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ENV's 7th conference to cover toll issues

Event set for Nov. 30 - Dec. 1-2 in Austin

By RICHARD GOLDSMITH
Public Information Officer
Environmental Affairs Division

The Environmental Coordinators Conference roars back for the seventh time Nov. 30-Dec. 2 for three full days at the Doubletree Hotel, I-35 and U.S. 290 in Austin.

The conference will begin at 8 a.m. Tuesday, Nov. 30 with a general session. TxDOT Executive Director Michael Behrens, P.E., will make opening remarks along with ENV Director Dianna F. Noble, P.E. A Transportation Commission member is also expected to speak.

Keynote speakers for Day 1 are:

- Larry Barfield of the Florida DOT on his agency's "Efficient Environmental Decision Making Process";
 - Jack Gilbert of the Office of the Texas Attorney General on the "NEPA Legal Perspective";
 - John Mettelle of the Kentucky DOT on "Community Impacts and Context Sensitive Solutions";
 - Patricia White of the Defenders of Wildlife national office on "Habitat Planning";
 - Lamar Smith of the Washington, D.C., office of the Federal Highway Administration on
- See CONFERENCE, Page 8

SH 130 built using design-build EDA, other unique ideas

By JON GEISELBRECHT
Austin District

State Highway 130 is a 91-mile new location tollway extending from I-35 north of Georgetown to I-10 near Seguin. Currently under construction by a joint venture known as Lone Star Infrastructure (LSI), this project is TxDOT's first major design-build project and is being executed via an exclusive development agreement (EDA). As such, the construction of SH 130 presents some unique challenges that are quite different from the traditional design-bid-build approach.

Design-build is a dynamic, fast-paced approach to construct projects in far less time than the traditional process. For example, in many areas construction may be ongoing while the roadway design is still being completed in other areas. To help ensure environmental compliance

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CAP pilot results evaluated

By HEATHER EVANS
Air Quality Specialist
Environmental Affairs Division

TxDOT's Clean Air Plan pilot is now complete. The pilot, which ran from June 1-Aug. 31, was the first department-wide attempt to gather data about the various clean air activities performed by both individual employees and districts.

Individuals were asked to report their commute-related activities such as carpooling, using public transit, and reducing workday outings. Districts were also required to select and report on a minimum number of activity-based measures based on their air quality attainment status. Examples of these measures

See CLEAN, Page 6

Biologist Bill Hood retires from ENV

Veteran bird man heads for the private sector after 24 years

SUSIE WATSON

Vehicle Title & Registration Division

Like most people who retire from a job they devoted years to, ENV biologist, Bill Hood, didn't leave TxDOT without reminiscing about his 24-year career in state government. Hood left ENV June 30 for a private sector job with HNTB Corporation.

Before joining ENV, Hood taught and coached in the Leander school district and worked for the Texas Department of Water Resources. In the late '80s, he began his TxDOT career as a technical writer for two years in the Information Systems Division.

Hood joined the Environmental Studies Section of the Design Division in 1987, which evolved into the current Environmental Affairs Division in 1993.

"I started here because I could make more money than I was making as a teacher, then I got close to the people and the work, and before long, it just made more sense to stay." Now that Hood had the opportunity to retire from TxDOT and work for a consulting firm, "it just made sense to leave," he says.

Hood received his bachelor of science degree in education, with a major in zoology and a minor in history. He also received his master's, majoring in wildlife biology from Abilene Christian University.

As Hood's co-workers know, he is anything but boring. Those who worked closely with him knew to watch out when they saw Hood and former ENV air guy Wayne Young together – anything could happen. One of Hood's favorite stunts involved a joke he and Young played on former ENV staffer Melissa Neeley back when the Environmental Studies Section of Design was located at Promontory Point. It seems that Neeley was the first to get her own office with a "door." She wasn't above gloating, so Hood and Young decided to adjust her attitude by removing the door. As Hood describes the scene, "Melissa sauntered in, went to her office, and let out a scream."

Hood for many years conducted annual bird surveys for the department. Co-workers on these sometimes weeks-long field trips say Hood was not known for letting a conversation lapse.

"Basically Bill doesn't like to be in silence. That job involved driving hundreds and hundreds of miles with the same people. One time Bill ran out of things to say and took off his cap and started reading the laundry instructions to the other four of us. I was driving and nearly wrecked the car I started laughing so hard," said former ENV staff member Kathie Goldsmith.

On another outing, Hood and Archeologist Al McGraw were walking possible new right of way for the road to Port Isabel. The undeveloped land was surrounded by swampy marshes on either side. They came to a narrow spit of land only 10-foot wide with smelly, snaky-looking marsh on either side. Headed towards them and blocking the path was a herd of cows.

"Bill's idea was to show me how to clear the cows off the path. He went running full speed and screaming like a madman towards the herd," McGraw said.

