

Celebrating A Double Anniversary

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Celebrating A Double Anniversary

by Richard F. Weingroff

In 2016, FHWA will commemorate two landmark laws that shaped America: 100 years of the Federal Aid Road Act of 1916 and 60 years of the Federal-Aid Highway Act of 1956.



Better Roads and Streets Magazine

During the early days of the Good Roads Movement that began in the 1880s, States held good roads days when rural residents came out to smooth or patch the roads in their area. This photo shows three Missouri officials on a gas traction engine during an August 1913 event. L–R: Governor Elliott W. Major, State Highway Commissioner Frank W. Buffum, and Representative Dorsey W. Shackleford, who would be instrumental in the congressional debate over good roads. More than 250,000 people participated in the 2-day event.

the 2-day event.

The Federal Highway Administration traces its origins to October 1893, when the U.S. Office of Road Inquiry opened in the U.S. Department of Agriculture with a \$10,000 budget and a Civil War hero, General Roy Stone, as chief. Today, with a budget of more than \$40 billion, FHWA works with its partners in State and

local governments, academia, contractors, and consultants to improve the road component of the Nation's intermodal transportation network.

To progress from 1893 to 2016, FHWA has benefited from dedicated leadership, a committed workforce, and dozens of Federal laws, all contributing to the agency's success. Many of those laws are worthy of landmark status, but two of them, the Federal Aid Road Act of 1916 and the Federal-Aid Highway Act of 1956, stand out as keys to the agency's success.

Looking back 100 years to the creation of the Federal-aid highway program in 1916 and 60 years ago to the launch of the interstate construction program in 1956, it is easy to forget that these landmark laws that shaped the agency, its legacy, and the United States were not foregone conclusions.

Part I: The Federal Aid Road Act of 1916

President Woodrow Wilson signed the Federal Aid Road Act of 1916 on July 11. The law established a partnership among Federal and State highway officials for "the construction of rural post roads," with "construction" defined as "reconstruction and improvement of roads." State highway agencies were to ensure that roads improved with Federal aid were "properly maintained." In addition, "all roads constructed under the provisions of this act shall be free from tolls of all kinds."

The act authorized \$75 million over 5 years to be apportioned among the States based on three equal factors: land area, population, and mileage of rural delivery routes and star (or contract) postal routes. The Federal share was a maximum of 50 percent. The act also authorized \$1 million annually for 10 years to improve roads and trails within or partly within the national forests "for the use or development of resources upon which communities within and adjacent to the national forests are dependent."

To satisfy Federal requirements, any State receiving funds needed to have a highway agency capable of administering projects. Out of the 48 States at the

time, 6 had no semblance of a State highway agency, while 9 others required additional legislation to meet the law's requirements.



Office of Public Roads and Rural Engineering



U.S. Office of Public Roads and Rural Engineering

Distributed in a 1916 publication of the U.S. Office of Public Roads and Rural Engineering, these before-and-after photographs showed the value of good roads. The images show Bonita Road in Lauderdale County, MS, in February 1912 and March 1913.

During the signing ceremony, President Wilson said he took "great pleasure in signing this bill...because it tends to thread the various parts of the country together and assists the farmer in his intercourse with others."

The *Washington Post* said at the time that the act "marks the beginning of a new era of domestic development in the United States, the beneficial effects of which will be felt by every citizen of the country." Those benefits were "beyond calculation."

The Federal-Aid Concept

The Federal-aid concept was based on the State-aid concept pioneered in New Jersey under a law approved on April 14, 1891. County officials initiated projects, subject to State oversight. New Jersey paid one-third, the adjacent property owners paid one-tenth, and the counties paid the remainder. Other States adopted variations of the concept.

U.S. Representative Walter P. Brownlow of Tennessee introduced the first Federal-aid bill in December 1902. At his request, M.O. Eldridge, deputy director of the U.S. Office of Public Road Inquiries, drafted a bill that proposed a Bureau of Public Roads to administer \$20 million a year in Federal aid to State or county governments on a 50–50 basis. Although President Theodore Roosevelt supported good roads, his administration opposed the Brownlow bill, which was never seriously considered in Congress.



