Transportation News

FOR THE EMPLOYEES OF THE TEXAS STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION

after Flach has planted them at a

roadside park or along the right of

way. Of the eight madronas Flach planted in a park near Vanderpool,

motorists pulled up six. The trees

probably will not survive much

replacements to refill those holes.

That is until the Flood of '78 surged

into Bandera and washed away the

Bandera mainténance warehouse. With the warehouse went 30 of

But Flach has not given up. He's

Flach's special seedlings.

just waiting for spring.

At one time, Flach had plenty of

longer than the holes they left.

Madronas Disappearing Despite Planter's Help

☐ The combined forces of Man and Nature seem to be pitted against Clifford Flach. Which seems unfair since the Bandera Maintenance Construction Supervisor is only trying to keep a little beauty in his part of the world.

Flach's pet project is the madrona, known by some as the aristocrat of all Texas trees. For some reason, the madrona seedlings seem to have lost their ability to survive in the wild, and have been listed as an endangered species. And many greenhouse efforts have failed.

But Flach seems to have a special ability to help madrona seedlings thrive. He has managed to grow madronas in cans at his warehouse in Bandera.

But motorists can't seem to keep their hands off the beautiful tree

Clifford Flach plants his madronas along the roadside and near the rest stops so that motorists can enjoy them. But rabbits seem to enjoy taking a rest stop near the trees as well.



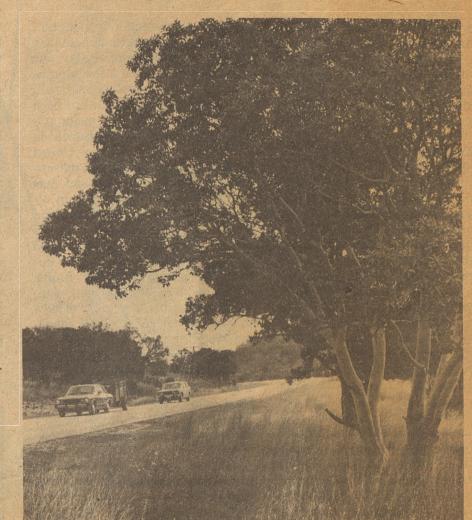
IN MEMORIAM

□ Fred W. Clark Jr., District Engineer at Del Rio, died unexpectedly in his sleep Jan. 16. He had not had a recent history of illness.

Allen

Clark put in a full day at the office Jan. 15 and went home in the evening in apparent good health. Services were not set up at presstime.

He went to work for the Department as a rodman in Del Rio in 1938. He advanced steadily through various positions in District 22 and was named District Engineer at Del Rio in October 1972.



Low Accident Rate Recorded

☐ The Del Rio District registered the lowest vehicle accident rate in the Department during fiscal 1978, according to Insurance Director Quinner Williams.

The Del Rio accident rate was 1.02 as compared to 1.22 for Brownwood and 1.43 for Odessa. Houston Urban had the highest rate at 13.08 followed by Atlanta with 7.42, Dallas at 7.01 and Houston District 6.78.

The statewide average rate was 4.29 in 1978.

The rate is determined by a formula involving the number of accidents times 1 million divided by the actual number of vehicle miles driven.

In all, District yehicles traveled 97.9 million miles and were involved in 420 chargeable accidents. The Department operates more than 2,800 vehicles of all types in the 25 Districts, the Houston Urban Office and in Austin.

INSIDE

Chairman Reagan Houston's term is due to expire this year. At the Short Course he had a few reflections and a few challenges to presentpg. 2

TEXAS STATE DOCUMENTS COLLECTION

JANUARY 1979

The travel counselors at the Laredo Tourist Information Bureau felt they could help the deaf by learning some signs. They found there was

Clark was a member of a pioneer Culberson County family, served in the U. S. Army as a major in World War II and was a member of the Texas Society of Professional Engineers. He was 62 years old.

Survivors include his widow and two children.

Total cost of all chargeable accidents was \$184,495, as compared \$132,964 a year ago. This represents an increase of 39 percent in vehicle accident costs.

Accident rate statistics are based on a formula established by the National Safety Council. The Department has been a consistent recipient of outstanding safety awards of the NSC.

more to learn than just a new	
languagepg. 8	

State office buildings can be rather cheerless. But during the Christmas Season many people in the Headquarters building used their talents and imaginations to help bring a little Christmas cheer to their surroundings

NON-CIRCULATING NTSU LIBRARY

chairman houston told those at the short course that the key to the department's future could be Decentralization

Perhaps everyone feels he or she lives in the most exciting, or significant, or enlightened times possible, but I think it would be fair to say that it would be difficult to find more eventful and challenging years in the history of transportation in Texas than those since I took my seat on the Commission in June of 1973. The times, as the Bob Dylan song goes, they have been a-changing.

For one thing, back in June 1973, you still could buy a gallon of regular gas in Texas for about 30 cents. The oil embargo was still about four months off and the news media was far more occupied with Watergate than with what became known as the energy crisis.

But after the Arab-Israeli War in October 1973, oil imports from the Middle East were shut off completely. Emergency measures were hustled through Congress and Texas had a special session. I recall that my first Short Course that fall was enlivened with a Commission meeting to set a statewide 55-mph speed limit to conform with a new federal law restricting highway funds to only those states having a 55-mile limit.