At that moment,

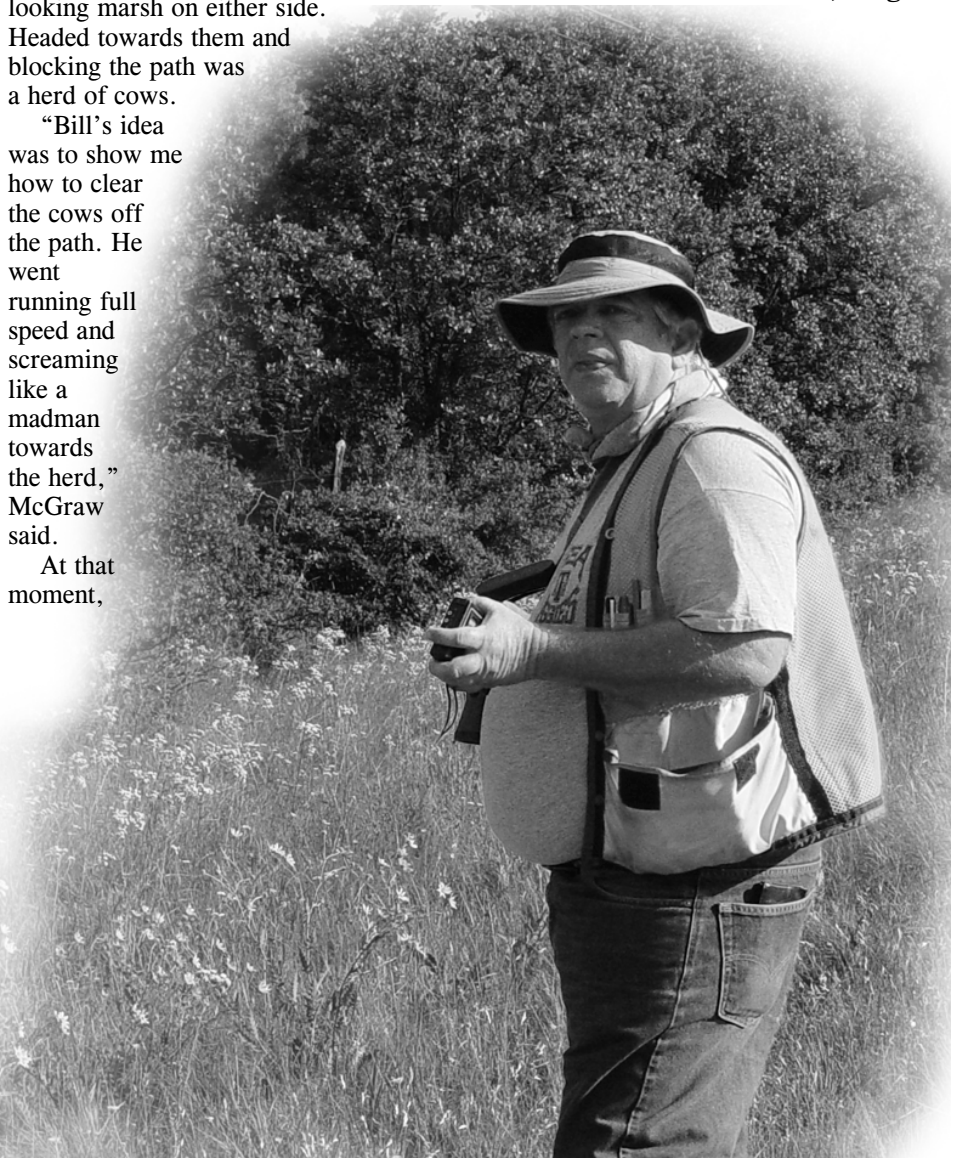
"just like a cartoon" according to McGraw, "the cows parted" and here came a bull running for Hood, who now ran full speed in reverse and quickly retreated waist-deep into the swamp.

"The bad thing was, I had nowhere to go either and I had to run into the water too."

The bull stood and stared at them for a long while before losing interest and moving off far enough for the two to head for dry land again.

Hood says his most challenging and rewarding project was helping to write the first memorandum of understanding (MOU) between

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San Angelo wins 2004 EAA for FM 1120 low-water crossing

By JIM DOBBINS

Environmental Affairs Division

The 2004 Environmental Achievement Award was presented to the San Angelo District for its Low Water Crossing on FM 1120 Project on Oct. 11 at the TxDOT District Engineer/Division Director/Office Director meeting in College Station.

The Environmental Achievement Award recognizes the best of projects and processes that meet transportation needs while protecting and enhancing the environment. ENV presents the award to the district or division whose efforts produce outstanding results.

When a low water crossing of the Frio River in Real County was damaged beyond repair by repeated floods, the staff of the San Angelo District went to work to ensure that the replacement crossing on FM 1120 would be environmentally sensitive.

The Frio River near the crossing is in a scenic resort area that supports recreation including swimming and tubing that is vital to the county's economy. Removal of the old crossing was scheduled for autumn to minimize disruptions during prime recreation season. To protect water quality, regular maintenance was performed on construction equipment and special, vegetable-based, biodegradable hydraulic fluid used in heavy equipment. A number of innovative features were included to maintain existing water flow rates and water depths during and after construction, including tight grade control and the installation of corrugated piping. Subsurface water flowing through the limestone riverbed was accommodated by installing a four-foot gabion basket set on the bedrock and pre-cast toe walls and rock nails instead of using a solid toe wall that would cut off subsurface water flow. Innovative design and construction techniques allowed seven of nine large Bald cypress trees to remain undisturbed that would have otherwise been removed. Compost berms were installed and sod planted to prevent sediment from entering the river.

Thanks to construction and design innovations, a low water crossing over the sensitive Frio River was accomplished with minimal impacts to the environment.

The El Paso District was recognized as a **runner-up** for its Community Used Oil Collection Centers.

In 1994 the El Paso District established TxDOT's only used motor oil collection program. The program allows do-it-yourselfers to properly dispose of their used oil. The program now has 10 collection centers at maintenance yards



The San Angelo District took the top prize in the 2004 Environmental Achievement Award competition for its low-water crossing on FM 1120 at the Frio River.

Photo by Benard Stafford/TRV

throughout the six-county district. Through 2003, these centers had collected 688,680 gallons of used motor oil – the equivalent of nearly 551,000 oil changes! Due to the remoteness of some of the communities served by the centers, a significant amount of the collected oil otherwise may have been improperly disposed of, creating pollution issues. The used motor oil is periodically taken to a recovery facility for use as fuel.

A true community service is provided to area citizens by the El Paso District's Used Oil Collection Centers.

The Fort Worth District was also a **runner-up** for its Keller-Haslet Historic Bridge Preservation Project.

When a depression-era Warren pony truss bridge on Haslet's Westport Parkway became obsolete due to greatly increased traffic demands and structural deficiencies, the staff of the Fort Worth District went the extra mile to insure that the historic bridge would be preserved for the enjoyment and use of future generations.

Enlisting the assistance of area historic preservation societies and local governments, the bridge was marketed to nearby cities for pedestrian use. The city of Keller expressed an interest in the bridge to span Big Bear Creek and tie-in with a hike and bike trail in its Keller Sports Park. A historic bridge team composed of district bridge and environmental staff worked with city officials and the Federal Highway Administration and Texas Commission on Environmental Quality to work out the details of the move. Lead-based paint was removed from the bridge in an environmentally-sensitive manner prior to the move. Following a day-long move to its new home, the bridge was painted and pedestrian guardrails added. Today, the bridge serves park patrons as a tangible reminder of a bygone era of transportation.

Thanks to the efforts of the Fort Worth District, a rare truss bridge has found a new home and new purpose.

An **honorable mention** went to the Maintenance Division for its Safety Rest Area Program.

The Maintenance Division opened four new environmentally-friendly safety rest areas to the public in 2003. These facilities incorporate local historic architectural features with the use of recycled materials for construction, wind power and the development of habitat for wildlife. For example, the Donley County rest area located on Interstate 40 includes Art Deco designs reminiscent of the businesses that lined nearby

See EAA, Page 6

SH 130: Both environmental compliance inspectors/managers can stop construction

(Continued from Page 1)

throughout project design and construction, TxDOT required LSI to establish a comprehensive environmental protection program.

