding point," it was still difficult to maneuver in the driving rain and the darkness. The only time they could see was when lightning stabbed the sky.

Suddenly, the water became much swifter, and Smith felt the heavy dump truck sway. The rising floodwaters swept Johnson's car

## Austin firm gets \$3 million traffic safety campaign

GSD&M Advertising, the Austin firm that launched the department's successful "Don't Mess with Texas" campaign against litter, has been awarded the contract for a new two-year, \$3 million traffic safety program.

From a field of nine agencies that submitted proposals in February, six made presentations on March 30 to a panel of representatives from the Maintenance and Operations Division, the Travel and Information Division, and seven safety organizations, including the Department of Public Safety, the Texas Safety Association, Highway Users Federation, and Mothers Against Drunk Driving.

The campaign, which is aimed at unsafe drivers, is funded at \$500,000 for the remainder of this fiscal year and \$2.5 million next year. During the next few months, research will be conducted to help define the most effective means to educate those who need to change their driving habits.

After that, appropriate methods to communicate with that audience will be planned, and the creative advertising will be designed and produced. The goal is to have a spot on the air for Labor Day weekend. ★

**Karen LeFevre, Travel and Information Division**

off the end of the bridge and down the embankment to the creek bottom. Water rushed in, quickly covering Johnson and his passenger to their shoulders.

"We climbed on top of the car and shouted to L.C. and Odis, but we couldn't hear each other over the roar of the water and the storm," Johnson recalls. Holsenbeck got back in the truck cab, and Smith positioned the truck as close to Johnson's car as safety permitted, so that the huge tandem dual tires broke the flow of the water and provided shelter from floating logs and debris.

As the water swept their feet out from under them, Johnson said, he and his passenger submerged and crawled on the creek bottom on their hands and knees, jumping up at intervals "like frogs" for air. They struggled the 50 feet to the dump

truck. Reaching down as far as he could, Holsenbeck pulled them, one at a time, to safety.

"I was so thankful to see those two gentlemen, L.C. and Odis saved our lives," Johnson said.

Smith was particularly glad when the rescue was complete. "I can't swim," he confessed.

Smith and Holsenbeck both said they were grateful their truck was loaded with aggregate, because without the extra weight, they too might have been swept off the road. With its load, their truck weighed about 29,000 pounds.

With the April experience behind them, the men know how to prepare for future flood emergencies: Take a partner, a rope at least 100 feet long, a spotlight, life jackets, and maybe a load of aggregate.★

**WE want YOUR  
problems, ideas, and  
suggestions.**

## Austin Divisions Employees Advisory Committee

Place your signed suggestion in one of the suggestion boxes in department offices around Austin... or contact any committee member:

EAC Chairperson  
Jerry Meyers - Camp Hubbard, Bldg. 5,  
465-7624

### Members (Term Expires 1990)

Robert Dunlap, Vice-Chair  
Walnut Creek, 835-0807

Cynthia Gonzales, Blood Bank  
Coordinator, Main Office  
5th floor, 463-8869

Juan Vega, Camp Hubbard  
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*... Your suggestion will be held in strictest confidence. All suggestions are considered and referred to the appropriate persons for action. A personal reply will be provided by the committee for each suggestion that is signed. Do it today!*

**We're here for you!**



# Era of functional review comes to an end

By **GINA McASKILL**  
Travel and Information Division

You could say it's the end of an era. An era of long trips, intense study, deferred work, and lots of coffee — the functional review era.

The report resulting from the last scheduled review of department functions was signed by its work group on March 27 in a brief ceremony at an Austin hotel. "We've never had a signing ceremony before, but we thought this one was special," said Frank Conklin, a planner who was the Planning and Policy Division (D-7) facilitator for the group.

The review of revenue collection and cash disbursement took about 10 months. For the six members of the study team, that meant about six months of nearly full-time work — four days a week spent interviewing, traveling, and studying — and about four months of working on the report one or two days a week.

