On a Century of Service to the People of Texas

There are miles and miles of Texas. In fact, there are more miles of roadways and state highways in Texas today than in any state in the nation. That robust transportation system paves the way to prosperity for more families and more businesses each and every day.

Since 1917, when it was known as the Texas Highway Department, the Texas Department of Transportation has been critical to the state’s economic growth by delivering a safe, reliable and integrated transportation system that enables the efficient movement of people and goods.

Much has changed since TxDOT’s founding. The state’s population was just over 4.5 million people. Less than 200,000 motor vehicles were registered in the state, and most of our roads were clay and dirt. Today, our population is well over 27 million. Almost 24 million motor vehicles are registered here, and TxDOT is responsible for maintaining 80,000 miles of roadway as well as supporting aviation, rail and public transportation across this great state.

I commend TxDOT’s ongoing commitment to providing a safe transportation system, including advances in highway safety engineering and public awareness campaigns for all who travel the many miles of Texas.

Through 100 years of collaboration and leadership, TxDOT has helped connect communities to commerce and people to opportunity by building and maintaining the backbone of our healthy economy — now the 10th-largest in the world.

In 2015, I proposed and the Texas Legislature approved an additional $4 billion a year to build more roads without raising fees, tolls, taxes or debt. Bucked by overwhelming voter approval, this historic investment ensures sustainable, predictable funding to build large-scale, multiyear construction projects. TxDOT can now program more than $70 billion of projects over the next 10 years. I am confident the employees at TxDOT are prepared for this enormous responsibility and can deliver results in the form of reduced congestion.

On behalf of the people of Texas, I congratulate TxDOT on their first 100 years. I look forward to continuing our work to accelerate economic opportunity and fuel Texans’ freedom to aspire.

Sincerely,

Greg Abbott
Governor

Left: This directional sign in Burleson County was posted prior to sign standardization, which began in 1927.
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State Highway 7, pictured here in September 1928 in the small East Texas town of Center, was one of the original 26 state highways proposed as a “Central Texas Highway” in 1917. It runs from I-35 south of Waco to U.S. 84 west of the Texas-Louisiana state line.
FIVE YEARS AGO, I embarked on a thousand-year journey. The road trip that loomed ahead struck me as both thrilling and daunting; it required that I venture into lands for which I owned no passport and no language training, with only a piecemeal collection of maps for tracking my way. Some of these maps were new; many were very old and often inaccurate.

My job was to travel backward in time, research, interview a number of people and write a book. The lands I would explore lay contained within the boundaries of Texas—beginning with a Texas none of us have ever seen, a Texas as it looked a millennia and more ago, and ending with the landscape we know now. I’d tell the story of our communities and wide-open spaces through the lens of game trails and early roads, then go on to recount the 100-year history of the Texas Highway Department, now known as the Texas Department of Transportation.

I entered into this expedition as an ordinary Lone Star citizen who, like most folks, took one of our greatest prizes for granted. Our road system was something I depended on every day but assumed as a right—one of the givens of living here. If a thoroughfare closed for repairs, the inconvenience annoyed me; if construction prompted a detour, I cursed the nameless ones who put me out. Potholes seldom gave me any trouble on the silken surface of our highways, interstates and farm-to-markets, but I failed to stop and wonder why—though I did realize that as soon as I crossed a state line, the next pavement often jounced my car like a buckboard with wooden tires. As for the agency itself: Its employees seemed a species apart, a tight-knit mystery, and their engineering and construction terms might as well have been ancient Sanskrit.

This ignorance lent me an advantage. Possessing no prior loyalties, I could ransack the department with an objective eye and tell the truth. With such wealth at its disposal, the easy presumption was that there must be something rotten somewhere. Right? Look at other agencies. Look at the scandal and controversy constantly circling state agencies and employees. A new story of corruption seems to go “viral” each week.

Little did I guess the truths that would soon emerge.

For corruption, I immediately hit pay dirt. The moment the legislative act creating the Texas Highway Department was signed into law by the infamous Governor James “Pa” Ferguson, I realized that as soon as I crossed a state line, the next pavement often jounced my car like a buckboard with wooden tires. As for the agency itself: Its employees seemed a species apart, a tight-knit mystery, and their engineering and construction terms might as well have been ancient Sanskrit.

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"It never hurts to remind ourselves that we who build highways work under a public mandate. If we do not have the public’s confidence, we cannot do our work.”

— Dewitt C. Greer

Right: As seen in this 1939 photo, driving was muddy and dangerous in central Texas on State Highway 2 (also known as the Meridian Highway) before the Texas Highway Department started construction.