This program requires that the developer have an independent environmental compliance manager (ECM) who reports to both TxDOT and LSI. The program also requires environmental compliance inspectors (ECI) who monitor all field activities to ensure protection of sensitive resources and compliance with applicable environmental permits. ECIs are responsible for observing construction activities, preparing daily monitoring logs, and reporting violations or non-compliance with environmental laws, permits and commitments from the SH 130 final environmental impact statement (FEIS), and the EDA documents. In addition, both the ECM and ECIs have the authority to stop construction should a threat to human health or the environment occur. LSI team member Hicks & Company, Inc., fulfills the role of ECM and provides ECIs and also has on-call specialists for cultural resources, biology, karst species, and water quality. Raba-Kistner Consultants, Inc., another LSI team member, serves as the project's storm water inspection team and hazardous materials manager.

Other key elements of the SH 130 environmental program include:

- establishment and implementation of a "zero violation" approach to all development work
- environmental training for all developer personnel that focus on specific issues
- development and implementation of a project mitigation plan
- development and implementation of a construction monitoring plan
- development and implementation of a hazardous materials management plan

Environmental Management System

In response to the environmental program requirements, Hicks & Company has developed an environmental management system (EMS) to address the compliance requirements of the SH 130 project. This system is guided by the underlying principle of continuous improvement and involves the environmental team in all aspects of project planning. This includes pre-construction, design, right-of-way acquisition, construction, and operation.

The EMS implemented by the SH 130 environmental protection program requires the developer to deliver the highest level of environmental commitment and establish and implement a "zero environmental violations" approach to the construction of SH 130. The EMS also reflects the basic elements of the international environmental standard (ISO 14001) and its

counterpart under the Texas Commission on Environmental Quality's (TCEQ) EMS certification program. These elements are adapted to the circumstances of a large linear infrastructure project, in the design-build format. In addition, LSI and

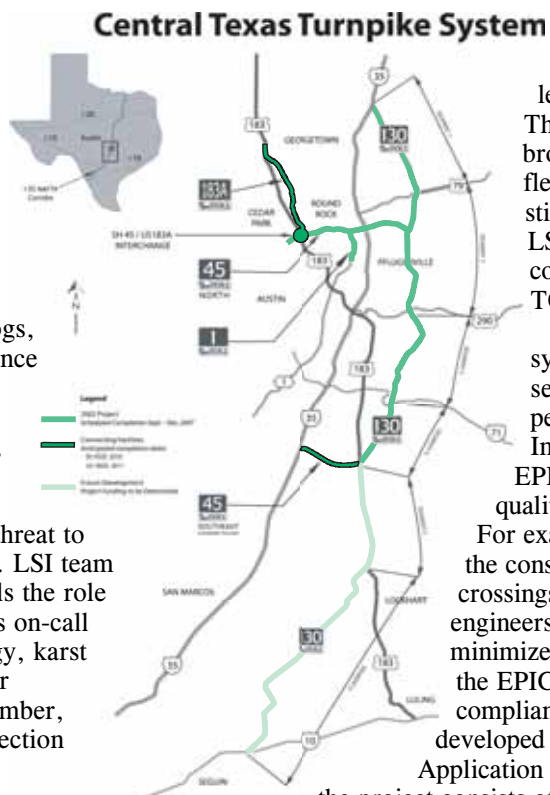
TxDOT have partnered with TCEQ for their "Clean Texas" program. "Clean Texas" is a voluntary environmental leadership program sponsored by TCEQ. Through this program, TCEQ offers a broad range of environmental initiatives, flexible membership requirements and stimulates networking among its members. LSI is the first and only highway contractor that has ever partnered with TCEQ for this program.

The EMS is implemented through a system that focuses on compliance with a set of documents called environmental permits, issues, and commitments (EPIC). In the design phase of the project, the EPIC review consists of an environmental quality control review of all project designs. For example, project wetland specialists review the construction plans for the jurisdictional crossings and provide comments to the design engineers relating to impacts to be avoided or minimized. These comments are incorporated into the EPIC documents, which evaluate the compliance aspects of the ultimate schematics developed for each project segment.

Application of the EMS in the construction phase of the project consists of an environmental construction-monitoring program under the direction of the project's ECM and the deputy ECM. Following the construction monitoring plan developed by the environmental compliance staff, the construction monitoring program is executed by a team of ECIs using various tools, including EPIC plan sheets, environmental clearance checklists and approval forms, and environmental "walkthroughs" of the project right of way conducted cooperatively by environmental compliance staff, LSI construction personnel, and TxDOT representatives.

Protection and Enhancement of the Environment

Through the SH 130 EDA, TxDOT has created an organizational structure that extends the objectives of the National Environmental Policy Act into the design and construction of the project. TxDOT and LSI, along with other resource agencies are taking extensive measures to protect and enhance the environment along the SH 130 corridor. Developing 165 acres of new wetlands, developing innovative approaches for temporary and permanent best management practices (BMPs) for storm water control, a stock pond fish recovery program in conjunction with Texas Parks and Wildlife Department, and installing bat roosts under certain bridges are just a few examples of the dedication to making SH 130 environmentally sound throughout the entire development process.



Van Horn maintenance office proud home for Mexican free-tail bats

BLANCA DEL VALLE
Public Information Officer
El Paso District

Did you know that more species of bats live in Texas than in any other part of the United States? Texas is home to 33 species of bats.

In the spring of 2000, bats began to arrive in Van Horn. They found a new home in the walls of the TxDOT Maintenance Facility there. A conflict with humans soon developed as the entrance to the bats' new residence was located precisely above the employees' entrance to the building. As time passed, the bats' "mess" started to accumulate and so did employee complaints.

