

A Noteworthy Year

Series: FHWA Highway History Website Articles

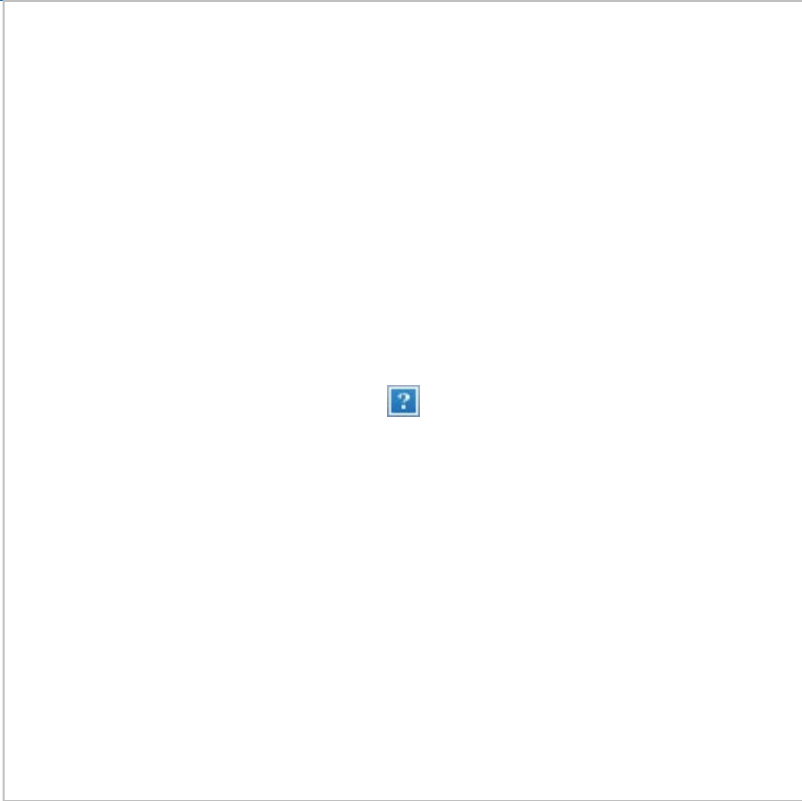
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by Richard F. Weingroff

The Golden Anniversary of the Eisenhower Interstate System was just one of several significant anniversaries in highway history in 2006.



1835 on the National Road (U.S. 40). The historic road, the first built by the Federal Government, is 200 years old in 2006 and is now a National Scenic Byway. *Photo: ©2001 National Road Heritage Park.*

In 2006, the Federal Highway Administration (FHWA) and its partners celebrated the 50th anniversary of the Dwight D. Eisenhower National System of Interstate and Defense Highways. However, 2006 also marked significant anniversaries of several other special events in highway history, including the 200th birthday of the National Road, the 90th anniversary of the Federal-Aid Road Act, and the 80th anniversary of historic Route 66. Over the past 3 years, a number of Public Roads articles have chronicled the story of the Interstate System, but these other historic stories deserve to be told as well.

This year of anniversaries is an opportunity to take a look at some of the most significant events in the history of highways in the United States.

The National Road—1806

On March 29, 1806, President Thomas Jefferson signed legislation authorizing him to appoint three commissioners to build a road from the Potomac River at Cumberland, MD, to the Ohio River at Wheeling, WV (then in Virginia). With rivers being the fastest means of travel among the States, the first National Road would provide a land bridge connecting the Potomac and Ohio Rivers for settlers bound for the public lands on sale in the new State of Ohio. The road also would facilitate trade and bind the States in what Jefferson called a "union of sentiment."

Congress had to think innovatively to get the road underway. Instead of using tax revenue, the 1806 law applied 2 percent of the revenue from the sale of Ohio's public land to building the road. To address the belief that the Government did not have the constitutional authority to build a road on land owned by the States, President Jefferson was required to secure consent from the three States through which the National Road would pass. Maryland and Virginia quickly consented, but Pennsylvania delayed until its representatives won a commitment that the road would be built through its towns of Uniontown and Washington, thus ending the Nation's first interstate highway routing dispute.