By Carol Dawson

Miles and Miles of Texas
How I learned to love TxDOT for all the best reasons
But the department fought back. One of the most important facts I learned on my journey is a simple equation: Politicians often care about self-interest and making money. Engineers care about solving problems as efficiently as possible, which is both their mandate and their born nature. $X + Y = \text{a paradox.}$

Soon Gilchrist joined the lieutenant governor as an expert consultant who helped prosecute the Fergusons’ corruption charges. After Miriam Ferguson’s first two-year stint ended, Gilchrist resumed his post as state engineer, forging steel walls between government tampering and the Highway Department’s integrity. When Miriam was re-elected in 1934, Gilchrist enraged the Fergusons with a sturdy bulwark protecting highway funds and designated projects.

And that tradition of integrity remains. It lies embedded in the agency’s culture. Although a few mistakes get made here and there, no graft, bribery or dishonesty have ever corrupted it. For instance, the department was the first state organization anywhere to establish a self-auditing system to catch any fraud, cheating, theft, sexual harassment, misappropriations of funds or other malfeasance within—a measure that still proves effective. Veteran engineers who could earn triple salaries elsewhere continue to shine as dedicated TxDOT professionals who care about making things, and then making them better and cheaper. As one 35-year employee proudly told me, “An engineer is someone who can do for $1 what it takes others $10 to do.” Texas not only has some of the smoothest, finest and most efficient roadways in the nation; it also has the thriftiest, thanks to the policies of longtime state engineers Gilchrist and Dewitt Greer—who during 27 years as the agency’s chief director would not let a contractor buy him so much as a cup of coffee.

And thanks to the amazing cohesion within the TxDOT family, roads and bridges are now my passion, and engineers are my new heroes. What a surprise!

Carol Dawson is an Austin–based writer and artist. The author of Miles and Miles of Texas: 100 Years of the Texas Highway Department, master-minded by former TxDOT Executive Assistant Roger Polson, she has also authored four novels and one award-winning book of non-fiction. She teaches writing workshops, was writer-in-residence at The College of Santa Fe, and is a member of the Texas Institute of Letters.

Early photo of what is now U.S. 281 near Encino. A caliche surface was applied in 1920 and replaced with concrete in 1928.

A U.S. Army convoy travels on U.S. 281 near Blanco during World War II.
The Texas Roadside’s Hidden History

Since the dawn of the automobile era, the Meridian Highway has been a vital part of the state’s highway network

By Marisol Espino and Laura Cruzada

Imagine the state’s road system without its intricate veins of interweaving automobiles. While transportation routes connecting goods and people date back to the earliest Native American tribes, colonizers and later pioneers, travel was not always easy. The roads were as rugged as the terrain. What began as arteries for exploration, military conquest, settlement and commerce no longer sufficed with increases in car ownership and population growth during the early 20th century. These changes created a demand for decent roads.

Although several roadways connected trade routes throughout the U.S. from east to west coasts, the Meridian Highway was the first and largest highway to connect the continent along a north to south route from Canada to Mexico. The route was named after the sixth principal meridian, which draws a line right down the center of the country and establishes boundaries of public lands. The highway’s path in Texas measured roughly 800 miles long and paralleled modern-day I-35. “Most people know about Route 66. But highways like Meridian, Bankhead and Old Spanish Trail were just as or more important during their time,” says Renee Benn, historic preservation specialist in TxDOT’s Environmental Affairs Division.

In all, the Meridian Highway traversed 2,400 miles by 1926, connecting South Texas to North Dakota. “It was even longer if you went from Winnipeg to Mexico City,” Benn says.

Guided by federal laws, historians consider these facts while planning expansion of TxDOT’s transportation system. The route started as part of the Republic of Texas’ Military Road, transporting people, goods and material to military installations. Later it passed through the Fort Worth Stockyards as a major path used to take cattle to northern markets during the famous cattle drive era after the Civil War.

Beginning in 1911, the International Meridian Association sought to promote this cross-continental route. In Texas, the route extended through Laredo and San Antonio, linking many historic places such as the Alamo and Mission San Jose with Fort McIntosh. Shortly after its inception, the Texas Highway Department designated Meridian as State Highway 2. This move signified the importance of the road, second only to the 1916 Bankhead Highway (State Highway 1).

Today, I-35 stands in its place, yet many parts of the old highway survive today. You might see evidence of the Meridian’s history in the buildings, iconic gas stations, roadside parks, motels and restaurants along the original alignment throughout the state. Businesses like a 1914 gas station and auto repair shop on Waco Street in Hillsboro or a 1926 concrete bridge and roadway in Bellevue may go unnoticed, but they betoken state history. “They represent a significant part of Meridian Highway’s story and the people along its forgotten path,” Benn says.

