

Pennsylvania Turnpike

1940



As states struggled financially to rebuild highways during and following World War I and the Great Depression, tolling became a way to finance large-scale projects, such as the Golden Gate Bridge and the San Francisco-Oakland Bay Bridge in California. By issuing bonds, a toll authority received funds from investors who would be repaid, with interest, from toll receipts. Some states created independent authorities to sell bonds and build toll roads.

1942 photo of truck leaving Laurel Hill Tunnel.

With help from federal funding sources, Pennsylvania sold sufficient bonds to open a 162-mile stretch of highway, called the Pennsylvania Turnpike, in October 1940. It was the first long-distance stretch of four-lane, limited-access (i.e., high speed) highway in the United States. The toll road was successful in drawing ridership and set the standard for the future design and construction of the superhighway; although many accidents occurred because of reckless speeding, as the speed limit was not enforced initially. Other states began considering construction of turnpikes, but America's entry into World War II put the ideas on hold for the duration.

The Pennsylvania Turnpike was built with 12-foot-wide lanes paved in concrete. It provided the design model for, and is termed the “granddaddy” of, the modern interstate system. The Pennsylvania Turnpike method of bond financing for the construction of expressways, with repayment through toll collection, would become a template that more than a dozen states followed before 1956, and it has been duplicated in multiple variations ever since.

“On this diamond jubilee, it’s easy to lose sight of just how revolutionary the nation’s first superhighway really was.”

—Richard Weingroff,
Federal Highway Administration,
in a 2015 article for *Public Roads*.



U.S. Department of Transportation
Federal Highway Administration

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Quick Facts

- A feasibility study for the Pennsylvania Turnpike began in 1934, and in 1937, Governor George Howard Earl III signed a bill creating the Pennsylvania Turnpike Commission to construct, finance, operate, and maintain the road.
- The construction of the turnpike was supported by the Works Progress Administration (WPA). The turnpike was financed by a loan from the New Deal's Reconstruction Finance Corporation for almost \$41 million at 3.75 percent interest. The WPA also provided another \$29 million in grants.
- The turnpike was the first large-scale construction project with consistent design standards, as opposed to previous piecemeal attempts to build roads through different areas. Plans called for a 200-foot right-of-way with two 12-foot lanes of travel provided in each direction with medians, berms, long entrance and exit ramps, banked curves, and separated grade crossings.
- Key features of the Pennsylvania Turnpike included four-lane concrete pavement throughout, a 10-foot median, 3 percent maximum grade, minimum sight distance of 600 feet, straightaways designed for 100 mph, and spiral curves superelevated to accommodate 70 mph. Easy grades were carved through valleys, ravines, and mountains, and almost 70 percent of the original turnpike was straight.
- The turnpike introduced many innovations, including laying out the route on southern exposures to let the sun heat the ice and snow on the roads and placing tollbooths on downhill grades to allow drivers time to react.
- The turnpike included over 300 bridges and culverts, nine interchanges, 10 service plazas, and 11 toll booths.
- There were 155 construction companies and 15,000 workers from 18 states under contract with the Turnpike Commission to construct the turnpike.
- For most motorists at the time, it was the first superhighway they could travel safely at high speeds on in their own cars. Terms such as “dream road” and “magic carpet ride” were used in the turnpike’s early years to describe the driving experience.
- The Pennsylvania Turnpike was a real-life example of what a superhighway could be, built within current budgets and using current engineering skills. The turnpike was, in short, an object lesson for those planning the next



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1942 photo (top) of toll booths at the Pennsylvania Turnpike.

1942 photo (above) of the four-lane concrete road of the Pennsylvania Turnpike.

generation of highways and was in part a template for the current Interstate System.

- In the following years, states across the country adapted the Pennsylvania Turnpike model to build their own turnpikes to meet growing demand. By January 1955, 1,239 miles of turnpikes had opened, 1,382 miles of toll roads were under construction, and plans or studies were underway for an additional 3,314 miles across the United States.
- With the passing of the Federal-Aid Highway Act of 1956, the Pennsylvania Turnpike was incorporated into the Interstate System while still charging toll, and it is currently a portion of I-76. Congress decided to incorporate the turnpikes and let them carry interstate numbers and shields rather than spending billions of dollars to retire the bonds (so the roads could become toll-free) or building parallel toll-free interstate highways.

Reference and Additional Information