In 1974, shortages of road building and maintenance supplies sent costs on an even steeper climb. In six years the cost index has doubled. We were aghast at the news that in the last quarter of 1973, it took \$2.06 to do the work that could have been accomplished for one dollar in the year 1967. That same 1967 dollar's worth of work would have required \$3.94 to accomplish in the third quarter of 1978.

The year 1975 was a landmark in the history of the transportation in Texas. The Highway Department and the Mass Transportation Commission were combined. The Legislature, very wisely determined that highways and public transportation were both concerned with the same major problem of mobility. And further, acknowledge that for the foreseeable future public transportation would move on rubber tires.

In addition to public transportation and highways, the Department was given added responsibilities in the development of the Gulf Intracoastal Waterway and the control and cleanup of oil and chemical

were being reduced by attrition, but, late in the year, it became necessary to lay off many employees. The Department emerged a few months later with a lean, professional staff, one-fourth smaller than it had been in the early 1970s. No major ongoing department of government in Texas or possibly in the United States had ever undergone a self-imposed reduction of force and may this never need to happen again.

Meanwhile, the Commission decided to get an outsider's view of the operation of the Department to give us an objective back-up to our looming plea for more funds. McKinsey & Company, Inc., conducted an exhaustive study of how to meet the challenge of the changing times.

From that study grew ideas and concepts which the leadership of the Legislature and the Governor translated into financial relief for the Department and a mechanism to meet the continuing ravages of inflation.

As you know, this action has restored the highway program to a realistic level - but not one that will fully finance every worthy or even every needed project.

For the past two years the Department has been involved in implementing our 20-Year Plan which grew out of our McKinsey study.

It is taking, and will continue to take, the greatest discipline on the part of the Commission and each of you in the Department, to hold to an attainable system of highways. Again we must weigh some present unhappiness against the disaster of a large backlog of projects which people have been led to expect but we can never carry out. We can remember this painful situation well.

This leads me to a matter which has been on my mind for some time and which I have discussed in part here before. In my opinion, our constituents should be brought to understand the constraints inherent in our highway funding.

And the same principle is no less true in the area of public transportation. I am convinced that the Commission and Department will be judged in the 1980s more by the success or failure we have in maintaining a livable mobility in the cities than any other single factor. Sometimes, in a pessimistic mood, I can envision that our highway and public

transportation organization as it exists today can continue or fall on this one almost insolvable problem. The reason is simply that the votes and tax base are increasingly vested in urban dwellers, and if they are not offered a reasonable solution to their mobility problems they will take their support elsewhere. Our very best efforts must be applied to solving the public transportation restraints and we had better not fail.

There is another and totally different area in which our Districts must play and ever-increasing roll for the future. As you all know, and contrary to our recommendations carried forward in the original version of H. B. 3, we are now receiving and in the future will increasingly receive support from the General Fund in competition with schools and social programs of all sorts. In order to survive in this environment and maintain the viability of H. B. 3, on which all of our projections are based, we must make our Legislators our partners in all of our programs. Basically, this cannot be done from Austin, but must be the responsibility of our people in the

field who live and work in the same area as our legislative representatives. Our Districts must, as a first order of responsibility, make certain that every effort is made to keep our Legislators acquainted with all facets of our requirements. Every District Engineer, must on a regular basis give time and thought to insuring that everything that can reasonably be done in this direction is being done. They must be made to feel that they are a part of our transportation program.

I guess in a nutshell, what I am really saying is that instead of following the modern trend of centralization, we must look to decentralization in many areas and to a continuing strengthening of what I call our field forces. If we are strong and active throughout the local areas of the state, we will survive and continue to improve our fine system. I am confident that this strong, able and virtually unique organization can meet the tremendous challenge for funding that lies ahead - a challenge, because of our changing political climate, which will be greater than any of the past.



• I would like to express my thanks to Patrick Williams, Louie Johnson, Elton Stroud and Antonio Huerts who helped me when I was stranded during a storm near Muleshoe.

I had a flat and skidded off the road into the ditch. There was about three inches of snow on the ground, it was snowing and very cold. Two highway department trucks stopped and pulled me out of the ditch, then Williams and Johnson changed my flat tire while Stroud and Huerta directed traffic.

Please express my special thanks to them for their cheerful assistance.

Barbara Hunt Lubbock, TX

• On Nov. 22, while enroute from my home to Corpus Christi on US 77 about 15 miles north of Victoria, I pulled onto the shoulder of the highway to allow another vehicle to pass. My right rear wheel struck a metal object that tore a hole in the tire. I pulled off the highway and with great difficulty manged to get my spare tire on the wheel. At about this time, Albert V. Bosak Jr. and John E. Ellsworth of the Victoria Maintenance Section stopped to see if they could be of assistance. When I lowered the car, I discovered that the spare was flat.

These two men took over the task of removing the tire and one of them drove me into Victoria to have it repaired while the other one remained with my car and my wife.

As it happened, the tire only needed air since it had gone down from not being used for such a long time. We returned to my car and the two men put the tire on for me and followed me to Victoria to see that I had no more trouble. They would not accept any money for their help and showed extreme courtesy and kindness to my wife and me. We are truly greatful for such help and appreciate the fact that it is available.

My thanks to the highway department and especially to these two men who so ably and cheerfully aided a stranded motorist.

> B. B. Potthoff Hilltop Lakes, TX

Spills.