Additionally, a 1910 stone courthouse complex on Seldon Loop in Bowie, the still-functioning 1929 Faust Hotel in New Braunfels and the round-shaped 1964 Holiday Inn on Town Lake in Austin still stand along the route of the historic highway.

In 2008, TxDOT and the Texas Historical Commission brought the highway and its history back to life through an interactive online documentary (txdot.gov/meridian). Historians documented 521 gas stations, 210 hotels/motels, 178 restaurants, 150 auto dealerships, 280 road segments and four metal truss bridges associated with the historic routes.

Marisol Espino is completing a directed study with TxDOT focusing on archaeological scoping and contract management. She also helps with public involvement and outreach. She is currently a graduate student at Texas State University San Marcos, studying South African archaeology.

Laura Cruzada manages the public outreach program for TxDOT’s Cultural Resources Management Section. She is responsible for bridging a gap between what people know about TxDOT and how they can get involved in the historic preservation process. Cruzada brings communications expertise from a 10-year career working on award-winning national public health campaigns. She is a graduate of the University of Texas at Austin.
LONG BEFORE BIG BOX STORES AND base ball fields blanketed the landscape of Leander, Texas, the area along Brushy Creek was a prehistoric hotbed of hunting and gathering. Ancient humans roamed the countryside making camp by the creek, subsisting on bison-size mammals, small turtles, birds (and their eggs), rodents and rabbits. Thousands of years later, TxDOT excavated the remains of one such Paleoindian before constructing FM 1431.

In 1973, a team led by TxDOT’s first Director of Archeology, Frank Weir, took to shovels and trowels to see what might lie beneath the land around Brushy Creek. TxDOT’s initial efforts then, as they are today, are part of a process all projects must go through during environmental reviews. Archeologists, aware and sensitive to the fact that water resources are often a good indication of life, visited the site and noted its potential. A decade later, archeologists working on the site uncovered more than dart and arrow points or fish net weights—they discovered a human finger bone. Working carefully, the excited crew gently loosened and removed the dirt around it and discovered a skeleton, which they nicknamed “Leanne” in reference to the modern-day town where she was discovered.

Today the site is one of the state’s archaeological treasures. Until its discovery, few sites contained such a long record of human activity in North America or a burial of Leanne’s antiquity, roughly 11,000 years old. Leanne’s knees were drawn up, arms crossed and her right hand rested underneath her head. Alongside her body was a smooth rock made of red sandstone most likely used to grind plants and other stones as well as a limestone slab, probably left there to secure the hide that wrapped her body. Her cause of death is unclear, but whoever laid her to rest did it with great care.

Well into the 1990s, archeologists excavated layer upon layer of dirt containing evidence of people inhabiting this shoreline. While Leanne was one of the oldest features of the dig, archeologists discovered multiple groups of prehistoric people camped in the area for the next 11,000 years, not knowing she was right under their feet.

A decade before Leanne’s discovery in 1971, TxDOT archeologists working under Wier excavated the foundation of the temporary State Capitol building as one of their first projects. This early work led to the first law for the preservation and protection of the state’s archaeological and cultural materials.

The National Historic Preservation Act is designed to preserve pieces of history in the face of development. “When TxDOT archeologists discover something like this, our goal is to tell a story about how people liked to settle and what their life was like,” says Scott Pletka, chief archeologist at TxDOT. “It is one way the past is not completely lost.”
OCCASIONALLY, visitors who are unfamiliar with the Lone Star State imagine they can drive from Houston to Big Bend and experience both places during the same weekend. Then the Texas Official Travel Map comes out, and as its pages unfold, visitors see the bigger picture—emphasis on bigger.

“Texas on a small smartphone or computer screen creates a totally different impression from a printed travel map,” says Dan Mullis, who edited the map from 2001 to the end of 2009. “Being able to visualize the entire travel route enables a traveler to see what lakes, state or national parks, or other tourism-related sites might need to be factored into the trip, making it more than just a tool for getting from here to there.”

Maps have been a useful resource for the Texas Department of Transportation since the Highway Department created its first proposed highways map in June 1917. They began widely distributing them in 1936, and since then, the department has generated a variety of maps to help drivers navigate the state, including county maps and the drivetexas.org road-conditions map. The agency map people are most familiar with, however, is the travel map—about 1 million are distributed to the public each year through the 12 Texas Travel Information Centers and by request. Travel counselors at each center often highlight routes for visitors to assist with their journeys across the state.