This was the 21st functional review completed. The first began May 19, 1987. Though the time and energy spent on the reviews has been considerable, "most of the people involved think it's been worthwhile," said Conklin.

"This process showed a willingness on the part of the department to take an arm's-length look at ourselves, not waiting for some outside audit group or committee to do so," said Lawrence Jester, district engineer in the Atlanta District and chairman of the functional review oversight committee.

In addition to the reviews' helping the department function more efficiently, the process educated the participants. "They

learned more about the department than they probably would ever have learned otherwise," Jester said.

"It helps those of us who have a certain job to find out what other people do in the department," said Sonya Hicks, accounting supervisor in the Atlanta District and a member of the final review team.

The other members of the review team were chairman Alan Ford of the San Angelo District, vice chairman Rick Norwood of the Transportation Planning Division, Jerry Fannin of the Bryan District, and Curtis Largent of the Automation Division. "Functional review brings people from diverse backgrounds to focus on a single function so it can be seen from diverse viewpoints," Conklin said. In addition, work group members traveled to several districts to find out if the function works the way the involved divisions say it does.

Though the last review report is completed, the process is by no means finished. The report joins four other studies now being reviewed and commented on by the functional review oversight committee, made up of two district engineers and three division heads. The committee hopes to have its desk cleared by the end of June. As of May 1, four reports were at the next level, review by deputy directors; five were on the engineer-director's desk; and seven are now in the implementation stage.

Changes that have already been made as a result of functional review include the name changes of the Occupational Safety Division and the Maintenance and Operations Division (D-18) and the moving of the BRINSAP bridge inspection program from D-18 to the Bridge Division.

"If the department can come out of this

process with a complete administrative manual, with policy and procedure manuals for each division, it will be a major accomplishment. It will be a benefit to all managers not to have to rely on someone's memory for a certain policy and when it came out — everything will be consolidated," Jester said.

The functional reviews originated from a recommendation in a 1985 Price Waterhouse management audit that the department review its operations. District operations were reviewed first, and that "field review" report also recommended that division functions be examined comprehensively for the first time. District engineers and division heads were asked to nominate employees to serve in work groups. For each group, the oversight committee selected five from the pool plus one D-7 representative, and the groups were then approved by the deputy directors.

After the groups complete their work, their reports and the appended recommendations from reviewers are studied by the engineer-director, who issues directives as he sees fit.

"The oversight committee worked together well. We received excellent support from the engineer-director and deputies, as well as great cooperation from division heads, district engineers, managers, and other employees," Jester said. "Without that cooperation, this endeavor would have been impossible."★

## This month in highway history

- 1917:** The Texas Highway Department opens for business with a staff of 10, using an office in a back room of the state capitol.
- 1949:** The Gulf Intracoastal Waterway between Corpus Christi and Brownsville opens.
- 1950:** The four-mile causeway from Corpus Christi to Padre Island is dedicated June 17, opening the island to extensive tourist development. The bridge was financed by road bonds; the county collected a \$1 toll per vehicle until the bridge was paid for, then turned it over to the state.
- 1950:** A magnetic truck is put into operation to pick up nails, spikes, and metal scraps from roadways.
- 1954:** The bridge carrying US 290 across the Pecos River is destroyed June 26 by flood. About \$450,000 worth of highway damage is caused by flooding in other areas.
- 1964:** The capitol tourist bureau opens June 30. It serves 5,470 visitors its first week.
- 1975:** Gov. Dolph Briscoe signs a bill June 19 that renames and reorganizes the Texas Highway Department as the State Department of Highways and Public Transportation.
- 1976:** The Dallas City Council unanimously decides to seek federal funding to construct an elevated monorail system in downtown Dallas.
- 1983:** Twenty-nine employees attend a week-long pilot managerial training program, titled First Level Management Training Course, in Wimberley.

## IN BRIEF

### District 12 boosts food drive

The Houston District was recently lauded by a local television and radio station for its part in the station's annual food drive for the needy of the area.