A growing crisis was beginning to be perceived by the public after dozens of warnings by the Commission and Administration spokesmen. We warned that it was not so much a case of "Where do we go from here?" as it was "How do we go from here?"

-And almost concurrent with taking up the broadened mission, the Department had to begin belttightening. It was caught between the rock of inflation and the hard place of diminishing revenue growth rates. Employment levels already

PAGE 2 TRANSPORTATION NEWS

Transportation News Number 4 Volume 4

A newsletter published monthly by the Travel & Information Division for the employees of the State Department of Highways and Public Transportation. Editor: Mike McClellen Art Editor: Ernest Jordan Manuscripts and news tips invited.

MISU UBRARY

• Very belatedly, I wanted to say "Thank You" to Herbert Wisian and Elwin Wolter for returning my billfold, which they found in a roadside park between Austin and New Braunfels back in November.

They have proven that there are indeed honest people left in this world! It was such a relief to have all my personal papers, pictures, etc., returned.

> Sandra Brock San Antonio, TX



□ It's a music form that is not always spiritual, but it's usually uplifting. Some call it "That Good Ole Down Home Music" because it's the kind of music rural families used to play and sing together when they gathered after supper in the pre-TV days.

In Northeast Texas, however, this music may be coming full circle. Twice in the month of October, two practicioners of "That Good Ole Down Home Music" appeared on the cover of the TV-Entertainment weekly section of *The Paris News*. As a further coincidence, they both work for the Department in the Paris District.

Dave Davison grew up in a family

tests and hoedowns. He's played with some of the finest fiddlers in Texas, but he likes to play with newcomers and help bring them along, because only in this way can the kind of music he loves be carried on.

While Dave's music is mostly devoted to accompanying fiddlers, Linda Thurman's music is mostly solo singing. But her family, too, was involved in her early years of music. Her parents bought her a used piano and would sit and listen to her seranade them into the late hours of the evening. Her brother so liked listening to her play "Last Date" that he paid for her piano lessons. opportunity to perform before an audience and she has written over 70 songs of her own.

"Singing before an audience is an outlet for me," she says. "The monetary gains so far have been small, but the satisfaction I get for performing and the response from the audience is worth the effort." Although Linda has hopes of recording some of her music, she, like Dave, gets her biggest thrill from music by recreating for others those magical moments when the family gathered around in the living room after a long day to enjoy a few uplifting moments of peaceful music together.

of four brothers and four sisters with a father who played the banjo and fiddle. When they got together with all the aunts, uncles, cousins, nieces and nephews it was a toe-tapping, square-dancing, good-old time.

"We worked together, played together and stayed together," Dave says. "Living in a rural area, that was about all we had to participate in besides school and church."

Mostly Dave would play guitar in a fiddle band, which is any kind of band that features a fiddle. And he still likes it that way. Most of his public appearances are at fiddle conShe first sang solo on stage while still in the seventh grade. She sings regularly at the Grapevine Opry, packing the house. She has twice won local and regional competitions in the Grand Ole Opry talent searches and is currently entered in the vocal and songwriting categories of the Music Festival Awards.

When she first started working for the Department, her regular routine included boarding the Dallas bus every Friday afternoon to sing at The Big D Jamboree. She has worked hard at her avocation, using every



Linda Thurman and Dave Davison have three things in common: they love music, they both work for the Department in the Paris District and they both appeared on the cover of the TV-Entertainment section of the local paper.

Hand-Held Calculators A Boon to Engineers

Whatever happened to the good, old slide rule?

by Bob Warner

☐ The bookkeeper for the Austin Independent School District's transportation section recently asked for assistance in finding "an adding machine which will convert hours to minutes. The purpose, of course, was to simplify time card reckoning for payroll computation.

The reply referred to a dealer in hand-held calculators who stocked three major brands which make the conversion with the press of a button: Texas Instruments, Sharpe and Hewlett-Packard.

The significance of the answer was not lost on DHT engineers and other professionals who have seen a rapid advance in calculator industry. The first hand-held calculators would perform only the four basic mathematical functions of addition, subtraction, division and multiplication.

Today, Texas Instruments, Hewlett-Packard, Sharpe, and probably others, manufacture programmable calculators with almost unlimited capabilities.

In fact, not everyone can exploit the full capability of Texas Instrument's TI 59, which the company claims is equal to the computing power of an IBM room-sized computer introduced in 1959 costing about \$70,000. The TI 59 sells for about \$300 at retail, less on State bid.

The TI 59 may be locked into a thermal printer (Model PC-100A) which provides a paper printout, of either stage computation or step-by-step process. It carries a retail price of about \$200 and combined with the TI 59 costs about \$350 in the bidding process.

Hewlett-Packard has a single-unit calculator-printout instrument (Model HP 97) which has a suggested retail price of about \$750. Both the TI 59 and the HP 97 accept magnetic cards on which often-used programs may be recorded.

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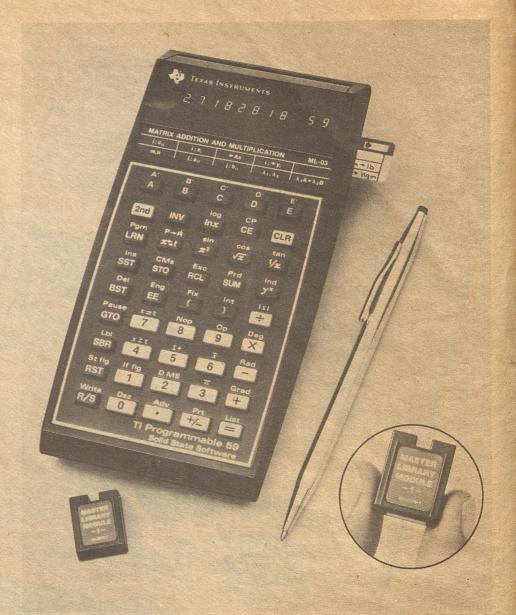
messages, to plot curves and to solve complex mathematical functions.