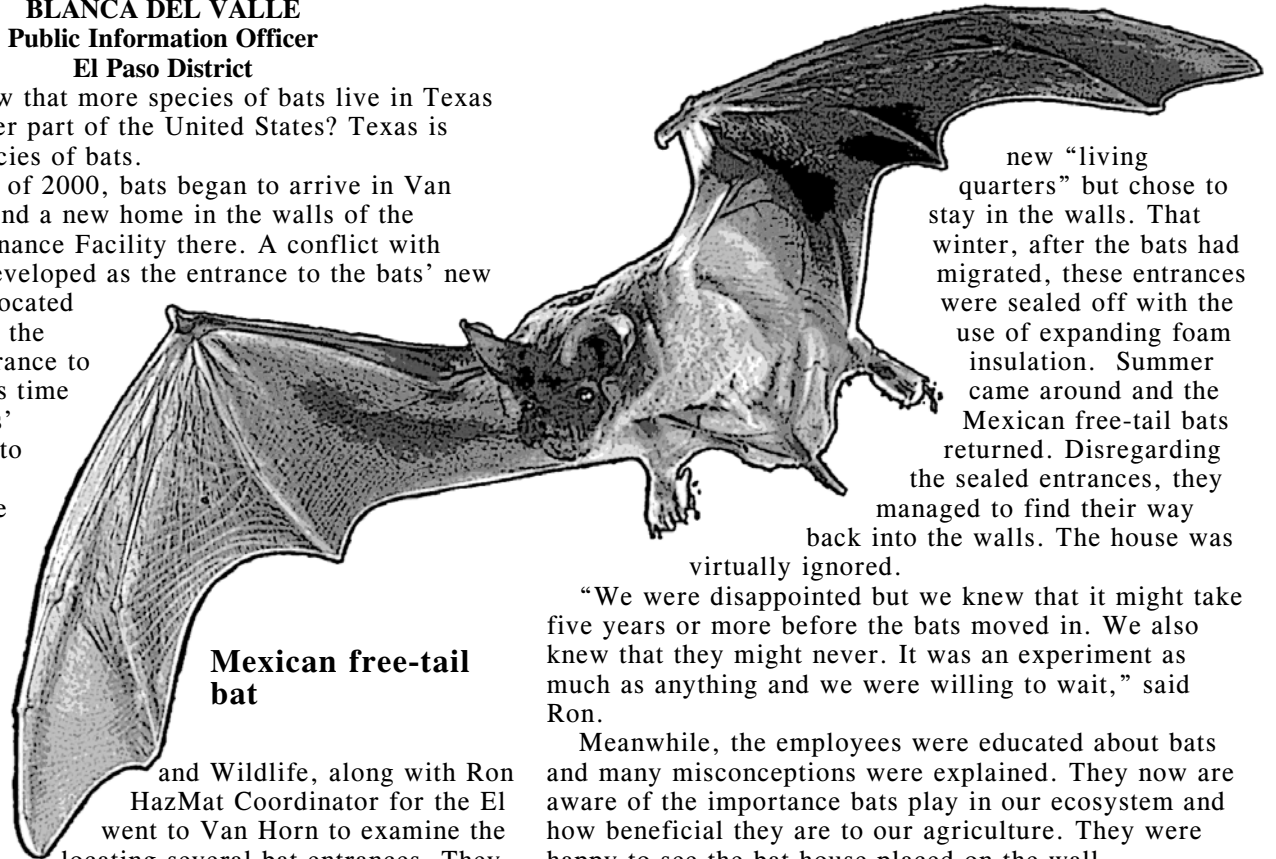
By June, the Maintenance Supervisor called for help. Lois Baldin, Urban Biologist with Texas Parks and Wildlife, along with Ron Groves, Safety-Paso District, and Ron HazMat Coordinator for the El Paso District, went to Van Horn to examine the building, locating several bat entrances. They discussed possible methods of exclusion and eventually the possibility of providing an alternative for the bats. Lois found a deceased bat and was able to identify the species as the Mexican free-tail. Not exactly an endangered species, but important nonetheless. Bats play an essential role in controlling insect pest populations that damage crops and irritate people.

Lois provided literature that included information on bat habitats. They weren't sure if this plan would work. Would it be necessary to move the tenants?

Mark Bloschock, Special Projects Branch Manager for TxDOT's Bridge Division (better known as TxDOT's Batman) informed us that, "With the knowledge and experience gained through our long collaboration with Bat Conservation International, unwelcome bat habitations in TxDOT buildings are dealt with in a humane manner and during the bats' absence."

That July a bat house was purchased from Bat Conservation International and placed on the north side wall, approximately 40 feet from the employees' entrance. While all of the literature recommended south facing walls, it was felt that it would just be too hot under the West Texas sun. "We didn't want to cook the little guys", said Ron.

Evidence indicated that the bats were aware of these



Mexican free-tail bat

new "living quarters" but chose to stay in the walls. That winter, after the bats had migrated, these entrances were sealed off with the use of expanding foam insulation. Summer came around and the Mexican free-tail bats returned. Disregarding the sealed entrances, they managed to find their way back into the walls. The house was

virtually ignored.

"We were disappointed but we knew that it might take five years or more before the bats moved in. We also knew that they might never. It was an experiment as much as anything and we were willing to wait," said Ron.

Meanwhile, the employees were educated about bats and many misconceptions were explained. They now are aware of the importance bats play in our ecosystem and how beneficial they are to our agriculture. They were happy to see the bat house placed on the wall.

It wasn't until May of 2003 that the bats decided to move into their new home. Ron spent an evening waiting for the bats to emerge. When they finally did, it was fast and furious. It was a small colony of approximately 30 bats.

This past spring, our friendly bats returned to Van Horn and to their "home." Although there has not been an official count, it is obvious that the bat population has increased by the rapidly growing mound of guano under the house, which now falls directly onto a flower bed. What is exciting for all, including the employees, is that there are now two bat habitats.

"I sense a bit of pride in having official TxDOT Bats", said Peter Bustamante, Van Horn Maintenance Supervisor, "it's kind of neat and it's an easy simple way to co-exist."

TxDOT's Batman added, "As far as we know, there are no other TxDOT offices that have a purposeful and successful bat house erected on a building. The Van Horn office is the first."

The Mexican free-tail bat population continues to grow in the El Paso District.

This past May a third house was hung at the Wildhorse Rest Area on US 62/180, approximately 10 miles from the New Mexico State Line.

EAA: El Paso and Fort Worth take runner-ups

(Continued from Page 3)

Route 66 during its heyday. Interpretive exhibits inform visitors about the history and culture of the area. Landscaped with native vegetation, the Donley County rest area limits demand on water. The Culberson County rest area, located on U.S. 62/80 and completed in 2001, received a significant upgrade in 2003 with the addition of a 10-kilowatt wind-powered generator that takes advantage of the prevailing winds. The generator, a collaboration with Alternative Energy Institute and the State Energy Conservation Office, produces as much as 16,000 kilowatts of electricity a year.