KPRC-TV and KPRC Radio, whose facilities are located in the center of the city's largest highway reconstruction project, stage a food drive every spring. Realizing that the reconstruction of U.S. 59 Southwest Freeway would interfere with donation drop-offs at the station, KPRC contacted the department to assist with the event's planning.

The department took advantage of the circumstances to help with public education. Many "Don't Mess with Texas" litterbags stuffed with information about the food drive, the department, and especially the Southwest Freeway Project were distributed.

Cooperation between the station, the highway department and contractors for the project resulted in a record-setting food drive, with 170,000 pounds of food and \$30,000 donated.

### Yoakum notes safe drivers

More than 300 safe drivers were honored at the Yoakum District's Safe Drivers' Award banquet in February.

Thomas Banda, DeWitt County maintenance supervisor, topped the list with 35 years of accident-free driving. Fifteen drivers with 25 or more years of safe driving were also honored.

Engineer-Director Arnold Oliver and Yoakum District Engineer Ben Bohuslav presented the awards to the winning drivers.

### Lufkin landscaping lauded

Landscaping at the U.S. 59-Loop 287 interchange in north Lufkin has won District 11 the March Angelina Beautification Award from Angelina Beautiful/Clean and the Angelina County Chamber of Commerce.

The award-winning landscaping included more than 2,300 plants and an irrigation system.

District 11 Maintenance Construction Superintendent Bill Basham said, "although aesthetics was the driving force behind this project, an additional benefit of reduced maintenance costs and better erosion control will be realized by eliminating mowing operations in this high-maintenance area."

Basham and chamber of commerce member Kay Alderman coordinated the landscaping, which was designed by a Texas A&M University team under the direction of Bill Kirwin of Maintenance and Operations Division's Landscaping Section.



# SERVICE AWARDS

## Administration

Marion A. Owen, 25 years; Michael P. Lehmann, five years.

## Automation

Lester T. Harris Jr., 30 years; Robert L. Frazier, Alan W. Jarl, Daniel D. Kadlecek, 20 years; Earl Cunningham Jr., 10 years; Carroll A. Harris, five years.

## Equipment and Procurement

James Kincheon, 30 years; Lonnie G. Brothers, Verlina C. Hutchins, 15 years; Brian K. Bell, Herbert A. Hamblin, five years.

## Highway Design

Mario G. Medina, five years.

## Maintenance and Operations

Scott R. Lambert, five years.

## Materials and Tests

Glenn I. Rabun, 30 years; John W. Helton, 25 years; Ronald D. Gardner, Frank R. Gilbert, Dickie L. Winters, 20 years; Roberto R. Garcia, 15 years; Henry M. Strosser, Robert J. Theige, 10 years.

## Motor Vehicle

Bernice S. Morton, Ray L. Wilhelm, 20 years; Charles A. White Jr., 15 years; Alethea H. Sutphen, 10 years; Theresa W. Sharp, five years.

## Occupational Safety

Pearl S. Lefevers, Sandra C. Thornton, 10 years; Garfield T. Roberts, five years.

## Transportation Planning

Kathleen G. Miertschin, Stephen D. Mings, 10 years.

## Travel and Information

Julia K. Kirkley, 25 years; Pamela S. Crew, 15 years; Albert J. Zucha, five years.

## Paris District (1)

John C. McKenzie, 25 years; Donald W. Nolen, 20 years; Anthony L. McNiel, 15 years; Cheryl J. Burt, Jeffery B. Dorner, David G. Norris, Skyler D. Robinson, five years.

## Fort Worth District (2)

David A. Bass, 35 years; Billy J. Baker Jr., Jerry J. Crocker, Otis M. Hooten, 20 years; John M. Bridges, 15 years; Gary P. Barnes, Robert D. Dorethy Jr., Joel S. Gunderson, Thomas C. Marquardt, Gaylon T. Steel Jr., Ricky D. Tompkins, five years.

## Wichita Falls District (3)

Allen L. Wood, 20 years; Kenneth M. Pollard, Julia S. Porter, Kenneth R. Stewart, 10 years.