The programmable units come with easy-to-use instruction books that will help users put their machines to work quickly to obtain maximum benefits of programming. Even the novice, with no prior experience, can move through a selfpaced course in programming with the instruction books.

Bob Rutland, senior environmental design engineer and a specialist in noise determination, purchased his own TI 59/PC-100A shortly after that instrument was introduced in May 1977. He is one of the Department's most enthusiastic supporters of the unit.

With his TI 59/PC-100A Rutland can develop highway right-of-way sound projections 20 years in the future based upon estimated traffic volumes provided by the Transportation Planning Division. The projections are in accord with FHWAdeveloped formulas required to determine future needs for sound barriers to protect roadside property owners from noise pollution.

Rutland sees unlimited adaptations of the TI 59 in departmental field work, especially in the Residencies and in the District Offices. This could involve computations of removal and fill, slope, bridge stress and compression and in many design applications. As in his own work, problem solving through



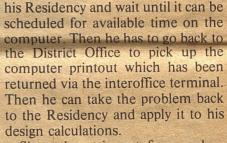
Texas Instruments' TI 59 in one of at least three hand-held calculators that can provide sophisticated computations in many engineering areas. TI also has developed more than 100 plug-in solid-states libraries having a capacity of 5,000 program steps.

manual computations and reference to established engineering tables can be reduced to a fraction of time required with the use of the TI 59.

"The capabilities of the TI 59 are so immense that even Texas Instruments engineers are not yet aware of all the things it can do," Rutland says.

Convenience and time-saving are two very important factors to DHT Residencies, he points out.

At the present time, if a Resident Engineer wishes the solution to a problem he must write the program, take it to the District Office, leave it for transmission to Austin, return to



Since the stringent force reductions, many residencies are hard put to get manpower — sufficiently so that manual computations of complex engineering problems are a definite handicap.

If the Resident Engineer has a TI, HP, Sharpe or other programmable calculator in his office he can write the program, punch it into the calculator (and enter it on the magnetic card if he may need the program again) and get an instant printout. The time savings are incalculable considering the number of Residencies, Districts and jobs in progress.

Besides Rutland, a number of employees have purchased their own programmable calculators. Now Equipment and Procurement Division has authorized purchases of the TI and HP instruments on proper requisition. At least six Districts have requested one unit, two have asked for a pair, and two urbanized districts have asked for five and six. So far, Houston District is leading all others with orders for 10 units. Since the TI 59/PC-100A or the HP 97 costs less than a popular electric typewriter, a great many more of the units may become standard office equipment in the nottoo-distant future.



The HP 97 has capacity for 224 program steps and 25 memory storage slots. The TI 59 offers up to 960 steps and 100 memories.

TI also has developed more than 100 plug-in solid-state pre-written "libraries" for the TI 59/PC-100A, having a capacity of 5,000 program steps each, adapted to specialty fields such as surveying, hydraulics, data entry programs in engineering and other professional disciplines. The PC-100A also has alphanumeric capability to print headings, label outputs, to program-in prompting

Highway Design Division's Bob Rutland uses his TI 59/PC-100A to develop highway right-of-way sound projections over a 20-year period. The PC-100A provides a paper printout of the computations for records and reference purpose.

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awards & retirements

SERVICE AWARDS (As of Jan. 31, 1979)

35 YEARS

District 7 William P. Fulgim Jr., Engineering Tech. V District 14 Howard Adcock, Engineering Tech. V District 16 Ysidro Perez, Maintenance Tech. III District 19 Lula B. Sullivan, Engineering Tech. II District 24 Jesus Velasquez, Maintenance Tech. III

30 YEARS

Motor Vehicle Division Warren H. Wolff, Supv., Motor Vehicle Section **Transportation Planning Division** Edwin L. Shiplett, Engineering Tech. V **District 1** Bessie M. McCoin, Engineering Tech. IV Vernon E. Mitchell, Senior Designing Engineer **District 4** Jay L. Hawley Jr., Supervising Resident Engineer **District 6** Cruz V. Marquez, Maintenance Tech. III **District 10** Luther H. Lawson, Maintenance Tech. III **District 11** Allen W. Cockrell Jr., Supervising Resident Engineer **District 12** John C. Smith, Asst. District Engineer Frank Y. Wadlington, District Designing Engineer **District 13** William F. Moehlman, Supervising Resident Engineer **District 15** Antonio Camareno, Maintenance Tech. III **District 16** William G. Kelley, Engineering Tech. V Patrick E. Byrne, Supervising Resident Engineer **District 19** Richard H. Tuck, Senior Resident Engineer **District 20** Franklin C. Young, District Engineer **District 21** Jose L. Cantu, Engineering Tech. V James L. Davis, Maintenance Foreman III Benito Salinas, Maintenance Tech. III