Looking back through the travel maps over the years showcases the state’s development as cities grew: Roads transformed into highways and then interstates, reservoirs and lakes were created, and state parks and historical sites were developed. The maps’ appearance gradually evolved as well—cartographic styles advanced from traditional methods, including scribe coat and stick-up, to digitization in 2003.

The travel division’s driving force over the years has been to find ways to continuously improve the map’s usefulness and readability. Those efforts have not been without challenges, however. In 1968, in an effort to increase the scale of the state and improve road visibility on the map, mapmakers lopped the Panhandle off the top of the state and moved it to the left. Despite reported complaints, the Panhandle remained on the side until 1983, when the map was printed on a larger sheet of paper, which allowed the state to remain the same size while moving the Panhandle back to its rightful place.

Another struggle has been to provide the map with a relief that accurately represents the state’s varied terrain, from the Guadalupe Mountains to the Coastal Plains. Earlier versions of map relief often resembled coffee stains. The 2017 map introduced a highly detailed relief from the U.S. Department of the Interior.

As time sprints forward and mapping improves and changes, travelers continue to rely on the printed travel map—for reasons aside from seeing the bigger picture.

“For what it’s worth, the printed travel map doesn’t talk back to a traveler like a smart phone–based digital system does,” Mullis says. “No scolding ‘recalculating’ from our map.”

Julie Stratton is an editor with TxDOT’s Travel Information Division and has more than 15 years of writing and editing experience. She is the current editor of the Texas Official Travel Map.
3,531 people were killed in vehicle traffic accidents in 2015—140 of them in work zones.

Mission Zero
At TxDOT, safety never stops

BUILDING and maintaining the nation’s largest transportation infrastructure can be dangerous work—not just for road crews but for motorists as well. In 1928, the department created a safety program to reduce on-the-job accidents, which fostered a culture of safety that today, nearly a hundred years later, is woven into the fabric of every district and division in the agency.
100 Years of TxDOT

BY THE NUMBERS: SAFETY STATS FOR 2015

AT LEAST ONE PERSON HAS DIED EACH AND EVERY DAY ON TEXAS ROADS SINCE NOVEMBER 7, 2000

960 PEOPLE DIED IN CRASHES WHERE THE DRIVER WAS UNDER THE INFLUENCE OF ALCOHOL — 27% OF ALL TRAFFIC FATALITIES

246,335 PEOPLE WERE INJURED IN MOTOR VEHICLE CRASHES — 27% OF ALL TRAFFIC FATALITIES

1 PERSON WAS INJURED EVERY 2 MINUTES, 8 SECONDS

1 PERSON WAS KILLED EVERY 2 HOURS, 29 MINUTES

3,531 PEOPLE WERE KILLED ON TEXAS ROADS IN 2015

807 PEOPLE WERE KILLED IN CRASHES OCCURRING IN INTERSECTIONS OR RELATED TO AN INTERSECTION

1 REPORTABLE CRASH OCCURRED EVERY 61 SECONDS

1,255 SINGLE VEHICLE, RUNOFF THE ROAD CRASHES RESULTED IN 1,255 DEATHS IN 2015.

807 PEOPLE WERE KILLED IN CRASHES OCCURRING IN INTERSECTIONS OR RELATED TO AN INTERSECTION

PEDESTRIAN FATALITIES TOTaled 550, AN INCREASE OF 12.7% OVER 2014

476 PEOPLE WERE KILLED IN CRASHES INVOLVING DISTRACTED DRIVING

960 PEOPLE DIED IN CRASHES WHERE THE DRIVER WAS UNDER THE INFLUENCE OF ALCOHOL — 27% OF ALL TRAFFIC FATALITIES

TxDOT PHOTO BY R.M. STENE

Above: Texas Highway Department personnel in El Paso circa 1940 pose with their safety record sign. Below: Signs along a highway work site in Austin in 1950 warn motorists to drive with caution.

Below: Highway patrol in the 1930s. TxDOT PHOTO BY R.M. STENE

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A Road Runs Through It

Eighty-six percent of the state’s population lives along or east of Main Street Texas

By Emily Roberts Stone

On any given day, more than 4,200 people are working on I-35 throughout the state on 71 current projects in various stages of development and delivery—In Wichita Falls, Dallas, Fort Worth, Waco, Austin, San Antonio and Laredo.