## Amarillo District (4)

Marilyn J. Schleh, 15 years; Sue L. Geroux, Steve R. Johnson, Jesse S. Sorrells, 10 years; David L. Jennings, Efrain Zaragoza, five years.

## Lubbock District (5)

Marlo D. Davis, 35 years; Ronnie E. Garner, Charles A. Sechrist, 20 years; Aron W. Garrett, Elton R. Stroud, 15 years; William H. Brandon, Mark C. Perry, 10 years; Paris E. Adams Jr., Joe L. Flores, Tommy E. Gray, five years.

## Odessa District (6)

Ysrael M. Hernandez, Raul R. Sanchez, 35 years; Audelio H. Cobos, 25 years; Francisco H. Sotelo, 10 years; Jerrell F. Stanley, Arnulfo R. Valdez, five years.

## San Angelo District (7)

Leandro R. Flores Jr., 30 years; Fred Reschman Jr., 25 years; Emitterio Salinas Jr., 20 years; Robert A. Mayer Sr., Eduardo P. Saenz Jr., 15 years; Jimmy Tambunga, Ronald P. Taylor, 10 years; Peggy R. Haynes, Kenneth R. Tomlinson, five years.

## Abilene District (8)

Gaylord Price, 40 years; Jerry Pittman, Joseph N. Swinney, 25 years; Benito Barrera, James E. Brooks, Emilio Martinez, 20 years; Johnny C. Moore, Harlan D. Turner, 10 years; Sue W. McAlister, five years.

## Waco District (9)

James T. Conner, 30 years; Clinton G. Glaesmann, Edwin H. Kunkel, 20 years; Roland J. Masters, 15 years; Donald R. Hall, 10 years; John L. Hrynyk, five years.

## Tyler District (10)

Jerry A. Sanders, 30 years; Perry L. Spence, 25 years; James D. Tidwell, 10 years; Mark L. Emery, Allison W. Goodwin, Daniel L. Mandeville, Jay T. Townson, five years.

## Lufkin District (11)

Charles E. Redden, 30 years; William E. Ford, Gertha J. Scarborough, 25 years; Donald E. Woods, 20 years; Larry T. Jackson Jr., Tina L. Walker, 10 years; Robert W. Mosby, five years.

## Houston District (12)

Maris D. Mattox, 35 years; Donald J. Geesing, Donald G. Ondruch, 30 years; Juan Rodriguez, Alvin M. Salinas, Jessie W. Standifer, Willie Thomas, Leon D. Thumann, 25 years; Victor A. Elizalde, 20 years; William D. Gates, Melvin Lee, Charlie Wesley, 15 years; Dennis F. Barton, Daniel W. Duncan, Alvin R. Ervin, Inman A. Hunt Jr., Sheryl R. Ledet, Harry V. Thompson, Lanny C. Yates, 10 years; Joanne W. Alford, Rocio Arismendez, David M. Berg, Raymond J. Gardner, Gary Gehbauer, John J. Haynes, Terri L. Hybner, Jerry D. Lawrence, Laila G. Louca, Ricky L. Morris, Steven R. Proffer, James D. Spivey, James R. Stoner, Barbara A. Storrs, Donna F. Taylor, George E. Williams, five years.

## Yoakum District (13)

Frederick L. Eilert, Lawrence J. Hatfield, 35 years; Gregory C. Kurtz, 10 years; Jocelyn M. Bolom, five years.

## Austin District (14)

Carl J. Voigt, 35 years; Richard M. McCan, 30 years; Lonnie L. Anglin, Carlos Gutierrez, Emory P. Montgomery, 25 years; Jodie Collins, John H. Fohn, 20 years; James D. Klotz, Russel W. Lenz, Benjamin B. May, James S. Tate, 10 years; Gary W. Barnes, Charles C. Chance, John C. Reavis, Jose F. Tejidor III, five years.