25 YEARS

Transportation Planning Division Bert Spence, Engineering Tech. V District 2 Jimmy O. Talley, Engineering Tech. V District 3 Roy C. Burdick, Maintenance Tech. III

District 4

Jimmy L. Mitchell, Maintenance Construction Supy. III Harold D. Steinle, Chief Accountant I W. T. Sullivan, Maintenance Construction Supv. III **District 5** Volney G. Chetty, Supervising Resident Engineer Daniel N. Rozell, Maintenance Tech. III **District 6** Mary H. Shultz, Engineering Tech. III **District 7** Robert T. Coy, Draftsman III Jackie B. Mathews, Maintenance Construction Supt. I Antonio E. Munoz, Maintenance Tech. II Jimmie B. Arrott, Maintenance Construction Supv. III Andrew C. Singleton, Maintenance Tech. III Frank C. Goodman, Maintenance Tech. III **District 9** James B. Brown Jr., Maintenance Foreman III Ruby B. Holloway, Maintenance Tech. I William H. Bradbury, Maintenance Tech. II **District 10** Thomas J. Hooks, Maintenance Tech. III **District 12** Jerry W. Thames, Maintenance Construction Supv. II **District 13** Elton O. Freudenberg, Maintenance Tech. III Leonard W. Hagens, Maintenance Construction Foreman III Grady F. Glass, Engineering Tech. V Joseph W. Laufer, Engineering Tech. II **District 14** Elmo R. Cox, Maintenance Tech. III **District 15** Edward H. Brown, Engineering Tech. III **District 16** Oswald R. Parsley, Maintenance Tech. II Alvin A. Ploch, Maintenance Tech. III **District 18** Leo D. Frizzell, Engineering Tech. IV James G. Page, Engineering Tech. IV District 19 John R. Calloway, Designing Engineer District 21 Robert M. Stevens, Draftsman III James C. Todd, Supervising Designing Engineer Estanislao Carranza, Engineering Tech. III **District 24** Charles T. Hall, Engineering Tech. V Juan J. Lujan, Maintenance Tech. III

20 YEARS

Bridge Division Angelene B. Robinson, Clerical Supv. III Finance Division Winston H. Anderson, Chief Accountant II Highway Design Division Andrew L. Blaschke, Engineering Tech. V Motor Vehicle Division James L. Keithley, Accountant III **Right of Way Division** Joseph J. Marks, ROW Agent III Robert M. Smith, ROW Utility Agent IV **District 1** Larry J. Buttler, Senior Planning Engineer **District 2** Dick Richardson, Maintenance Tech. III Jerry L. May, Engineering Tech. IV **District 4** Alton L. Carpenter, Engineering Tech. V Raymond E. Boyles, Maintenance Tech. III District 5 Austin Y. Steen Jr., Maintenance Tech. III Donald J. Bednarz, Engineering Tech. IV **District 6** George E. Hopper, Engineering Tech. V Eddie C. James, Maintenance Tech. III James W. Strong, Senior Maintenance Engineer **District 7** Gene P. McWilliams, Maintenance Construction Supv. III **District 8** Herbert D. Turner, Shop Foreman IV **District 9** George W. Collins, Engineering Tech. III **District 12** John L. Pavlock, Maintenance Tech. III Thomas E. Wenzel, Chief Accountant I Bobby S. Davis, Engineering Tech. IV Gay C. Field, Accounting Clerk III Eusebio Escamilla, Engineering Tech. V James D. Blanton, Senior Resident Engineer **District 13** Gilbert E. Canik, Engineering Tech. III August E. Popp, Engineering Tech. III **District 15** Billy G. Teague, Engineering Tech. II Wayne L. Marty, Engineering Tech. III James H. Pohl, Engineering Tech. III District 17 Robert A. Lauter, Maintenance Tech. III Billy J. Adams, Maintenance Tech. III Elwood C. Draehn, Maintenance Tech. III Thomas E. Woolley, Engineering Tech. V Melvin L. Doss, Maintenance Tech. III **District 18** Joe A. Melton, ROW Agent II Robert P. Hamm, Engineering Tech. IV **District 19** Charles T. Blizzard, Maintenance Tech. III James L. Knox Jr., Engineering Tech. II Bobby D. Prator, Materials Analyst III **District 20** Floyd J. McKee, Maintenance Tech. III **District 21** Jack T. Trammell, Senior Laboratory Engineer Esmerejildo Y. Ramos, Maintenance Tech. III **District 23** Garland Y. Perry, Maintenance Tech. III **District 24** Harold A. Sargent, Chief Accountant II

RETIREMENTS Administration

District 8 Harold M. Hamer, Maintenance Tech. II District 17 Virginia S. Martin, Secretary III

Fred M. Khoury, Staff Services Officer II **Insurance Division** Corneil G. Curtis Jr., Director, Insurance **Transportation Planning** Williard R. Brown, Traffic Survey Supv. Albert H. Clopton, Senior Office Engineer **District 1** George E. Porterfield, Maintenance Tech. II **District 4** Harrison L. Miller, Engineering Tech. III James C. Newton, Maintenance Tech. III **District 7** Arless F. McDonald, Maintenance Tech. I District 10 Earl Brown, Maintenance Tech. III John B. Hoffmann, Engineering Tech. V Wilson Knight, Maintenance Tech. II District 13 Henry L. Helble, Engineering Tech. V Clarence A. Weise, Supervising Resident Engineer District 15 Frank Sanchez, Maintenance Tech. II Federico Zepeda, Maintenance Tech. III District 16 Otis M. Brown, Maintenance Tech. III District 18 Rogert W. Hyde, Maintenance Tech. III District 19 James B. Brady, Engineering Tech. IV Harvey D. McKinney, Maintenance Tech. III District 20 Everett D. Langford, Engineering Tech. V District 21 Arnoldo R. Garza, Maintenance Tech. II District 22 William R. Downum, Maintenenace Tech. III District 23 Henry P. Turner, Maintenance Tech. III

The Old Fort Worth Mixmaster

despite some bad publicity recently, the old first-generation interchange has done its job for two fast-paced decades

by Mike McClellen

□ Old buildings become landmarks, old people become venerable and old ideas become quaint. But old interchanges just become inconvenient.