Better Roads and Streets Magazine

Better Roads and Streets magazine published cartoons to celebrate the 1916 good roads law. The caption for this cartoon read: "Uncle Sam: 'Adopt him,

I'll pay half the expense.'"

During the next decade, Members of Congress introduced dozens of good roads bills. Some followed the Federal-aid idea, but others focused on an interstate network, or individual roads, that the Federal Government would build. The bills were referred to committee and were never heard of again. Congress was not ready.

Shaping the Future

During the 1910s, the question was what shape Federal involvement should take. Farm interests embraced Federal-aid for roads to move products to market. Farm-to-market roads also would help reverse the flow of population from farms to cities by improving the social and cultural life in rural areas.

Road Conditions as of January 1, 1915

Total Road Mileage: 2,445,761 miles (3,936,070 kilometers)

Total Surfaced Mileage: 257,291 miles (10.5 percent) (414,070 kilometers)*

Gravel: 116,058 miles (186,777 kilometers)

Macadam: 64,898 miles (104,443 kilometers)

Sand Clay: 44,155 miles (71,060 kilometers)

Bituminous Macadam: 10,500 miles (16,898 kilometers)

Concrete: 2,348 miles (3,779 kilometers)

Brick: 1,594 miles (2,565 kilometers)

Other: 17,738 miles (28,547 kilometers)*

*These totals do not include streets in incorporated cities and towns.

Source: Public Road Mileage and Revenues in the United States, 1914: A Summary, U.S. Department of Agriculture Bulletin No. 390, January 12, 1917, pages 3–5.

However, the auto industry, auto clubs, and others promoted hard-surfaced interstate and transcontinental highways. They argued that road policy should follow the pattern of railroad construction

in the 19th century, with trunk lines coming before short lines.

The Rental Plan

On March 29, 1912, U.S. Representative Dorsey W. Shackleford of Missouri introduced a bill that authorized \$25 million in Federal funds per year to “rent” the use of roads for rural free mail delivery by paying \$30 a mile for Class A roads (macadam), \$20 for Class B roads (gravel), and \$10 for Class C roads (dirt). On May 2, the U.S. House of Representatives passed the ABC rental plan, 240 to 86, as an amendment to the Post Office Appropriation Act of 1913.



U.S. Office of Public Roads and Rural Engineering

Roads had to accommodate a variety of traffic in all weather conditions. In March 1912, this school wagon carried 20 children from Dewitt, VA, 6 miles (9.7 kilometers) to school in the Dinwiddie Courthouse.

The Senate replaced the provision with one authorizing a joint committee to report on Federal assistance for roads. The House-Senate conference resolved differences in the bills by retaining the joint committee and adding a provision appropriating \$500,000 for an experimental program to improve post roads on which the delivery of mail “is or may hereafter be established.” President William Howard Taft approved the Post Office Department Appropriation Act on August 24, 1912.

Representative Shackleford tried again with a new version of his rental plan in 1914. This time, each Governor could choose the ABC rental plan or a

Federal-State partnership in road improvement. The House passed the Shackleford bill by a vote of 284 to 42. The Senate Committee on Post Offices and Post Roads substituted a plan based on the sale of bonds, selection of projects by a State highway agency, and establishment of a U.S. highway commission to oversee the work. Committee approval was the final step; the bill never reached the Senate floor.



Senator John H. Bankhead of Alabama introduced a modified version of a bill developed by the American Association of State Highway Officials that provided the basis for much of the Federal Aid Road Act of 1916.