## San Antonio District (15)

Alroy R. Zercher, 30 years; Felix R. Delgadillo, Milton H. Doege, Fernando S. Gonzales, Martin E. Harper, Martin Rico,

Guadalupe Rodriguez, Pablo Talamantez, 25 years; Paul C. Barrera, Calvin F. Rathke, Isidoro Sierra, Allen R. Townsend, 20 years; Manuel O. Flores, 15 years; Thomas S. Clark, Larry J. Dockal, Robert S. Lopez, Jose L. Rodriguez, 10 years; Rogelio Garcia, William J. Shannon Jr., John E. Svab III, five years.

## Corpus Christi District (16)

Gilberto L. Almaraz, Jimmie C. Harrod, 30 years; Maximino H. Perez, Crecencio R. Rubio, 20 years; Robert D. Casares, 15 years; Charon B. Jones, 10 years; Andy M. Chica, Roberto Tovar, five years.

## Bryan District (17)

Nelda D. Riley, 20 years; Curtis G. Barnett, James H. McCoslin, five years.

## Dallas District (18)

C.L. Strickland, 25 years; Don F. Baker, Harlan D. Boyd, Kenneth L. Childers, Lewis Davenport, Flo C. McCallum, Rodrick J. Parr, David A. Phelps, Larry C. Shaw, Gerald W. Taylor, 20 years; Donnie R. Schroeder, 15 years; Brenda K. Davis, Doris M. Franks, Judy A. Howe, Johnny D. Moore, 10 years; Earl T. Anderson Jr., Ronald K. Bairrington, James E. Dunn, Grady K. Franks, Stephen J. Rickenbacher Jr., Lyle J. Seals, Robert J. Smith, Brenda N. Stefka, five years.

## Atlanta District (19)

Billy R. Allen, Allen W. Cariker, 35 years; Carl Barrington Jr., James T. Clayton, 20 years; James W. Cook, R.L. Nero, 15 years; Perry C. Carpenter, Attie S. Daniels, Howard K. Hines, Robert E. Ivory, James H. Voss, 10 years.

## Beaumont District (20)

Earl Ard, 30 years; James E. Strawther, 20 years; Marilyn T. Crouch, 15 years; Delores B. Barriere, William W. Bradberry II, Theodore R. East, 10 years; Ted E. Clay, Ronnie L. Pullin, five years.

## Pharr District (21)

Jose Mesa, 25 years; Jose A. Cuate, Jose A. Luna, 10 years; Roberto R. Lopez, Jorge Martinez, Jorge A. Rendon, five years.

## Brownwood District (23)

Harley E. Fox Jr., 30 years; Mario F. Castanuela, Clarence R. Chambers, James A. Zumwalt, 20 years; Scottie L. Elliott, 15 years; Raymon D. Hicks, Thomas M. Mann, Leonard E. Spivey, 10 years; Paul H. Musick, five years.

## El Paso District (24)

Enrique Guerra, 30 years; Oscar B. Tavaraz, 10 years; Nasario J. Olvera, five years.

## Childress District (25)

Ansel K. Hendrix, 30 years; Mayland R. Foard, James G. Freeman, 20 years; Gil M. Rodriguez, Cosme Solis Jr., 15 years; William T. Hoover, John D. Warren, 10 years.

(March 31, 1990)



## RETIREMENTS

### Automation

Connie G. Parrott, Systems Analyst I, 21 years; William C. Schwarz, Program Administrator I, 29 years.

### Bridge

Homer L. Woody, Welding Technician, 27 years.

### Equipment and Procurement

Melba L. Schwarz, Reproduction Equipment Operator II, 24 years.

### Right of Way

Guthrie O'Donnell, Chief Accountant II, 32 years; John A. Warren, Staff Services Officer I, 32 years.

### Paris District (1)

Clarence D. Gillean, Roadway Maintenance Supervisor III, 30 years.

### Wichita Falls District (3)

Eugene Mangram, Maintenance Technician II, 19 years.

### Amarillo District (4)

Alton L. Carpenter, Engineering Specialist I, 31 years; Wallace R. Fritts, Maintenance Technician III, 11 years.

### Odessa District (6)

Emigedo H. Jimenez, Maintenance Technician III, 31 years.