The Fort Worth Mixmaster was born on the brink of an era of a rapidly escalating state of the transportation art. And its reputation has wrongly suffered in comparison to newer standards.

The idea for an interchange where IH 35W and IH 30 now intersect was not born until after Congress passed legislation in 1944 allowing funding for the first time for the State to build highway facilities within city limits.

Since the highest traffic count in Fort Worth at that time was on one facility with 45,000 vehicles per day, the early planners decided to build a cloverleaf interchange to smoothly

move traffic from one highway to the other.

But the state of the art was already escalating. In about 1950, the Department began using the sophisticated art of traffic projections, and it quickly became apparent that a cloverleaf built for use by 45,000 vehicles each day would not suffice.

Planners turned to a new design concept. And the plans were made for a multidirectional interchange to handle 80,000 vehicles per day that could probably be able to handle as much as 120,000 vehicles per day without too much trouble.

Unfortunately, the city was strapped for funds to pay for the additional right of way and utility adjustments. This was before Congress established funding to relieve the cities from the total weight of these

responsibilities on major facilities. The planners were stuck with a rather confined land area.

By the time the new interchange was completed in 1957, it stood as a testament to a new era in highway building. Though it was not the first multidirectional interchange in the state, it was one of the first.

That was 21 or more years ago. Today the Mixmaster is handling in excess of 180,000 vehicles per day and still holds its own except when an occasional vehicle with a high center of gravity tries to handle one of the curving ramps at too high a rate of speed.

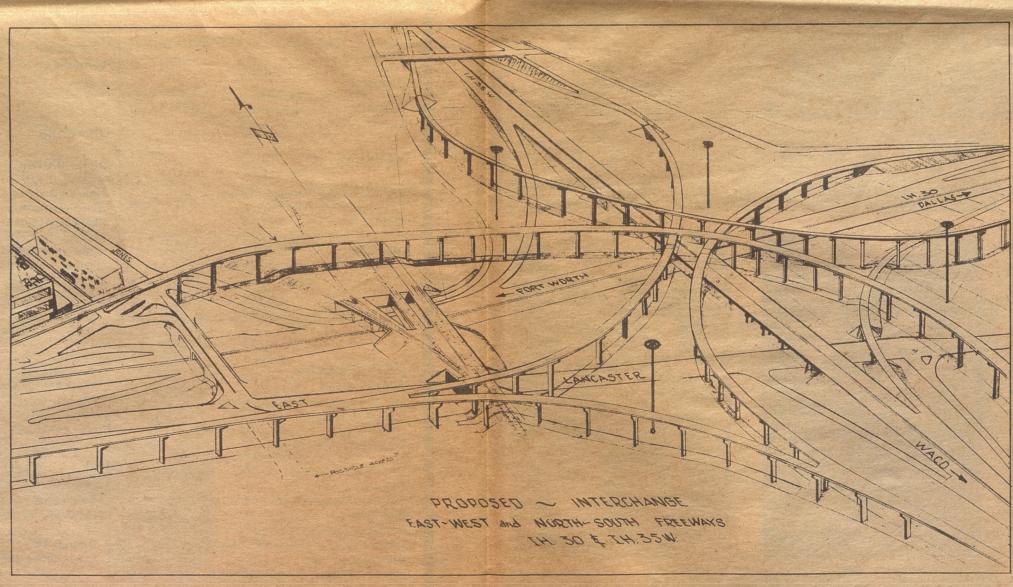
Unfortunately, this is happening with much more frequency of late and the Mixmaster is drawing a lot of bad press.

Age has not been kind to the Mixmaster in terms of maintenance, either. It is one of the most expensive sections of Interstate to maintain in the state.

Fortunately, help is on the way. The Mixmaster is included in new plans to improve one of the oldest sections of Interstate in Texas: IH 35W in Fort Worth.

A public meeting was held last April for the planned new facility. The main thought expressed at the meeting was: "Hurry up and get it done!'

now.



In the past 20 years, the state of the art of highway building has progressed quite a bit. Next month the people of Fort Worth will have an opportunity to add their ideas to a planned replacement that will be better suited to today's needs.

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A public hearing has been set for Feb. 7 at the Seminary South Shopping Center. If all goes well at that public hearing, the Fort Worth District hopes to be able to go to contract in two years and to complete the whole project in 10 years.

The old Mixmaster will have done its duty. Perhaps history will be kinder to it than many are being





Through the years, the guardrails on the ramps have taken a beating from trucks with high centers of gravity trying to take the curves too fast. The District has added an extra rail and barrels to give an extra measure of safety.