Thanks to the efforts of the Maintenance Division, travelers are treated to attractive, environmentally-sensitive facilities when taking a break from the road.

“This was my third year reviewing the nominees and I think it was the best year yet,” said Project Manager Jenise Walton. “All of the participating districts put forth a good effort – I think we had the best overall quality nominations so far.”

Look for the call for nominations for the 2005 Environmental Achievement Award in early January. Entries must be received at the Environmental Affairs Division by 5 p.m. on Friday, May 6, 2005.



The Fort Worth District took a runner-up prize for its Keller-Haslet bridge preservation project (top), while the El Paso District earned a runner-up slot for its used oil collection program that gives its citizens an ecological option to improperly disposing of oil (bottom).



Photos by Benard Stafford/TRV

Clean Air Plan: Pilot program achievers recognized

(Continued from Page 1)

include limiting mowing activities on Ozone Action Days, using cleaner diesel fuel, purchasing solar-powered sign boards, limiting idling of vehicles, and the use of night construction to alleviate peak traffic congestion.

As part of the CAP, Air Quality Coordinators (AQC) were designated in each district, division and office to run the program.

The purpose of the pilot was twofold: 1) to encourage participation in clean air activities, and 2) to solicit feedback on how best to report and gather data. Significant feedback was provided and ENV is now in the phase of incorporating those suggestions prior to launching the official Clean Air Plan program in 2005.

In addition to providing data about the specific measures in the CAP, several districts were also involved in other clean air activities worth mentioning. The Fort Worth and Dallas districts continued their

respective clean air programs (on which the CAP was based) to encourage employees to reduce trips. The Corpus Christi district participated in a “Clean Air Fair” in August, and the San Antonio district conducted a lunchtime carpool contest in September. These are just some of the many great activities that help to prove that TxDOT is on the road to clean air.

And the winners are:

ENV would like to recognize the D/D/Os with the greatest achievements from the pilot program. Districts were divided into three tiers – Tier 1 districts are those with attainment counties, Tier 2 districts are those with near-nonattainment counties, and Tier 3 are those with nonattainment counties. One district from each tier has been selected as the “winner.” The achievement was based on three factors: 1) the percentage of participation from individual employees in the district, 2) the percentage of completion of district measures, and 3) the emissions that

were reduced as a result of the district’s activities. Divisions and Offices were rated based on factors one and three.

Winners:

- Tier 1 – Wichita Falls (AQC Jill Holmes)
- Tier 2 – Yoakum (AQC Bryan Ellis)
- Tier 3 – Dallas (AQC Jim Crisp)
- Division/Office - ISD (AQC Jorge Bermudez)

Honorable Mentions:

- Tier 1 – San Angelo (AQC Orlando Villareal) and Brownwood (AQC Andrew Chisholm)
- Tier 2 – Atlanta (AQC Marcus Sandifer) and Corpus Christi (AQC Steven Ashley)
- Tier 3 – Fort Worth (AQC Mary Hobson)
- Divisions/Offices – AUD (AQC Karin Faltynek), ENV (AQC Heather Evans), OCC (AQC Michele Regis)

ENV would like to acknowledge the hard work of all of the AQCs throughout this pilot program.

Routine Waco bridge investigation finds significant prehistoric archeological site

JON BUDD

Environmental Affairs Division

A routine archeological investigation sponsored by ENV in support of a bridge installation project for the Waco District led to discovery of the remains of a significant prehistoric Indian encampment.

The encampment is located on the Leon River about 25 miles northwest of Hamilton. Because the site cannot be avoided, it has been subject to controlled scientific excavation to document important information prior to destruction. The site consists of stone-lined cooking hearths, bison and deer bones, chipped stone arrowheads, and pottery shards. These fragile remains have been unusually well preserved under two and a half feet of Leon River flood sediments. The sediments sealed the site for posterity soon after the Indians abandoned it. In addition, the site has remained untouched and undisturbed by amateur arrowhead collectors. These sediments also protected the fragile charcoal remains of the Indians' campfires. Radiocarbon assays from the charcoal were submitted for laboratory analysis. This analysis roughly dates the occupation of the encampment from sometime between 1350 and 1550 AD.

This time period overlaps the last recognized purely aboriginal cultural manifestation prior to the arrival of the European culture. The Indians traveled on foot as they did not yet possess horses. They utilized stone, wood, and bone as the sole materials for their implements. While at this encampment, they probably did not practice any agriculture. Instead, they subsisted on hunting wild animals and gathering naturally-occurring plants. Their houses were most likely fragile temporary structures made of brush and branches and covered with hides. They cooked at least some of their food in limestone-lined pit ovens. Brush and wood were burned on the limestone and the ashes were brushed out. Plants and meat were placed on the hot rocks and covered under a layer of grass and soil. The hot rocks would cook the food underground. A number of extraordinarily intact pit ovens have been discovered at this encampment.

The bones of at least two bison have also been recovered from the site. The Indians stalked these animals on the nearby prairie and probably killed them with stone tipped arrows. They brought the choice parts of the animals back to camp for consumption. A number of small stone arrowheads have been recovered from the site. Other interesting and important chipped stone remains discovered at this site were numerous pieces of obsidian, an extreme rarity in this part of Texas. Nearly all of the chipped stone remains in Central Texas are local varieties of chert. Naturally-occurring chert is plentiful in this part of Texas while there are no currently known sources of obsidian. Laboratory analysis of obsidian can determine the exact geographic location where it was quarried. While the obsidian pieces from the Leon River site have not yet been

analyzed, other obsidian pieces have been determined to be from sources as far away as the Jemez Mountains of Central New Mexico some 700 miles west. The obsidian pieces discovered at this site demonstrate either a very large territory that the Indians dwelt in or a very complex trade network. This large territory or complex trade network is new information about this important time period that has not been clearly documented prior to the site's discovery. Numerous pieces of broken pottery have also been recovered from the site. The



Controlled scientific archeological investigations by professional archeologists at the prehistoric Indian encampment located on the Leon River.

pottery matches the types of pottery made by the Caddo Indians whose homeland is located 225 miles east. The presence of these shards also suggests a large territory or complex trade network.

Due to the extraordinary preservation of this site as well as the novel information gleaned from an analysis of the charred plants, animal bones, pottery, and stone artifacts, this site has been determined to be eligible for listing on the National Register of Historic Places. The materials recovered during the excavation shall be permanently curated and available for study by present and future researchers. A professional report shall be widely distributed to archeologists, libraries, and research centers for comparison with other sites in Texas. Cumulatively, all of the information gleaned from this site during the ENV-sponsored excavation will offer new and important information about the prehistoric inhabitants who dwelt in Central Texas at this time. The excavation also demonstrates how well TxDOT's environmental process works in preserving important information about the irreplaceable prehistoric heritage of Texas.