The Findings

U.S. Senator Jonathan Bourne, Jr., of Oregon chaired the Joint Committee on Federal Aid in the Construction of Post Roads. (He lost reelection in 1912 but remained chairman at his own expense.) The

committee's January 1915 report stated that "when the United States Government undertakes so important a problem as that of Federal aid to good roads it should undertake it in a large way." To avoid besmirching "the good name of Congress," the report recommended that "great care be exercised to avoid...legislation that will prove by experience to be of the 'pork-barrel' character."

The report strongly endorsed Federal aid; however, the committee did not recommend a specific policy. It warned against Federal construction, arguing that good roads could be achieved "without building up an autocratic bureau vested with dictatorial power to which the road authorities of the United States would be subservient."

The experimental program for post roads delivered 457 miles (735 kilometers) of improved roads, but its real significance was that it convinced officials that Federal aid should be made available only to the States to avoid the complexities of dealing with 3,000 counties.

The Worst Good Roads Conference

When State highway officials formed the American Association of State Highway Officials (AASHO) in December 1914, one of their goals was to submit a good roads bill to Congress. Initially, AASHO collaborated with AAA on a good roads bill calling for a national system of highways. Midwestern AASHO members objected to the plan and the fact that they had not been consulted before it was submitted.

To settle the dispute, AASHO arranged a meeting of a subset of its executive committee for September 1915, just before the Panama-Pacific International Road Exposition in San Francisco. The exposition was one of the least successful good roads conventions, with low attendance and the absence of many scheduled speakers. One of the event's organizers, Logan W. Page, director of the Federal road agency, was one of those who did not deliver his own speech.

The subset of the AASHO committee consisted of George P. Coleman, chairman, Virginia; Henry G. Shirley, AASHO president, Maryland; Lamar Cobb, Arizona; Thomas H. MacDonald, Iowa; James R. Marker, Ohio; Joseph Hyde Pratt, North Carolina; W.D. Sohler, Massachusetts; and E.A. Stevens, New Jersey.

Despite the problems during the convention, the committee accomplished its mission on September 11. In *Building the American Highway System*, Professor Bruce E. Seely indicated that MacDonald, a friend of Page's, took the lead in ensuring that the bill proposed "a federal-aid plan congruent with Page's ideas." (Whether Page attended the meeting cannot be determined.)



Convict labor was a cheap source of men for road building. In December 1916, the U.S. Office of Public Roads and Rural Engineering published a 218-page bulletin on the subject. This photo shows the interior of a Virginia bunkhouse for convicts on the job.

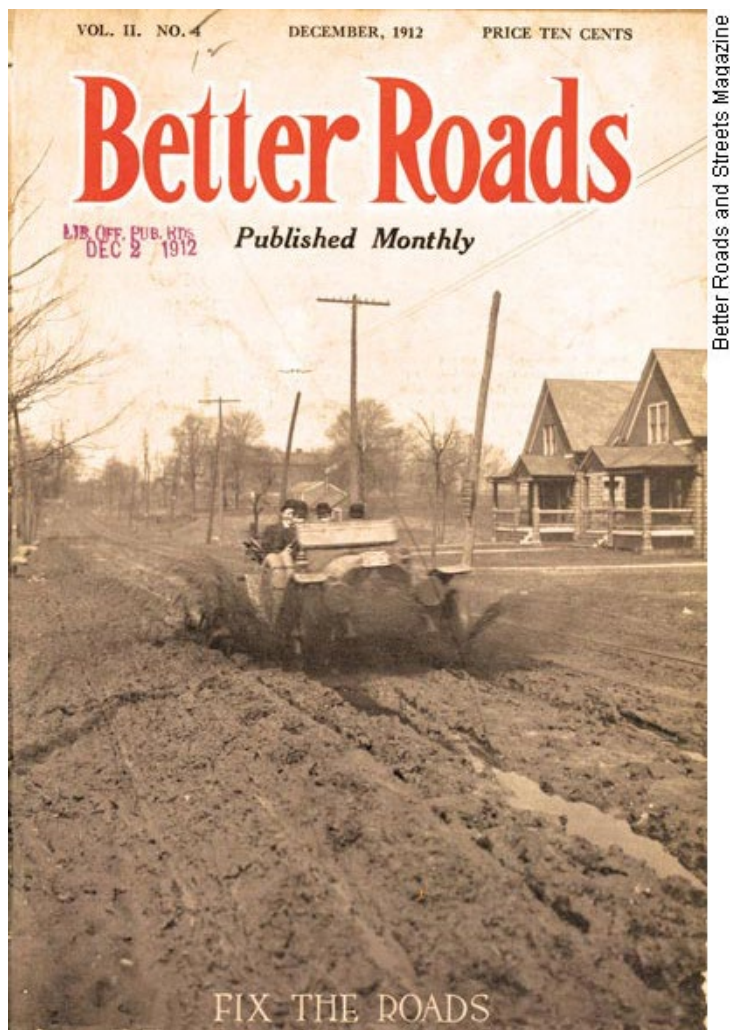
shows the interior of a Virginia bunkhouse for convicts on the job.