The 30-mph speed limit is posted, but people tend to not believe it. The planned new facility will cover a larger area and have less severe curves for its ramps.





by Mike McClellen

□ It's a common joke among the travel counselors at the Department's nine Tourist Information Bureaus and two Visitor Centers that they get paid for telling people where to go. Usually they can even tell people where to go in Spanish as well as English and sometimes French, too.

But the travel counselors at the Laredo TIB found nothing funny about giving directions to deaf tourists. By both personal inclination and training, travel counselors love helping people. The Laredo counselors were becoming frustrated at their inability to help these people. Since it would be difficult for the deaf to ask directions at filling stations and other common places en route, the travel counselors felt that the deaf probably needed help more than most of the other tourists.

They decided they had to do something about it. While Supervisor Berni Taylor stood duty at the bureau, Estela Sanchez and Grace Vera began taking sign language classes at the Ruth B. Cowl Rehabilitation Center.

They quickly learned that there is more to communicating with the deaf than merely learning the hand movements. For instance, while working through a list of the most often asked questions at the bureau, they ran into a problem about the question "Where is the telephone?"

The students and instructors were so involved in the mechanics of the hand signs that it was a

anyone realized that a deaf person would be unlikely to ask that question.

But there are other, less obvious problems the deaf have to live with that the communicator needs to keep in mind.

According to Jeanett McPherson,

the travel counselors found that learning the language is only half the job









one of the instructors at the Cowl Rehab Center, the general signs used in sign language are abstract and nonspecific. It is important for the communicator to use simple, direct statements in order to avoid confusion.

Most deaf people are reluctant to admit confusion in their communications with nondeaf people. The expression "deaf and dumb" has caused many deaf people to be

sensitive about appearing confused. Although "dumb" is used as a syn-onym for "mute" in the expression, most people think of "dumb" as "stupid'

Empathy is an important part of any communication, but it is much more critical in communicating with the deaf. Which is no problem for the Laredo travel counselors. Empathy and communications are tools of their trade.



A December school bus wreck killed four high school students and injured 21 others.

for maintenance men jess houghton and john almanza **'Everything Seemed To Take Forever'**

by Ray Green

□ DHT employees have been called upon to perform under every undesirable circumstance imaginable. One of the worst, however, had to be the wreck in the Abilene District between a McCaulley school bus and an oil field service truck.

The wreck occured on Dec. 8 at the intersection of US 180 and FM 611 in the West Texas county of Fisher. When the screaming of metal fell silent, four McCaulley school children lay dead and 21 others, mostly high school students, were injured, many of them critically.

Jess Houghton and John Almanza of Fisher County Maintenance were on routine litter pickup. Although they did not see the wreck, they arrived while the dust was still hanging in the air. Two vehicles following the bus were already at the scene.

"When we arrived, we did not know a school bus was involved," Houghton said.

Upon realizing the situation, their actions were spontaneous. Fighting back a tendency to panic, both employees immediately began removing the badly injured bodies.

"Everything seemed to take forever," Houghton said. With great difficulty they

Barney Cumby, Maintenance Foreman from Fisher County, was impressed by his men's actions: "I saw many heartbreaking scenes in World War II, but nothing to equal the one on US 180. I guess I'm prejudiced and I know our employees are trained and ready to act in bad situations, but I'm very proud of the way our people handled the whole thing. Their quick actions kept a tragic situation from being any worse than it already was."



For those at the scene of the accident, there was a sense of shocked disbelief and a feeling of great tragedy. But the quick actions of a couple of DHT men may have helped to keep the tragedy from being worse.

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Grace Vera and Estela Sanchez go. through a special practice for Jeanett McPherson and Yolanda Sanchez, their instructors from a Laredo rehabilitation center

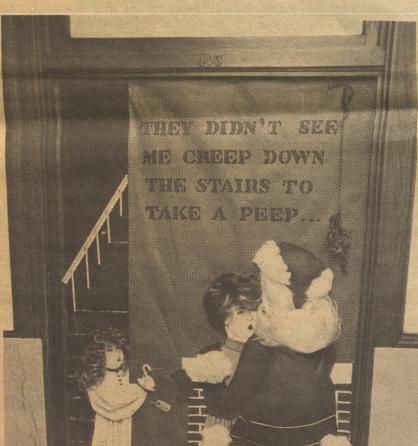


managed to remain calm. Since the litter pickup was not equipped with a radio, Almanza decided to go to a nearby cotton gin to call Fisher County Maintenance for help and medical assistance. He returned with cotton sacks from the gin to cover the injured and to keep them from freezing in the 22° weather.

With the arrival of more vehicles, both men decided they could best assist by directing traffic, which they did until relieved by other maintenance personnel.



Administrative Asst. Lee Reese of Finance Division presents the first-place ribbon for secular decoration to Joan Lee, Margaret Holloway, Evelyn Hill and Anita Moore.



'Twas the Season

'Twas the season For all to be jolly. Away winter's gloom! Begone melancholy! The tree stood dressed In spangles and bow, And faces turned happy With smiles all aglow. Each floor had reminders To mark the occasion, For each and for all To share the sensation. Thanks to the adorners For sharing their cheer And giving us fresh spirit To begin the New Year.

Finance, First Place - Secular

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Personnel

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Highway Design, First Place - Religious



Chief Engineer for Highway Design Bob Lewis (above, right) congratulates Andy Blaschke, Terry Deanda, Jim Barr and Clyde Bullion for their prize-winning religious decoration. (Below) Myrna Lind, Sylvia Caballero, Lana Adams, Laura Dodd, Frances Ratliff and Wesley Pair put the finishing touches on the Christmas Tree in the lobby.