Sweet Success!

Left to right: Jesus Garza, Houston District ROW; David Eng, Houston District ROW; Dan M. Neal II, P.G., ENV; Jose M. Ramirez, P.E., Galveston Area Engineer; and Bennie Smith, Galveston Area Office, celebrate reopening of SH 146 on June 1 after the success of the Tex Tin phase of the project. Since SH 146 is a hurricane escape route for Galveston Island, it was imperative that the massive cleanup (over 60,000 cubic yards of arsenic laced soil was replaced) and construction be completed during the non-hurricane season, between November 1 and June 1. For more details see the related story, "Japanese Look at SH 146..." in the Spring, 2004 issue of ENVision.

Hood: Co-workers tell tales

(Continued from Page 2)

TxDOT and the Parks and Wildlife Department.

"Being involved with writing the first rendition of the first two drafts of the MOU with Parks and Wildlife, before there was an MOU in the early '90s was quite a task. Neither the department nor I had ever written an MOU that was mandated by the Sunset Commission, and it was a huge project, and it took about one year and gave me a great feeling of accomplishment. It was my first time to work with another agency on a joint document."

As challenging as his job has been, Hood is looking forward to his career change, and spending more time with his family. Hood and his wife, Linda, were married 25 years on June 2. They have three children, two in college, and one in high school. Hood's youngest son, Michael, runs cross-country for Round Rock High School, and will be an Eagle Scout by the end of this year. His two older children, Laura and Mark, who Hood affectionately refers to as his "princess," and the "cowboy," are both juniors at Tarelton State University. Those who know Hood at all, know he is a dedicated husband and father, and can never brag too much about his kids.

Conference: Day 2 breakouts to include 20 class choices

(Continued from Page 1)

"Secondary and Cumulative Impacts."

On Day 2, four sessions of five topics each will be offered, for a total of 20 classes. Some sessions will repeat to make scheduling easier for attendees torn between topics.

Day 2 topics include tolling rules and tolling issues related to public involvement, environmental justice, noise impacts and air quality. Also covered in the breakout sessions will be: Section 404 permit issues; technology tools used in planning such as GIS; Section 4(f) issues; floodplains issues; Programmatic Categorical Exclusions; Memorandums of Understanding; Programmatic Agreements; TxDOT contracts; Limited English Proficiency Populations and Environmental Justice; Haz-Mat site assessments; and more.

Days 1 & 2 are open to all, including other state and federal agencies, metropolitan planning organizations, and environmental consulting firms, who are sponsoring more than two dozen exhibits. Day 3 is closed to all but TxDOT and Federal Highway Administration staff.

Information is available at www.dot.state.tx.us/env/ as well as online registration. Registration and attendance is free, but you must register. For reservations at the DoubleTree, call 1-800-347-0330, or 512-454-3737 and ask for the conference rate of \$80 single/\$120 double.

RTI funds environmental research

By JIM DOBBINS

Environmental Affairs Division

The well-known idiom “curiosity killed the cat” apparently does not apply at TxDOT, where a research program has formally been under way since 1948. The program saves lives and money and improves operations and services.

Administered by the Research and Technology Implementation Office (RTI), research projects are divided into five areas – pavement; transportation planning; geometric design, right of way, environment and hydraulics; traffic operations; and structures. The studies are conducted by state-funded universities. Historically, more than 60 percent of findings are implemented.

A number of environmental-related research projects have either been recently completed or are currently in progress. Those recently completed include:

“Intelligent Transportation Systems (ITS) and the Environment” – examined and quantified the air quality benefits of ITS. This study was conducted by the University of Texas at Austin’s Center for Transportation Research (CTR). The study found that ITS tools, such as variable message signs and in-vehicle information systems can significantly decrease air pollution. Additional details about this study can be found on Crossroads at: http://crossroads.org/rti/docs/0_4197_S.pdf

“Process Framework for Identifying and Prioritizing Water Quality Improvement for Meeting Total Maximum Daily Loads in Texas: A Summary” – looked at highway runoff issues. This study was also conducted by CTR. The researchers found that highway runoff accounts for a very small portion of surface water. It also noted that existing best management practices do not effectively address the two major pollutants found in Texas waters – bacteria and nutrients that contribute to low dissolved oxygen. Additional information on this study can be found on Crossroads at: <http://crossroads.org/rti/docs/0-4252-S.pdf>

The environmental-related research projects presently under way include:

“Noise Level Adjustments for Highway Pavements in TxDOT” examines noise issues related to pavement types. This project collects data required to obtain Federal Highway Administration approval to make noise level adjustments for various types of pavement in traffic noise analyses. The use of some pavement types could

result in fewer noise impacts on land use activity areas adjacent to TxDOT highway projects and could either eliminate the need for noise barriers or reduce the overall height of noise barriers. The study is being conducted by CTR and should be completed in fiscal year 2008.

“Preservation Alternatives for Historic Truss Bridges” studies ways that historic truss bridges can be kept in vehicular service. Texas has a large inventory of older metal truss bridges that were constructed in the late 19th and early 20th century. Many of these bridges play an important role in the historical fabric of the communities that they serve and frequently have strong community support. Many of these bridges have potential strength and geometric deficiencies that must be addressed if they are to be kept in service. This research project has developed tools that can be used by engineers when assessing a historic truss bridge and provides options for addressing problem areas. Among the lessons learned is that standard load rating techniques often show that older truss bridges do not have sufficient strength to satisfy current load standards for modern bridges. However, these standard load-rating techniques are sometimes overly conservative in their assessment of bridge capacity. By employing more advanced structural analysis techniques combined with field load testing, it is often possible to demonstrate that the bridge is actually substantially stronger than indicated by standard load ratings. These better analysis techniques can be used to mitigate or in many cases preclude the need for structural strengthening measures. This project is nearly complete and is being performed by CTR.

“Alternatives to In-Kind Wetland Mitigation in Texas” is being performed by the Texas Transportation Institute. This research project studies alternatives to small scale, piecemeal mitigation for impacts to wetlands. Many of these sites are small and can be difficult and expensive to develop with no assurance of success. The four areas of investigation are:

- reviewing literature and current practices
- documenting successes and failures of previous mitigation efforts
- reviewing and documenting statutory, regulatory and policy roadblocks to mitigation alternatives

• developing appropriate alternatives to in-kind mitigation and strategies for implementation.