EVERYTHING’S BIGGER IN TEXAS, including the road projects. And none is bigger, more complex and more integral to the state’s economy and quality of life than Interstate 35. Known as Main Street Texas, the north-south highway connects Texas’ big cities and stretches through the state for more than 450 miles, from Laredo near the U.S.-Mexico border, to the Red River north of Gainesville where it crosses into Oklahoma. Several expansion projects along the interstate—in Central Texas, Dallas, Laredo and Corinth—will be completed in 2017. Others will wrap up in 2018 and 2019, and still new projects will begin. While drivers may be impatient for I-35 construction to finally finish, the state’s continuous population growth and strong economy indicate the finish line will be a moving target.

On any given day, more than 4,200 people are working on I-35 throughout the state on 71 current projects in various stages of development and delivery—in Wichita Falls, Dallas, Fort Worth, Waco, Austin, San Antonio and Laredo. All projects are ongoing while the highway is kept open, a Herculean task. For example, the Dallas Horseshoe Project—which includes the expansion, repaving and addition

Above: State Highway Engineer D.C. Greer cuts the ribbon officially opening Interstate 35 from the Atascosa county line to Broadway in San Antonio on September 19, 1960. Opposite Top Left: Construction workers on the Stemmons Freeway in Dallas in 1959. Opposite Top Right: This four-level interchange in Fort Worth, taken in 1959, connected Interstate 35 (U.S. 81), Texas 550, and the Dallas-Fort Worth Turnpike. Opposite Bottom: Construction workers expand Interstate 35 at Loop 20 in Laredo, also known as the Mile Interchange, in 2004. TxDOT PHOTO BY MICHAEL AMADOR
of several new bridges and roadways along Interstates 30 and 35—the number of vehicles traveling on it on weekdays.

“It has taken a lot of work and innovation in the traffic planning plans to keep traffic moving during construction,” says Bill Hale, TxDOT’s chief engineer. “The existing number of interstate mainlines have been maintained through all phases of construction.”

I-35’s history reflects the history of interstates throughout the country. It was Denison-born President Dwight D. Eisenhower who spearheaded passage of the National Defense Highway Act, which proposed 41,000 miles of domestic highways, particularly in Germany, and which proposed 41,000 miles of domestic highways, including I-35. Eisenhower had spent time in Europe and saw some of the major highways, particularly in Germany, and recognized the importance of having a strategic military highway network,” explains Randy Hopmann, TxDOT’s director of district operations. “The original purpose of having an interstate system was having a way for the military to get from the east coast to the west coast in a more expedient manner.”

Since its inception in 1956, the interstate highway system has contributed $3.7 trillion to the Texas economy since its inception. An analysis by Texas A&M Transportation Institute in 2010 found that a $4 billion annual investment in road construction could save the typical Texas household $3,390 annually by 2035.

And a lot of households are affected by I-35, with more than 10 million Texans living within 20 miles of the interstate. As such, the success of I-35’s many road projects is contingent on TxDOT’s relationship with cities, counties and local officials throughout the state.

“We pride ourselves on having good working relationships with our local communities and local officials,” Hopmann says. “Our role is transportation, so there’s a defined role. We try to come to the table and see what we can do to assist communities from an economic and quality of life standpoint.”

One of the ways TxDOT works to reflect the communities it partners with is through artwork along its highways and interstates. In West Texas, brands of nearby ranches adorn concrete retaining walls, and a strong heritage of agriculture is captured in murals on retaining walls, and a strong heritage of agriculture is captured in murals on retaining walls. Along the coast, retaining walls reflect the importance of bountiful marine life, and in East Texas, the piney woods, rivers and streams come to life.

“It becomes a great source of community pride because those walls are going to be there for a long time,” Hopmann says. “Communities look for inspiration and community pride because those walls are going to be there for a long time.”

“I have ever known.” — Governor Dolph Briscoe
Planes, Trains and Ferries

Texas transportation involves more than roads and bridges

While the Texas Department of Transportation’s oversight of the state’s roadway system is well known, it also plays a key role in travel by sea, railway and air. TxDOT’s Aviation Division works with cities and counties to obtain funds to maintain 300 reliever and general aviation airports across the state, generating billions of dollars in economic activity, creating jobs, and helping Texas recruit and retain some of the nation’s best companies. With nearly 11,000 railroad track miles, over 2,000 highway-rail bridges and more than 16,000 open railroad crossings, Texas leads the nation yet again. In addition, the Rail Division manages and implements improvements for the South Orient Rail Line that runs from Presidio, on the Mexican border, to San Angelo Junction. And more than 8 million riders travel on passenger ferries each year thanks to the Houston and Corpus Christi districts, while the Maritime Division oversees the development and connectivity of Texas’ ports, waterways and marine infrastructure. For more information about the activities of the Aviation, Rail and Maritime divisions, visit txdot.gov.