Carl Rakeman, an artist with the U.S. Bureau of Public Roads (BPR), depicted the National Road at Willis Creek just west of Cumberland, MD, showing the Conestoga wagons and stagecoaches that were common on the road in its heyday.

President Jefferson's three commissioners took 4 years to select the route. Beginning in May 1811, contractors cleared a roadway 20 meters (66 feet) wide with a 9-meter (30-foot)-wide stone surface. The first section opened in 1813 and immediately saw heavy traffic as contractors worked to extend the 209-kilometer (130-mile) road to Wheeling, which the road reached in 1818.

Under pressure from Ohio and newly admitted Indiana (1816) and Illinois (1818), Congress passed legislation in 1820 authorizing funds to lay out a road from Wheeling to the eastern bank of the Mississippi River. Funds for construction, first authorized in 1825, again came from 2 percent of the public land sales in the new States.

Other 2006 "Zero" Anniversaries

1766: First "Flying Machine" stage wagon run between Philadelphia and New York

1806: Lewis and Clark's Corps of Discovery returns from Pacific Northwest to St. Louis

1846: First plank road in the United States (New York State)

1926: Cooperative agreement by National Park Service and Bureau of Public Roads for construction of roads in national parks and monuments

1936: Opening of San Francisco-Oakland Bay Bridge

1966: The Department of Transportation Act of 1966 authorizes creation of the Department of Transportation

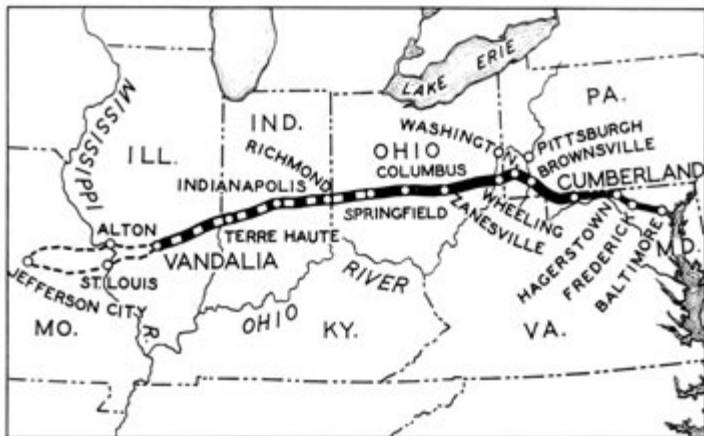
1966: National Historic Preservation Act of 1966

1966: National Traffic and Motor Vehicle Safety Act of 1966

The U.S. Army Corps of Engineers built the extension, which was laid out as straight as possible, 24 meters (80 feet) wide, from Wheeling to Vandalia, then the capital of Illinois. In eastern Ohio, the availability of stone for road building allowed for high construction standards, but the rest of the extension was little more than a cleared and graded dirt track. Vandalia remained the terminus because an 18-year struggle between Alton, IL, and St. Louis, MO, to be the primary Mississippi River port was still unresolved when Congress stopped funding the National Road in 1841.

As the roadway expanded westward, the original section deteriorated under heavy use. Still trying to save tax revenue, Congress approved a bill in 1822 calling for toll collection to pay for maintenance. President James Monroe vetoed the bill because Federal toll collection within the States implied a sovereign authority that he did not believe the Constitution granted. Rather than pay for maintenance with tax revenue, Congress decided to turn the road over to the States to operate as a turnpike. Maryland, Ohio, Pennsylvania, and Virginia agreed to accept ownership, but only after the Government paid for reconstruction.

1840 THE NATIONAL PIKE



The Federal Government built the National Road (National Pike) from Cumberland, MD, to Vandalia, IL, and gave it to the States in the 1830s to operate as a turnpike. As shown on this map, Maryland built an extension from Cumberland to the port of Baltimore. Source: FHWA.

By the time the handoff was completed with the transfer of the Illinois segment in 1856, the age of the railroad was well underway, taking traffic from the National Pike. As revenues declined, so did the roadway.

