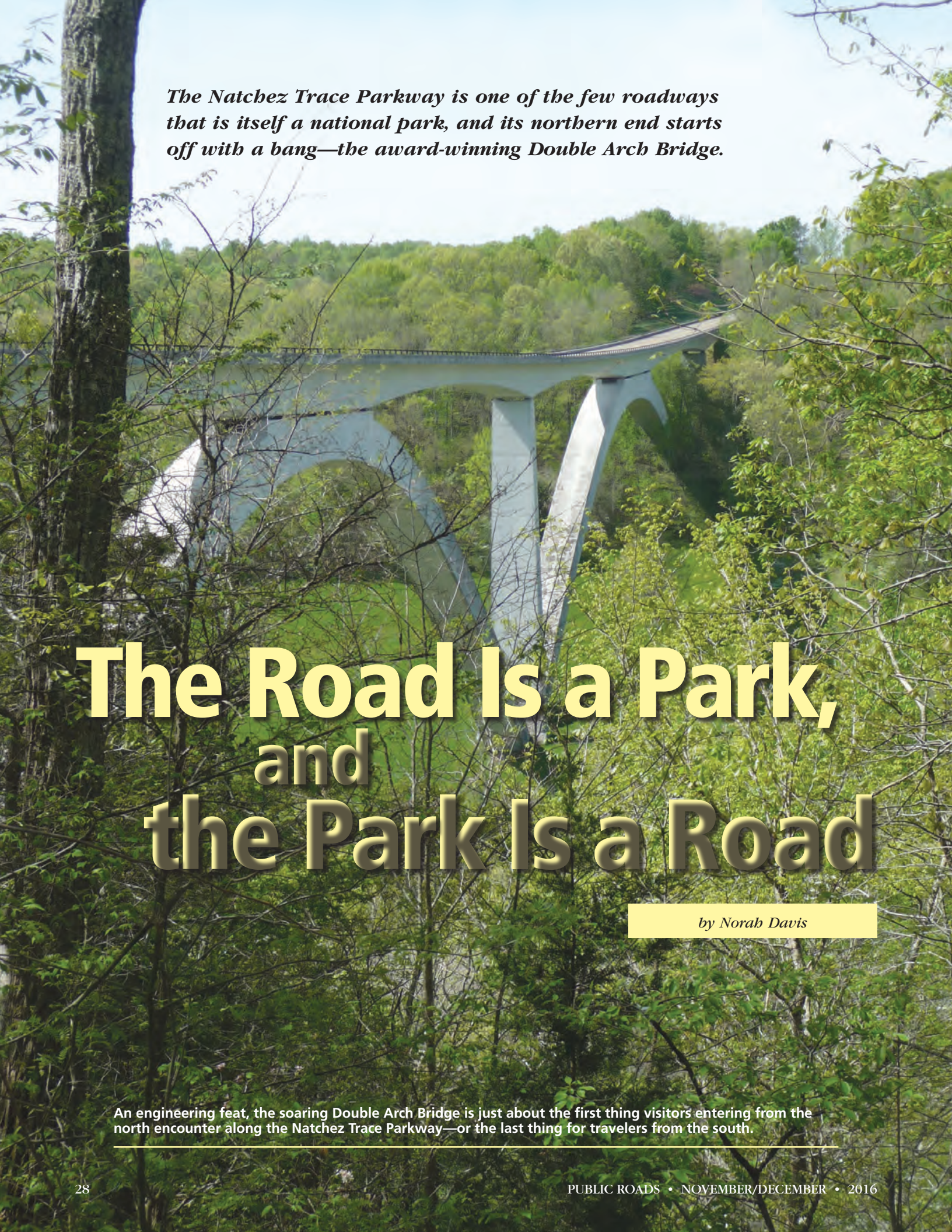

The Natchez Trace Parkway is one of the few roadways that is itself a national park, and its northern end starts off with a bang—the award-winning Double Arch Bridge.

The Road Is a Park, and the Park Is a Road

by Norah Davis

An engineering feat, the soaring Double Arch Bridge is just about the first thing visitors entering from the north encounter along the Natchez Trace Parkway—or the last thing for travelers from the south.

All national parks include roads that run through them, but only a few parks are themselves roads. The Natchez Trace Parkway is less well known than the Blue Ridge Parkway or Skyline Drive in the Shenandoah National Park. But, like them, the Natchez Trace has scenery, beauty, historic landmarks, picnic areas, hiking trails, campgrounds, welcome centers, wildflowers, and wildlife.

Unlike them, however, the Natchez Trace also has the haunting remains of a plantation mansion, a former town site, nearby Civil War battlefields at Shiloh and Vicksburg, miles of split-rail fencing, and the Nation's second largest Indian mound (earthenworks thought to have been used for burials and religious ceremonies). Perhaps of greatest interest to the highway community, however, the Natchez Trace Parkway starts off at its northern terminus with the award-winning Double Arch Bridge.

More on that later.

The Trace, established as a national park in 1938 but not completed until 2005, winds 444 miles (715 kilometers) from the north just below Nashville, TN, continuing south across the Tennessee River into Alabama for a few miles, then crossing into Mississippi and through Jackson to Natchez, where it ends near bluffs overlooking the Mississippi River.