NTSU LIBRARY **Public Transportation Ridership Up** but department report also shows public transportation expenses up

□ Public transportation ridership in Texas increased 4.4 percent in calendar year 1977, according to a report issued recently by the Transportation Planning Division.

However, public expense of transit rose 21 percent from \$27.7 million in 1976 to \$33.6 million in 1977. Total public expense included operating costs of \$28.8 million and capital costs of \$4.8 million for 1977

Public transportation funds committed both by the State and federal governments rose 89 percent from 1976 to approximately \$85.1 million in 1977.

For the first time, operating revenues per vehicle mile increased at a faster rate (10 percent) than total operating expenses per vehicle mile (9 percent).

Transit vehicle miles driven rose about 6 percent from 53.9 million miles to 57.2 million miles in 1977.

The number of passengers per capita in the state increased approximately 5 percent, from 23.7 percent in 1976 to 24.9 percent in 1977.

Significant bus systems (those operating at least five buses on regularly schedules routes) carried 130.5 million passengers in 1977 as

Clinger Named 'Man of Year'

□ Chapter 39 of the American Right of Way Association has begun the year by naming Charles Clinger "Right of Way Man of the Year" for 1979

Clinger is supervisor of the Utilities Section of the Department's Right of Way Division and has been with the Department for 25 years.

He is a former president and presently an International Director of the AR/WA Chapter 39.

He is very active in civic organizations including Cub and Boy Scouts, the Optimist Club, various parent organizations at Bedichek Junior High and Crockett High and has been chairman of the board at his church six-times.

compared with approximately 125 million in 1976. These systems serve 18 urbanized areas and all are publicly owned except for two private companies in Brownsville and one Harlingen-based company which serves the Lower Rio Grande Valley.

About 73 percent of all transit patronage was in the three largest Texas cities: Houston (31 percent), Dallas (24 percent) and San Antonio (18 percent).

Ridership would have reflected a greater increase had not a strike which began in 1976 in Houston continued through 17 days of the

vear 1977. Estimated ridership would have increased about 6 percent in 1976 and 10 percent in 1977 had the strike not occurred, according to the report.

Net operating revenue in 1977 was 33 cents per passenger, 77 cents per vehicle mile and \$9.88 per vehicle hour. Operating expense totalled 55 cents per passenger, \$1.30 per vehicle mile and \$16.70 per vehicle hour.

This represented a net operating loss of 22 cents per passenger, 53 cents per vehicle mile and \$6.82 per vehicle hour. Operating costs are shared by federal subsidies and the city. The State contributes nothing to operating losses, but does participate in capital costs.

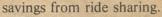
Total operating revenue for the State totaled \$70.3 million and capital revenue (federal, State, local) \$4.8 million for a total of \$75.1 million. Total operating expense was \$70.3 million, and all capital revenue was devoted to plant additions.

As in each year since the Department assumed responsibility for the State and federal transit grant programs at the direction of the Legislature in 1975, the public transit program has reflected increased interest.

Dallas Car Pool Gets New Boost

□ Dallas' limping car-pool program will get a \$100,000 "shot in the arm" in 1979 with a federal grant to increase participation.

The grant will represent a \$40,000 increase over the amount the city will receive to promote the car-pooling program and resulting energy



The city expects to use the additional funds for a new, major promotional effort to attract additional car-pool riders. Although 60,000 people have filled out questionnaires indicating interest in the program, only 15,000 are participating on a regular basis.

About 175 major employers and other local institutions have cooperative projects that assist workers in finding people to participate in car pools.

Although Dallas has been ranked second among Texas cities participating in the program, it was rated only 46th out of the nation's 70 leading communities with carpool programs.

Houston has spent \$325,000 on a ride-sharing program but has been able to attract only 9,000 riders.

Meantime, the San Antonio District recently has completed carpool parking facilities in Kendall County to stimulate further interest in the program.

SAMTA Requests More \$\$

□ The San Antonio Metropolitan Transit Authority has requested State-federal funding assistance for a \$968,000 public transportation capital improvement grant.

The request for State funds was approved by the Commission which will forward the grant proposal to the Urban Mass Transportation Administration for federal concurrence.

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The SAMTA project involves purchase of maintenance office furniture and equipment; vehicles; tools and cleaning equipment; construction of maintenance and repair facilities exclusive of storage yards; renovation of the maintenance facility; supporting services/cost allocation plan; engineering and design.

AR/WA "Man of the Year" for 1979

□ The largest dollar volume of highway construction in the Department's history was let to contract Dec. 13-14.

December Letting Highest

For the first time, estimated construction and preliminary engineering topped \$100 million as contractors vied for 51 highway projects.

Contractors' bids plus preliminary engineering estimates totaled \$102.6 million, 2.34 percent over departmental estimates of \$100.3 million. Highest previous month was August 1978, when contractors'

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bids plus preliminary engineering and contingency totaled \$98.3 million.

An even larger letting, estimated at \$117.1, is scheduled for January. However, this total may be scaled downward should some of the projects not be ready for bidding Jan. 18-19.

Total construction let to contract in calendar 1978, including E&C was \$846.5 million as compared to \$688.9 million in 1977 and \$426.9 million in 1976.