In an 1894 history, Thomas B. Searight described the National Road as a highway "grand and imposing, an artery ... largely instrumental in promoting the early growth and development of our country's wonderful resources, ... influential in strengthening the bonds of the American Union, and at the same time ... replete with important events and interesting incidents." In that spirit, the U.S. Department of Transportation designated the Historic National Road (the National Pike) a National Scenic Byway from Maryland to Illinois.



As late as the 1930s, U.S. 40 included this National Road "S" bridge west of Hendrysburg, OH. The bridge was replaced with an arch bridge during reconstruction of the highway in 1933.



Traffic on the National Road declined in the 19th century after railroads took much of its interstate business. This photograph shows a railroad line (left of picture) along the National Road west of Cumberland, MD.

Federal-Aid Road Act of 1916

During the second half of the 19th century in the railroad era, the Nation's roads, including the National Pike, deteriorated from lack of maintenance, resources, and interest. Interest, however, revived with the introduction of bicycles with large front wheels and small rear wheels in the mid-1870s and the "safety" bicycle (equal size wheels with pneumatic tires) in the 1880s. Bicycle groups such as the League of American Wheelmen joined with farm groups to demand better roads. The Federal Government responded with \$10,000 for a road inquiry by the U.S. Department of Agriculture. On October 3, 1893, General Roy Stone, a Civil War hero, opened the U.S. Office of Road Inquiry (FHWA's first incarnation).

In the 20th century, the automobile replaced the bicycle as the motivating factor in the Good Roads Movement. By 1910, two competing ideas had developed. One was that the Federal Government should help the States improve farm-to-market roads to "get the farmer out of the mud." As an alternative, long-distance travel groups wanted the Federal Government to build national roads.

In 1916, Congress rejected Federal construction by

approving a bill drafted by a committee of the American Association of State Highway Officials (AASHO), as it was known at the time. The Federal-Aid Road Act of 1916, signed by President Woodrow Wilson on July 11, 1916, authorized Federal aid to the States on a 50-50 matching basis. To receive funds, a State had to have a highway agency capable of carrying out the requirements of the Act.



This 1928 photograph shows an old National Road tavern along an unimproved section of U.S. 40 in Indiana, just west of the Ohio State line.



This section of the National Road (U.S. 40) in Wheeling, WV, was reconstructed in 1941 to provide a road width of 12 meters (40 feet).

The United States entered World War I in 1917, taking workers and materials away from road building. When the war ended in 1918, work on Federal-aid highway

projects quickly demonstrated the program's defects. The primary problem was that the States could use the funds on all existing or potential "rural post roads" outside cities. With virtually every road to choose from, the States spread Federal-aid funds among all their political subdivisions, with little focus on interstate roads, statewide links, or State line connections with adjacent States.

Long-distance road advocates renewed their efforts to promote national roads. For example, in 1919 the U.S. Army launched its first transcontinental convoy of military vehicles, a 2-month journey from Washington, DC, to San Francisco, CA. The convoy included Dr. S. M. Johnson, a good-roads advocate who spoke to crowds along the way in support of a bill that would establish a Federal highway commission to build national roads. A young officer named Dwight D. Eisenhower took part in the convoy and would cite the experience as one of the reasons why, as President, he supported construction of the Interstate System.

The Federal Highway Act of 1921, approved by President Warren G. Harding on November 9, resolved the issue—once and for all, as it turned out. The new law limited the expenditure of Federal-aid highway funds to 7 percent of the roads in each State. Within this limit, a maximum of three sevenths of each State's total mileage could be "interstate in character." Up to 60 percent of the funds had to be used on the "interstate" mileage.

The 1916 Act, as amended in 1921, launched the first "interstate system," as the "interstate in character" portion of the Federal-aid system was called. As work on the system increased, Federal and State highway officials considered the 1920s the "Golden Age of Road Building."

Historic Route 66

The 7-percent system, with its "interstate" subset, was a paper network that was not visible to the public. That would change in the mid-1920s.