### San Angelo District (7)

Jesue A. Menchaca, Engineering Technician V, 37 years; Billy T. Young, Staff Services Officer II, 35 years.

### Abilene District (8)

Billy W. Davis, Geologist I, 34 years; Freddie W. Stacy, Right of Way Agent IV, 37 years.

### Lufkin District (11)

George T. Maxey, Maintenance Technician III, 24 years; Mabel M. Powers, Administrative Technician III, 15 years.

### Houston District (12)

Ruben Bijarro, Maintenance Technician III, 34 years; Elmer L. Dickey Jr., Maintenance Technician III, 27 years; James D. Heinrich, Engineering Technician V, 28 years; Oscar F. Malac, Maintenance Construction Supervisor I, 22 years; Robert N. Odom, Maintenance Construction Supervisor III, 33 years; Justino D. Ramos, Engineering Technician IV, 13 years; Warren D. Stout, Maintenance Construction Supervisor II, 27 years; Anna K. Zwernemann, ADP Record Control Clerk III, 22 years.

### Yoakum District (13)

Gladys B. Kaiser, Accountant II, 25 years.

### Austin District (14)

Constance A. Zaleski, Chief Accountant I, 38 years.

### San Antonio District (15)

Esmael A. Arguijo, Maintenance Technician III, 34 years; Bobby A. Pirtle, Administrative Technician II, 15 years.

### Corpus Christi District (16)

John D. Prosen, Maintenance Technician II, 34 years.

### Bryan District (17)

Cecil Davenport, Motor Vehicle Mechanic III, 31 years.

### Dallas District (18)

James H. Lambert, Motor Vehicle Repair Supervisor, 21 years; Martin Sipriano, Maintenance Technician III, 22 years; Elizabeth A. Wilkerson, Personnel Assistant II, 12 years.

### Atlanta District (19)

Billy G. Knight, Roadway Maintenance Supervisor III, 43 years.

### Pharr District (21)

Octavio Flores, Maintenance Technician III, 24 years; Evaristo Garcia, Maintenance Technician III, 29 years; Anastacio Luera, Assistant Foreman, 34 years.

### Brownwood District (23)

Robnett S. Martin Jr., Director II, 32 years.

(Jan. 31, 1990)

## CALENDAR

### JUNE

- 1 Wetland Recognition and Evaluation Seminar, Lufkin, D-8 (continued from May 30)
- 5-6 Pavement Data Collection Coordinators Meeting, Austin, D-18PM
- 6-8 Transportation Planning Conference, Arlington, D-10P
- 7-8 Area IV Research Advisory Committee Meeting, Pharr, D-5
- 11-15 Highway Capacity Course, Austin, D-18STO
- 12-13 Highway Construction Lettings, Austin, D-6
- 12-14 Personnel Workshop, Fort Worth, D-13
- 19 Holiday, Emancipation Day in Texas
- 21 Commission Meeting, Austin
- 26-27 Highway Program Financing, Austin, D-13
- 26-28 Personnel Workshop, Corpus Christi, D-13
- 26-29 Pavement Evaluation System Visual Rater Training, Fort Worth, D-18
- 27 Litter Input Data System Meeting, Corpus Christi, D-18
- 27-28 Highway Program Financing, Austin, D-13

### JULY

- 4 Holiday, Independence Day
- 10-11 Advanced TEXAS Friendly Course, Austin, D-18STO
- 10-11 Highway Construction Lettings, Austin, D-6
- 10-13 Pavement Evaluation System Visual Rater Training, Lubbock, D-18

For the most complete and up-to-date calendar listings, see PIC (Public Information Coordinator), available on computers throughout the department. For more information, see your automation administrator.