This project was scheduled for completion at the end of August.

“Development of Risk-based Manual for Use of Contaminated Material Relative to Highway Construction Activities” is being conducted by the University of Texas at Arlington (UTA) and the Texas Transportation Institute (TTI). This project focuses on regulatory, legal and risk management issues associated with using contaminated materials (such as non-hazardous waste) in construction materials. The report on this project is forthcoming.

“Design, Construction and Maintenance for Storm Sewers in Contaminated Environments” examines the complex web of safety, regulatory, and construction issues that can arise when TxDOT projects encounter soil or groundwater contaminated by petroleum substances and industrial pollutants. Conducted by UTA and TTI, this project is nearing completion.

For additional information on TxDOT research projects, visit the RTI page on Crossroads at: <http://crossroads.org/rti/>

Traffic Noise Model software (v2.5) delayed

As indicated in the Spring 2004 ENVision, the Federal Highway Administration announced in April that version 2.5 of its Traffic Noise Model (TNM) would be required for all new traffic noise analyses begun on, or after, Oct. 14, 2004.

FHWA update: the date has now slipped, probably to January of 2005, or soon thereafter.

TNM v2.5 has not yet been distributed to all TxDOT Districts pending the development and distribution of new guidelines for modeling roadways. Consultants should contact TxDOT districts to confirm which version of TNM should be used. Direct questions to Mike Shearer, TxDOT/ENV Noise Specialist, 512-416-2622.

McLendon leads Project Management

Chuck McLendon, branch supervisor for ENV's Project Management Section (PM) since November 2002, is now the first director of that section effective Oct. 1. For many years, ENV's deputy division director doubled as PM's section director.

Prior to joining ENV, McLendon spent eight years at the Texas Department of Health (TDH). As a program manager, McLendon planned, developed and coordinated special projects relating to complex engineering and environmental evaluations for wastewater, water and soils. Prior to that, he held other positions in which he coordinated public pollution and abatement compliance with public agencies and private companies; reviewed and developed interagency consulting and purchasing contracts; and reviewed remediation plans and recommended mitigation requirements.

Before TDH, McLendon spent many years in the environmental consulting field and in environmental and engineering management with other private sector businesses.

McLendon earned his bachelor's degree in engineering from the Colorado School of Mines in Golden, CO., and a master's degree in management from Nova University in Florida. McLendon is board certified in industrial/environmental health.

McLendon spends his leisure time with his wife Terrie and two boys, Max and Jon. McLendon is also a unit leader for Boy Scouts.

Julie Perales, a project manager in PM since before ENV became a stand-alone division in 1993, joined the Austin District as of Aug. 2 as an Environmental Quality Specialist. Perales started out as a summer employee in the archeology lab when ENV's functions were carried out by a section within the Design Division. She was a 14-year veteran of ENV and its predecessors.

John Neal came to ENV as a project manager for PM July 1 after a 14 year career with the Texas General Land Office, 12 years on the Upper Texas Gulf Coast and the remaining two years in Austin. Neal has a bachelor of science degree from Sam Houston State University in Huntsville. He enjoys hunting, fishing (especially wade fishing), cooking on the pit, ranch work, both kinds of dancing (country and western) and "a cold one." He and his wife live in Leander.

Ed Johnson joined PM as a project manager July 1 after a 20-year career with Austin Energy. He retired from Austin Energy as an environmental coordinator there. Johnson has a bachelor's degree from the University of Texas at Austin. He enjoys fishing on the Texas Gulf Coast and riding horses.

This column failed to note the arrival of **Matt Barkley**, who has been a project manager in PM since July 2003 under contract through Michael Baker Jr. Corp. He has a bachelor of science in Environmental Resource Management from Pennsylvania State University and has worked on advanced degrees at Duquesne University and the University of Phoenix. His Baker career has included two years in Utah providing consulting services to the Utah Department of Transportation, the Idaho Transportation Department and the Utah Transit Authority. He has carried out various forms of environmental work in 17 different states including Alaska. He came to ENV on temporary assignment and "has been here ever since." Barkley and wife, Christina, have two toddlers, Jonah and Ella, and two dogs. He enjoys cycling,

climbing rocks and the outdoors. He commutes up to two days a week from Cedar Park to the Riverside campus on bicycle.

Vicki Crnich joined PM as a project manager as of July 12. Crnich came to ENV from HVJ Associates, Inc. She has a bachelor's degree in geological engineering from the Montana College of Mineral Science and Technology (now part of the University of Montana). When not poring over interesting environmental documents, Crnich enjoys her hobbies of photography, reading, making jewelry and "watching obscene amounts of television."

Julia Ragsdale began Sept. 13 as a project manager in PM. She has a bachelor's degree in chemical engineering from the University of South Florida. Ragsdale is a displaced high tech worker who was with AMD. Volunteer work with the Clean Air Force of Central Texas lead to a part-time job with the Capitol Area Planning Council assisting in the development of the Early Action Compact for the Austin/Round Rock MSA. Ragsdale then joined the Texas Commission on Environmental Quality (TCEQ) working on leaking petroleum storage tank issues. She has a 4-year-old daughter, Lydia, and enjoys running.

Sarah Stroman returned to ENV Sept. 27 as a project manager with PM after a nine-year absence. Stroman was with ENV's Special Projects Section that handled the then Statewide Transportation Enhancement Program. Stroman moved to the Design Division where the program was transferred in 1995. Stroman has a bachelor's degree in History from the University of Texas at San Antonio. She worked for Governor Ann Richards and then in 1993 joined what used to be the Environmental Section of DES working on the Enhancement Program. After leaving the Enhancement program in 1995, she worked for the TxDOT administration and then as a technical writer. She earned a master's degree from the University of Texas at Austin's School of Social Work in 2001, then worked with indigent elderly clients, substance abuse and addiction diagnosed clients and clients diagnosed with severe mental illness and personality disorders. She has five dogs (two Australian Cattle dogs, a Staffordshire, a German Shepherd Mix and a Chow mix) and enjoys hiking, cycling, camping, beadwork, reading and home improvement projects. She is a native of Eagle Pass.

Paul Turner left PM in February after two years with ENV to take a position with the Lower Colorado River Authority.