During the 1910s and early 1920s, private associations selected routes for interstate roads, gave them names, and promoted their improvement by government agencies and use by travelers. Motorists, mapmakers, and road builders used the common names of Atlantic Highway, Dixie Highway, Jefferson Highway, Lee Highway, Lincoln Highway, National Old Trails Road, Pacific Highway, Yellowstone Trail, and 250 or so other named trails. However, as interstate traffic grew in the 1920s, the named trails proved to be a jumble of overlapping roadways, poor marking, and indirect routing through towns willing to pay dues to an association.



Beginning in the 1880s, a bicycle craze swept the country, leading to demands for better rural roads. The "ordinary bicycle" (with the large front wheel) sparked the bicycle craze of the 1880s, but the "safety" bicycle (equal size wheels) expanded the craze. This painting by BPR artist Carl Rakeman illustrates one of the problems with the "ordinary," namely front spills known as "headers."

In 1925, Secretary of Agriculture Howard M. Gore, at AASHO's request, appointed a Joint Board on Interstate Highways to identify the main interstate roads, create a way of marking them, and adopt uniform signing for highways. Chief Thomas H. MacDonald of the U.S. Bureau of Public Roads (BPR) and two coworkers, E.W. James and A.B. Fletcher,

represented BPR on the Joint Board, which included 21 State highway officials.

During meetings in April and August 1925, with regional meetings in between, the Joint Board identified the best interstate roads, decided to call them "U.S." highways, and applied numbers to them. The Board also developed uniform signs for the Nation's roads, including a marker for the U.S. routes based on the official U.S. shield (which can be seen on the back of a \$1 bill). The new Agriculture Secretary, William Jardine, submitted the plan to AASHO, whose member highway agencies owned and operated the roads.



Cross-country motorists found rough conditions on "interstate" roads before the Federal and State highway agencies began cooperating on their improvement after the Federal Highway Act of 1921. In 1911, auto club "pathfinder" A.L. Westgard came across this crashed vehicle on a prairie road a few miles south of La Junta, CO.

As AASHO considered the proposal, the named-trail associations lobbied for changes. The Joint Board had divided the interstate named trails among several numbers to put the associations out of business. Each association sought a single number for its route, while AASHO considered petitions from cities that had been left off the network or that wanted a more prestigious number that would put the community on a mainline.

Of all the numbering disputes, none was more bitter than the fight over "60." The Joint Board assigned numbers ending in zero to the transcontinental or major east-west routes, with the lowest in the north. (With U.S. 10 through 90 accounted for, the Joint Board assigned U.S. 2, rather than U.S. 0, to the route closest to the Canadian border.) When the Joint Board's map was released, Kentucky Governor William J. Fields thought that his State had been "cheated." In sequence, U.S. 60 should have gone through Kentucky on the National Roosevelt Midland Trail, which was split among three less prestigious numbers (52, 62, and 150). The Governor's anger intensified when he spotted "60" on a route from Chicago to Los Angeles that passed through Illinois, Missouri, and Oklahoma—three of the States represented on the five-member Joint Board subcommittee that had assigned the numbers.



BPR's Rakeman included this painting of a road in California—the first completed under the Federal-Aid Road Act of 1916—in his collection of paintings of historic highways.

For months, the controversy raged. Compromises, such as designating the routes U.S. 60 North and U.S. 60 East or assigning U.S. 62 to the Chicago-to-Los Angeles route, failed. The solution came on April 30, 1926, when Cyrus Avery (Oklahoma) and B.H. Piepmeier (Missouri), who had been on the numbering subcommittee, met in Springfield, MO, on routine

business. When they discussed the "60" controversy, Avery's chief highway engineer, John Page, noticed that the number "66" had not been used. Avery and Piepmeier sent a telegram to Chief MacDonald: "We prefer sixty-six to sixty-two." A compromise soon took shape. In July, AASHO assigned "60" to the route from Newport News, VA, through Kentucky to Springfield, MO, and "66" to the Chicago-to-Los Angeles route.

The controversy over "60" was the last major roadblock to approval of the U.S. numbered highway plan. On November 11, 1926, AASHO approved the plan and the uniform marking system.

As the named-trail associations faded, the U.S. route numbers became the core of the Nation's interstate system of paved two-lane roads. Some routes would take on an identity of their own, but none more so than U.S. 66.