Above: Widespread public campaigns to eliminate at-grade railroad crossings in the 1920s and 1930s led to the building of underpasses like this one on U.S. 85 south of Bowie, taken in 1936.

Below: Galveston ferry landing circa 1937. The Galveston-Port Bolivar and Aransas Pass-Port Aransas ferries operate 24 hours a day, 365 days a year—weather permitting.

Above: A 2011 study of the economic impact of general aviation airports to the state economy showed 56,000 jobs, $3.1 billion in payroll and $14.6 billion in total economic output.
Weathering the Storms
When disaster strikes, TxDOT responds

By Elizabeth Small

Left: Damage caused when Hurricane Carla made landfall near Port Lavaca on September 11, 1961. TxDOT PHOTO BY DOUG FAIRCHILD

Above: TxDOT workers unload supplies for Hurricane Katrina refugees at the Van Zandt County Safety Rest Area on September 2, 2005. TxDOT PHOTO BY PETE MARTINEZ
The Travel Information Centers provide one-on-one help to thousands of callers. The automated system can answer most questions, but many travelers opt for the personal assistance only a travel counselor can provide, asking about alternate routes and resources: pet-friendly shelter options, where to get gas or refill prescriptions, and more.

One of the most important safety benefits provided by these centers is highway conditions information, updated statewide online 24/7 and through the automated Travel Information Line at 1-800-452-9292. TxDOT offers current information on highway closures, construction delays and weather-related conditions like flooding and ice.

TxDOT has offered highway conditions via phone for 25 years, opening a call center in 1991. The first website interface became available in 1993. Today, the Travel Information Line is automated and interactive, so callers can query it by location; the dynamic online map works on computers and mobile devices, with an intuitive, user-friendly interface.

But it’s not just travelers who count on DriveTexas. TxDOT’s Emergency Operations Center relies on it to mobilize response, and as part of statewide emergency efforts, the State Operations Center at DPS Headquarters monitors it closely. TxDOT plays a vital role in emergency coordination across multiple agencies, and a veritable army works around the clock to keep the system accurate and up-to-date.

“Everything we do is about helping travelers,” DriveTexas staffer Joe Hurley says. “We’re really proud to be a resource for people—not just during emergencies but every single day.”

Elizabeth Small handles projects related to DriveTexas, Travel Information Center operations, travel counselor training, and emergency response. She also coordinates the annual Texas Travel Counselors Conference and other events.
“Getting on the subject of beautification is like picking up a tangled skein of wool,” Lady Bird Johnson wrote in her diary in the winter of 1965, shortly after her husband’s second inauguration. “All the threads are interwoven—recreation and pollution and mental health, and the crime rate, and rapid transit, and highway beautification, and the war on poverty, and parks—national, state and local. It is hard to hitch the conversation into one straight line because everything leads to something else.”

To Lady Bird, beauty was never just about aesthetics. The same could be said about our state’s beloved highways: The first lady’s fond memories of scenic Texas roads were her inspiration to adopt highway beautification as her cause in the White House.

Texas had prohibited billboards in highway right-of-way since 1927, but we still had our share of litter spoiling the view. As highway design has evolved, our beautification efforts have expanded to include decorative features on highway structures. Enhanced retaining walls, special illumination and regionally inspired architectural elements grace new overpasses and bridges—on these Texas highways, beauty and safety go hand in hand.

Perhaps most famously, Lady Bird loved the roadside wildflowers that sprouted alongside Texas routes each spring. Shortly after the Texas Highway Department was founded a century ago, officials noticed these colorful weeds were the first to reappear from the disturbed earth when they built roads. In 1932, State Highway Engineer Gibb Gilchrist hired landscape architect Jac Gubbels, who began producing printed instructions with illustrations for landscaping and

Stop and Smell the Wildflowers
By design, Texas roads are among the most beautiful in the nation
By Anne Cook

“Almost every person, from childhood, has been touched by the untamed beauty of wildflowers.”
— Lady Bird Johnson

Left: Wildflowers near Cuero. TxDOT PHOTO BY J. GRIFFIS SMITH. Above: The famous Adopt-a-Highway program began in Tyler in 1985. Today there are nearly 60,000 groups in 49 states and in Puerto Rico, Canada, New Zealand, Australia and Japan. TxDOT PHOTO BY PETE MARTINEZ

Inset: Boy Scouts and Girl Scouts in Texas who participated in one of the statewide Trash-Off events received this special 30th anniversary Don’t Mess with Texas patch.
beautification of the roadside. Gubbels encouraged the district engineers and county maintenance foremen to become landscape conscious.