The parkway commemorates a footpath used by the Chickasaw, Choctaw, Cherokee, and Natchez Nations through their hunting grounds in the southern wilderness. In the late 1700s and early 1800s, the Trace was used by the "Kaintucks." The settlers from Kentucky and the Ohio River Valley floated their produce and livestock down the Mississippi River on wooden flatboats. Once they reached Natchez or New Orleans and had sold their crops—and their boats for lumber—they walked home via the Natchez Trace rather than fighting upstream against the current of the mighty Mississippi. With the coming of the steamboat to the Mississippi in the 1820s, the river could serve two-way traffic, and the Natchez Trace fell out of use.

The Trace's northern section in Tennessee rolls with the "ups and downs of hill country" (quoted from the National Park Service's official map), as it traverses the foothills of the southern Appalachian Mountains. In the spring—perhaps the best time to experience the parkway—the trails and roadsides are bordered by fields of wildflowers—from black-eyed Susans to crimson clover.

As the parkway continues south, it winds through pine woods and alongside sloughs and cypress swamps. Trails lead into the woods to waterfalls, and the roadway passes farms and alongside a few sections of the original Trace, preserved rather than paved over. In some places, visitors can walk through segments that are sunken deep into the ground, eroded by wagons, horses, and thousands of traders walking home to their farms in the Ohio Valley.

How the T race Became a Parkway

Exhibits at the parkway's visitor center at milepost 266 near Tupelo National Battlefield in Mississippi tell the story. In addition to the

Visitors can stroll through a cypress swamp on this walkway at milepost 122, a few miles north of Jackson, MS.

This log cabin is adjacent to the gravesite of explorer Meriwether Lewis, best known for the Lewis and Clark expedition. Lewis died under mysterious circumstances while traveling the old Trace in 1809.

exhibits, the center sells a photo book by the Natchez Trace Parkway Association, *Building the Natchez Trace Parkway*, which contains numerous photographs of the construction crews and promoters who turned their vision into today's enjoyable road trip.

Most important from a transportation perspective, in 2005 the Federal Highway Administration's Eastern Federal Lands Highway Division completed a history of the pathway titled *The Natchez Trace: Path to Parkway*. The book contains priceless photos of early construction methods and equipment, plus engineering plans that include superstructure and construction sequence drawings of the Double Arch Bridge.

In 1905, a journalist named John Swain wrote an article, "The Natchez Trace," for *Everybody's Magazine* that generated considerable interest just as the Trace had started fading from public memory. Then, in 1909, the Daughters of the American Revolution began placing interpretive markers along the route. Good Roads associations also joined in the mission to remember the Trace.

Thanks to powerful friends, the Trace became a Federal road project to provide jobs and stimulate the economy during the Great Depression. In 1940, the National Park Service and the Public Roads Administration (a predecessor of the Federal Highway Administration) completed a survey of the old Natchez Trace.

Construction halted during the Second World War, but the Natchez Trace Parkway Association persisted and revived public support after the war. Still, obtaining rights-of-way and funds for construction took more than 67 years from the groundbreaking on September 16, 1937, to completion of the final section on May 21, 2005.

The construction was an exemplary model of interagency collaboration between the National Park Service and FHWA's Office of Federal Lands Highway. According to *Path to Parkway*, "From the very beginning, the 'park road' aesthetic values used in other national

At milepost 180.7, this meadow and split-rail fencing is next to the French Camp "stand," an inn that opened in 1812. The innkeepers at the Trace's regularly spaced stands provided food and places for travelers to spend the night.

parks was the operative in designing and constructing the parkway." Curvilinear alignments that minimized excavation and embankment followed the lay of the land.

Along the way, in 1996, FHWA Administrator Rodney Slater (later U.S. Transportation Secretary) presented a plaque to Superintendent Daniel Brown of the National Park Service, designating the parkway as one of America's Byways® and an All-American Road—a title indicating a nationally significant route that provides an exceptional traveling experience.

The Double Ar ch Bridge

Completed in 1994, the elegant Double Arch Bridge is one of 442 bridges on the parkway. This crown jewel crosses over Tennessee Highway 96, which passes through Birdsong Hollow. An engineering feat, the bridge won the 1995 Presidential Design Award and numerous other awards for its innovative design. FHWA's *Path to Parkway* notes that it was "the first segmentally constructed arch bridge in America."

The bridge is 1,648 feet (502 meters) long and rises 155 feet (47 meters) above the valley it spans. It cost $11.3 million and took 2.5 years to build.

The arches were constructed of 122 segments cast offsite, each weighing 36 to 45 tons (33 to 41 metric tons). During construction, six pairs of cables and three pairs of backstay cables provided support for the arches. When both arches were complete, the cables were removed.

"During the preliminary design, the engineers were planning to use spandrel columns on top of the arches to support the superstructure," says Hratch "Rich" Pakhchanian, a bridge engineer with the Office of Bridges and Structures headquartered at FHWA's Eastern Federal Lands Highway Division. "Then they realized that spandrel columns were not necessary since post-tensioning was to be used." Eliminating the spandrel columns resulted in an elegant bridge that preserves an unimpeded view.

Commemorating the Natchez Trace and its remarkable Double Arch Bridge is especially appropriate during this year's celebration of the National Park Service's 100th anniversary.

Norah Davis is the editor of PUBLIC ROADS magazine.

For more information, see https://www.nps.gov/natr/index.htm or contact Norah Davis at 828-877-4070 or norah.davis@icf.com.

All photos by Norah Davis.

The Natchez Trace Parkway winds 444 miles (715 kilometers) through peaceful scenery.

Seen here from the valley below, the Double Arch Bridge spans Tennessee Highway 96.