Because it cut across most of the transcontinental routes and provided access to southern California, "Route 66" was heavily used. In addition, the reputation of Route 66 would be enhanced by unique circumstances. First, John Steinbeck chronicled the desperate flight of Depression-era farmworkers to California on Route 66 in his Pulitzer Prize-winning novel *The Grapes of Wrath* (1939), which director John Ford adapted in an Oscar-winning movie of the same name (1940).

Second, when songwriter Bobby Troup, just discharged from the Army, and his wife Cynthia headed for Los Angeles, they gave Route 66 a new image in 1946. After they turned onto Route 66 in St. Louis, Cynthia came up with the rhyme "Get your kicks on Route 66." Troup conceived a catchy melody for the narrative line ("It winds from Chicago to L.A./More than 2,000 miles all the way"), his wife's catchphrase, and a recitation of Route 66 cities ("don't forget Winona"). Nat "King" Cole's group, The King Cole Trio, recorded the song, which was a hit. Hundreds of road songs later, Troup's "Route 66" remains the most recognized.

Third, in 1960, the television series "Route 66" began its 4-year run before going into worldwide syndication. The popular series about two men sharing adventures as they traveled the country in a Corvette renewed the image of Route 66 as a symbol of the American road even as the highway with that number was passing into history.

The Interstate System launched in 1956 brought about the demise of Route 66. Some parts of two-lane Route 66 were incorporated into the new Interstates as half of a four-lane highway. Other parts, especially in the small towns of the Southwest, were bypassed, including the final segment outside Williams, AZ, in 1984, and Troup's "highway that's the best" was no longer the interstate route for motorists. On June 26, 1985, the American Association of State Highway and Transportation Officials (AASHTO), which controls the numbering of U.S. routes today, eliminated Route 66 from the log of U.S. numbered highways.



After AASHO approved the U.S. numbered highways in 1926, the new U.S. shields began to appear around the country. Rakeman illustrated the change by painting a sign crew shortly after they posted a U.S. 40 sign on the old National Road between Zanesville and Columbus, OH.

The media reported AASHTO's action with images of Route 66 signs coming down, snippets from the movie

"The Grapes of Wrath" and television's "Route 66," and snatches of Bobby Troup's song. The renewed interest prompted support groups to form in the Route 66 States to preserve the route and its lore. The State transportation departments, which had asked AASHTO to de-designate the route, arranged "66" designations, such as "Historic Route 66" and "State Route 66," to preserve the link to the road's past.



MaryAnn Naber, FHWA

This 1993 photo shows historic Route 66 west of Flagstaff, AZ, on the left and its replacement, I-40, on the right.

Today, the highway that died in 1985 is one of the best known roads in the world. Tourists travel the old roadway, sometimes in rented Corvettes, in search of remnants of its famous past—a motel, a restaurant, a tourist attraction, and even abandoned bridges. Dozens of books and videos chronicle the old road. Congress has called for its preservation through the National Park Service's long-distance trails program, while the segments in Arizona, Illinois, and New Mexico have been designated National Scenic Byways. The 2006 Disney/Pixar animated film "Cars" depicts a fictional Route 66 town, Radiator Springs, as a once-vibrant town that had been left behind by traffic when it was bypassed by I-40. The town revives when the impatient hotshot main character discovers the values of life, love, and friendship in Radiator Springs.

Enthusiasts of Route 66 consider 2006 the 80th

anniversary of the famous highway, but it was only one of the U.S. numbered highways AASHO designated on November 11, 1926. They formed the core of the "interstate system" that was essentially complete by the late 1930s when President Franklin D. Roosevelt, BPR's MacDonald, and his key associate, Herbert S. Fairbank, began thinking about the next-generation interstate highways that President Dwight D. Eisenhower would launch by signing the Federal-Aid Highway Act of 1956.

As these stories of the National Road, the Federal-Aid Road Act of 1916, and Route 66 reveal, the anniversary year 2006 offers a reminder that the Interstate System was the product of a long evolution of America's road network.



MaryAnn Naber, FHWA

With the opening of I-40, many businesses on parallel Route 66 lost their customers, including these enterprises along Route 66 in Glenrio, NM, photographed in 1993.

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