Working with garden clubs and Boy Scouts—and with landowner’s permission—the department began gathering wildflower seeds and transplanting trees. Gubbels’ research showed that landscape design could make highways safer by eliminating monotony and using trees to highlight approaching changes. By 1934, the department officially put a stop to springtime mowing—unless essential for safety—until after wildflower seasons were over.

In a 1930 memo, Gilchrist directed division and resident engineers to be on the lookout for sites that could be acquired without cost for use as roadside parks. The original picnic tables and shelters at these parks had varied design styles, including concrete faux bois, hewn logs, and thatched roofs or arbors to provide shade in treeless regions. More than 500 roadside parks were completed before World War II slowed construction and materials acquisition. By the department’s 50th anniversary in 1967, it maintained more than 1,100 roadside parks, scenic turnouts and overlooks, and had begun building new safety rest areas (which were euphemistically named “comfort stations” for a time).

TxDOT’s certified travel counselors sustain a proud legacy that goes back more than 80 years to the Texas A&M cadets who greeted visitors as they entered Texas to attend state centennial events in 1936. Intended to be temporary, the first information centers were small, one-room buildings housing the Aggie cadets. They met the cars that pulled in, provided travelers with a free Texas highway map and offered any necessary directions including current road conditions; a cup of water from a nearby barrel was optional. The building designs reflected regional architecture: log cabins in East Texas, Colonial style in Northeast Texas and stucco-coated adobe in West Texas. shuttered during World War II, the information centers were managed and staffed by men when they reopened.

By 1957, tourist bureaus welcomed visitors inside to browse brochure racks, visit with a travel counselor or use restrooms—and women were finally allowed to serve as travel counselors. The September 1957 issue of Texas Highways documented the payoff best: “Combine that natural quality known as ‘woman’s intuition’ with the studied art of giving directions, and don’t be surprised when the tourists who drive away from the Travel Information Bureau … write back as did recent visitors from New York, ‘The young lady at the Information Bureau was wonderful, and because of her we stayed a week longer than expected.’” Today’s travel information centers still feature certified travel counselors—both men and women—to guide travelers.

These early ideas of highway beautification, roadside parks and travel information centers are now Texas traditions. They have evolved to include decoratively enhanced highway structures, safety rest areas with restrooms, landscaping that attracts migrating butterflies and play areas for families to stretch their legs; and the continued presence of travel information centers at Texas borders. Perhaps one day, even passengers riding in driverless cars will appreciate these programs in the century to come.

Anne Cook manages the TxDOT Photo Library, which contains a still photo archive of more than half a million images as well as a digital database of more than 200,000 images. She completed a Master of Library and Information Science from the University of Texas in 1983 and came to TxDOT in 1989.
SINCE 1918, BRIDGE ENGINEERS in Texas have been skillfully creating innovative, beautiful and safe bridges. In accordance with the department’s commitment to the safety of the traveling public, TxDOT’s Bridge Division thoroughly inspects all bridges every two years. Bridges deemed unsafe are closed to vehicular traffic.

With 53,875 bridges and counting, Texas has nearly double the bridges of any other state, and more than the combined total of 17 states. As of September 2016, 82 percent of Texas bridges are in “good or better” condition and just 1.9 percent earned the lowest rating—the national average for deficient bridges is 9.6 percent. Texas bridges are in better condition now than at any other time in our history, while at the same time, bridge costs are among the lowest in the nation.

“I have tried to get close to the frontier between architecture and sculpture and to understand architecture as an art.”
—Santiago Calatrava, Margaret Hunt Hill Bridge designer

Crossing the Great Divide

Thousands of bridges span the state, a timeless symbol of state history

Left: The Port Arthur-Orange Highway Bridge was constructed in the mid-1930s. Above: The Rainbow Bridge and the newer Veterans Memorial Bridge span the Neches River to join Bridge City and Port Arthur in Jefferson County. TxDOT PHOTO BY JAMES E. PIKE
Left: Fireworks light up the West Seventh Street Bridge in Fort Worth during its opening ceremony on November 16, 2013. The bridge, which crosses the Trinity River, is the first precast network arch bridge in the world. TxDOT PHOTO BY KEVIN STILLMAN

Above: Congress Avenue Bridge in Austin is home to 1.5 million Mexican free-tailed bats from March through October. After the bats moved into the crevices under the bridge in 1980, TxDOT teamed with Bat Conservation International to study the phenomenon. TxDOT’s understanding of the environmentally beneficial aspects of bats led to a program to make bridges and culverts more suitable for bat roosting and nurseries. TxDOT PHOTO BY J. GRIFFIS SMITH
Above: The current Pecos River Bridge near Langtry, shown here, was completed in 1957. The top of the finished bridge reaches 1,228 feet above mean sea level. The original 1923 bridge was destroyed by flood waters in 1954. Two subsequent temporary bridges met the same fate. TxDOT PHOTO BY RANDALL MAXWELL