## IN MEMORIAM

### Employees:

**Joe D. Pate**, Atlanta District, 13 years service, died March 7, 1990.

### Retirees:

**Wilson Adaway**, Nederland, retired from Beaumont District in 1987, died Jan. 19, 1990.

**Anthony W. Barnard**, Marshall, retired from Atlanta District in 1981, died Jan. 4, 1990.

**Eugene B. Barrier**, Kenedy, retired from Corpus Christi District in 1988, died Jan. 12, 1990.

**Helmuth E. Bartling**, New Braunfels, retired from San Antonio District in 1987, died March 9, 1990.

**Archie L. Bouse**, Port Bolivar, retired from Houston District in 1971, died Jan. 31, 1990.

**Ray Clark**, Harleton, retired from Atlanta District in 1977, died Dec. 22, 1989.

**Delmar C. Crenshaw**, Bryan, retired from Bryan District in 1980, died Jan. 3, 1990.

**Willie J. Davis**, Uvalde, retired from Materials and Tests Division in 1980, died Jan. 1, 1990.

**William L. Dunklin**, Frankston, retired from Tyler District in 1973, died March 6, 1990.

**William E. Fite**, Carthage, retired from Atlanta District in 1963, died Dec. 9, 1989.

**Arnoldo R. Garza**, Pharr, retired from Pharr District in 1978, died Feb. 15, 1990.

**Earl F. Gilmore**, Austin, retired from Equipment and Procurement Division in 1978, died Feb. 16, 1990.

**Ernest J. Lawson**, Irving, retired from Dallas District in 1986, died Jan. 4, 1990.

**Ernest L. Lewis**, China Springs, retired from Waco District in 1984, died Jan. 11, 1990.

**Bobby A. Pirtle**, San Antonio, retired from San Antonio District in 1990, died March 6, 1990.

**Earl W. Smith**, Campbell, retired from Paris District in 1979, died Dec. 24, 1989.

**Avner W. "Shorty" Spainhour**, Wichita Falls, retired from Wichita Falls District in 1976, died March 10, 1990.

**Euwell J. Thibodeaux**, Colmesneil, retired from Beaumont District in 1981, died March 3, 1990.

**Joe T. Webb**, Garland, retired from Dallas District in 1976, died Jan. 21, 1990.

**George M. Wood**, Wellington, retired from Fort Worth District in 1980, died Jan. 27, 1990.

**Clarence L. Woods**, Dumas, retired from Amarillo District in 1981, died Feb. 21, 1990.

\*Compiled by Glenda Wood, Human Resources Division



# LETTERS

During my spring break from school, my wife and I were traveling from San Antonio to Corpus Christi when my camper van broke down.

**Lisa McCumber** of your department stopped to assist me within minutes of my breakdown.

She not only took me to the nearest town to get a part, but waited to see if I was able to fix the van and proceed on my trip before she left us.

In this day and time it is certainly unusual to find someone so willing to be of assistance, particularly to an "out-of-state stranger."

**Robert Milner**  
Dumas, Ark.

*McCumber is assistant maintenance supervisor in the Live Oak County maintenance section, Corpus Christi District.*

*The following letter was sent to **Merle Miller**, roadway maintenance supervisor, and **Efren Agundis** and **Tino Sanchez**, maintenance technicians in the Monahans maintenance section, Odessa District:*

I just want you to know how much I appreciate your stopping to give me a jump start the morning of Feb. 27. I was on my way to the doctor after what turned out to be a mild heart attack.

I had bypass surgery the next day and am doing fine now.

If you had not happened along and helped me when you did, I could have been in serious trouble. God bless you all.

**Roy D. Armstrong**  
Fort Stockton

I would like to thank one of your employees for helping me when my car broke down in El Paso in January.

I was returning to San Antonio from California when my car started giving me trouble on Interstate 10 and I had to park in the middle of the freeway. I could not get across the road to a pay phone because of the traffic.

No one would even stop to help me until one of your employees, **Alfred Klement**, pulled in behind me with his lights on. He checked my car for me and was nice enough to take me to his office to call AAA. He returned me to my car and we talked until the wrecker came to pick up my car. I was an elderly woman traveling alone, and he was very polite and courteous. Please thank him very much for helping me.

**Audrey Valley**  
San Antonio

*Klement is chief inspector on a major reconstruction job on I-10.*

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