Richard Goldsmith, information specialist with the **Communications Branch (CO)** since March 1995 and editor of ENVision since its creation that year, as of June 1 is ENV's Public Information Officer and head of CO. He is a 1983 graduate of the University of Texas at Austin's School of Communications and a veteran of community journalism. He has two kids ages 15 and 12 and enjoys raising children so much that he and his wife, Kathie, started over Jan. 4 with a new baby girl named Willow.

Jim Dobbins, an information specialist in ENV's **Communications Branch** since 1995, began a new TxDOT career in a new home. As of Oct. 1 he is an environmental specialist in the Advance Transportation Planning Section of the El Paso District.

As of June 1, **Heather Evans** is ENV's **Air Quality Specialist** handling issues including: conformity; coordination on air quality issues with the Federal Highway Administration, Texas Commission on Environmental Quality and Environmental Protection Agency; air permitting advice;

Continued on Page 11

Don't peek unless you have tried the puzzle on Page 11!

Answer to Rebus Ruckus on facing page:
"R-key-lodge-E-cow-sight" =
archeological site

(Continued from Page 10)

and environmental document review. Evans began her career in state government with the Texas Air Control Board in July 1993. She worked on air quality issues throughout her tenure with the TACB and its successor agencies, and TCEQ. Her most recent position with TCEQ was as the manager of the Air Quality Planning Section, responsible for the development and coordination of the State Implementation Plan that demonstrates Texas' compliance with federal air quality standards. Evans is a 1992 graduate of Purdue University with a Bachelor of Arts degree in communications and Spanish. Heather and her husband, Mark, have a son, Cody, 20 months. She enjoys scrap-booking and chasing Cody.

On a related note, ENV's air quality specialist from 1996 to 1999, **Bill Knowles**, is now director of the Traffic Analysis Section of the Transportation Planning and Programming Division as of June 1. Congrats!

Ralph Newlan, a historian with ENV's Cultural Resources Management Section (CRM) since August 2002, left Sept. 3 to

join the consulting firm of Michael Baker Jr., Inc., as an Architectural Historian.

Historian Maryellen Ficker joined the Cultural Resources Management Section Sept. 22 as a contract employee via Mead and Hunt, Inc., of Madison, Wisconsin, which hired her specifically for the position. Previously Ficker was with the West Virginia DOT, Division of Highways, where she conducted Section 106 reviews and survey work for standing historic structures. Prior to WVDOT, Ficker worked at several museums in North Carolina. Ficker has a bachelor of arts degree in History and a master of arts degree in Public History, both from Appalachian State University in Boone, NC. She and her husband, Eddie, an environmental geologist, are from North Carolina and have a cat named Kyla. Ficker plays in an adult soccer league in Round Rock.

Archeologist Maureen Brown left ENV in August to become Collections Manager for the Texas Historical Commission's Archeology Division. Brown was with ENV for nine months, having come to TxDOT from the THC.

This column neglected to include the retirement of archeologist **Cindy Tennis** last year. Tennis retired Aug. 31, 2003, under the Legislature's incentive program.

Stacey Cullen, division administrative assistant since Nov. 1, 2003, left ENV to become a project coordinator in the Motor Vehicle Division's Enforcement Section as of Sept. 7th.

Pat Tiger and **Susie Watson**, both part of the administrative support staff, began new careers with the Vehicle Titles and Registration Division of July 19. Both are now Information Specialists there. Tiger joined ENV in 1993 and Watson in 1996.

Congratulations to **Mark Rodriguez** of ENV's **Automation Services Branch** on becoming a CompTIA A+ Certified Professional. This certification is presented by CompTIA, a global trade association representing business interests of the information technology industry and is recognized by leading developers such as CISCO, IBM, Intel, Microsoft, and Novell.

Biologist **Bill Hood** retired from ENV at the end of August and has begun a new career with the consulting firm of HNTB. (Full story Page 2).



Jamandre's Jumbly Word Jambalaya

by Orlando Villa Jamandre Jr.

Unscramble the four jumbled words (one letter to each circle or square) to form four ordinary words and arrange the circled letters to form the puzzle answer.



Cool to jump in year round?

TINSTAR

□□○□□□

LEVEICH

○□□□○□

PERVIOM

□□○□○□

OCTEMUM

□○□□□□

Print your answers in the circles below.

A "○○○" ○○○○

Answers on back page.

Rebus Ruckus

By H.G. QUINN

Decipher the environmental term!



_____ : an area in the ROW under the purview of the THC and Section 106.

A "rebus" is a representation of words in the form of pictures or symbols, often presented as a puzzle. Good luck! Answer on bottom of Page 10.



Environmental Affairs Division
125 East 11th Street
Austin, Texas 78701-2483

Address correction requested



Jumbly Word Jambalaya Answers

**‘Cool to jump in year round’
A “VAN POOL”**

TRANSIT - VEHICLE - IMPROVE - COMMUTE

The Environmental Affairs Division conducted a pilot program this summer to test gathering and reporting participation for TxDOT’s Clean Air Plan. Suggestions and feedback from the three-month pilot will be incorporated into the Clean Air Plan, the Department’s effort to set an example in the field of air quality. TxDOT partnered with the Texas Commission on Environmental Quality in March 2002 to create the Drive Clean Across Texas campaign, the first state-sponsored public awareness program aimed at motivating Texans to change their driving habits. Drivers can improve air quality by properly maintaining their vehicles, driving less, avoiding unnecessary idling, buying zero or low-

emission vehicles, driving posted speed limits and/or joining a van pool for weekday commutes. Explore the links below for more information on how to organize or join a van pool:

- Austin** Capital Metro (512/477-RIDE)
<http://www.capmetro.org/SERV.HTML#start>
- Corpus Christi** Regional Transportation Authority (361/884-8400)
www.ccrta.org/otherservices.html
- Fort Worth** Transit Authority (817/336-RIDE)
www.the-t.com/carpool.html
- Dallas** Area Rapid Transit (214/747-7433)
www.dart.org/riding.asp?zeon=rideshare
- El Paso** Sun Metro (915/533-1220)
<http://www.ci.el-paso.tx.us/sunmetro/sunspr.asp>
- Houston** Metropolitan Transit (713-224-RIDE)
www.ridemetro.org/services/vanshare.asp

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We welcome ideas for stories and standing features. Submit those to the above address, attention Richard Goldsmith, phone 512.416.2743; via GroupWise to “rgoldsmi” within TxDOT; “rgoldsmi@dot.state.tx.us” for e-mail from outside TxDOT.

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RECYCLED PAPER
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