Right: TxDOT worked closely with the City of Dallas on the Margaret Hunt Hill Bridge project. The cable-stayed bridge across the Trinity River, designed by Santiago Calatrava, has become an iconic city landmark since it opened in 2012. TxDOT PHOTO BY KEVIN STILLMAN
The Next 100 Years

The state demographer explains the value TxDOT offers

By Dr. Lloyd Potter

Growth by the Numbers

In recent years, Texas outpaced all other states for numeric growth, and it has grown more quickly than all other large states. It is the second-largest state in terms of population and geography, with a total land area of about 261,797 square miles.

Population Growth Rank, U.S. Counties
1. Harris County
2. Comal County
3. Williamson County
4. Fort Bend County
5. Bexar County
6. Tarrant County
7. Williamson County
8. Harris County
9. Dallas County
10. Harris County

Net In-Migration Rank, U.S. Counties
1. Harris County
2. Comal County
3. Williamson County
4. Fort Bend County
5. Bexar County
6. Tarrant County
7. Williamson County
8. Harris County
9. Dallas County
10. Harris County

W H I L E  I T  I S  C L E A R to most that the Texas Department of Transportation is responsible for development and maintenance of the road and highway infrastructure, it’s important to remind people of the vital role TxDOT plays in economic development. TxDOT’s management of our airports, water ports, railroads and mass transit support business and population growth throughout the state. From a time when the economic base of Texas was largely agrarian, TxDOT’s precursor—the Texas Highway Department—formed in 1917 to administer the construction and maintenance of highways. The development of the highway system in Texas played a key role in bringing agricultural products to market. Since 1917, through an evolution of responsibilities and names, TxDOT has overseen the development and maintenance of an enormous and complicated infrastructure that goes well beyond roads and is fundamental to the state’s continued economic well-being and growth.

As the state’s urban areas grow and the regional economies of Texas become more and more integrated and advanced, TxDOT’s role in expanding transportation infrastructure and incorporating advances in transportation technology will continue. Advancing efficient intermodal transit of freight, planning for passenger cars and commercial trucks, developing efficient mass transit options within and between urban centers, and generally ensuring the flow of people and freight is done as efficiently and as safely as possible, is a tall demand. While TxDOT is focused on current transportation demands, it also has an eye to the future. If Texas’ demographic trends continue as they have for the past decade, the population will double by 2050.

If Texas’ demographic trends continue as they have for the past decade, the population will double by 2050.

With new Texans joining the state every day from around the country and world, and with other Texans moving from less populated areas to more densely populated areas, the capacity of Texas’ roads to handle the increases in passenger cars and commercial truck traffic is being stretched. The resulting congestion and slow-moving traffic is costly in many ways. Time is valuable, whether it’s time at work or time spent with family and friends—the more time spent sitting in traffic, the less time to be productive and enjoy life. For commercial freight on the roads, time is money. Companies are paying drivers to sit in traffic, and when freight is delayed, so is the flow of income associated with freight delivery. Congestion is costly in many ways. Perhaps one of the greatest challenges for TxDOT and state leadership is to anticipate, plan and meet the future transportation needs of the state. If TxDOT is able to meet this challenge, there is little that can stop Texas from continuing to lead the nation’s roadways.

Dr. Lloyd Potter was appointed as the Texas State Demographer in June 2010. He is Professor of Demography at the University of Texas at San Antonio where he serves as Director of Texas Demographic Center. He holds a Bachelor of Science degree from Texas A&M University and a Ph.D. in sociology and demography from the University of Texas at Austin.
We’re building bigger bridges to the future, and our employees are at the heart of everything we do. With a history of maintaining one of the nation’s largest transportation systems, we take pride in our work to keep Texas moving. We connect farmers and ranchers to market, operate ferries along the gulf, help people travel these great Texas highways and create multimodal transportation solutions. We have opportunities in aviation, archaeology, environmental, communications, construction, engineering, maintenance, accounting/finance, human resources, research, transportation planning and so much more. What path will you take? Picture yourself here and build a career as big as Texas, because what you build today isn’t just work—it’s a legacy.

www.TxDOT.gov/careers
OVER THE PAST CENTURY, TxDOT has worked closely with community leaders and citizens to build one of the safest and most reliable transportation systems in the world. Through it all, our team has been focused on connecting Texans and visitors to what matters most. We look forward to our next 100 years of service to the people of Texas.

#TxDOT100