Stevens, who had been appointed by New Jersey Governor Woodrow Wilson, showed the bill to President Wilson to ensure his support before the full AASHO executive committee approved it. Senator John H. Bankhead of Alabama, chairman of the Committee on Post Offices and Post Roads, introduced the bill in the Senate.

The Shackleford Bill, 1916

Representative Shackleford dropped the rental plan from his new Federal-aid bill, which had its share of critics. For example, Representative Joseph Walsh of Massachusetts, a member of the Committee on Roads, was concerned that “any little cowpath or lane or alley,” as long as it was not in a city, “can receive Federal aid under this bill.” He knew the bill would pass because of the great demand from State and local officials “to reach into the Federal Treasury and extract funds therefrom.”

Another concern was that funds should not be diverted to good roads so soon after the war in Europe had prompted the country to enact an emergency revenue act almost equal to the amount in the roads bill. Despite such objections, the House approved the bill, 281 to 81, on January 25, 1916.



Magazines such as *Good Roads*, *Better Roads*, and *Southern Good Roads* promoted Federal involvement in road improvement. The Office of Public Roads

collected the magazines, including this copy of the December 1912 issue of *Better Roads*.

The editors of *Good Roads* magazine were not convinced that Congress had avoided “the usual drain of federal funds to provide ‘pork’” “...in view of the unsettled condition of foreign relations,” calling the Shackleford bill “a shrewd piece of partisan politics, and nothing more.” By contrast, *Southern Good Roads* magazine borrowed a phrase usually applied to fences to describe the bill as “horse-high, bull-strong, and pig-tight.”

The Bankhead Bill, 1916

Upon receipt of the Shackleford bill, Senator Bankhead’s Committee on Post Offices and Post Roads substituted the AASHO bill, which the committee had strengthened after a conference with the Department of Agriculture. The bill retained most of the AASHO provisions but had been modified, in part, on the advice of Page.

On May 8, the Senate approved the Bankhead bill without a recorded vote after several days of debate and amendment. Senator Thomas J. Walsh of Montana introduced an amendment on May 2 that authorized funds for forest roads and trails.

A House-Senate conference committee resolved differences between the bills on June 27, with Congress approving the legislation the same day. The approved bill mainly followed the Bankhead bill, with AASHO estimating that it had proposed 90 percent of the content.

Southern Good Roads said of the bill: “The Bill is as big as the great country it represents and as broad as the humanity it would serve. Its enactment will take the public highways out of politics and make them thoroughfares for commerce and industry instead of paths to public office.”

The Aftermath

American entry into World War I in April 1917

sidetracked the Federal-aid highway program. State and Federal highway agencies and construction contractors lost much of their workforce and construction materials that were needed to support the war effort. By July 1918, just a few months before the end of the war, the Bureau of Public Roads (as the Federal agency was called after July 1, 1918) had approved 572 projects, but only 5 projects totaling 17.6 miles (28 kilometers) had been completed.



Many rural areas used county patrolmen to travel a stretch of road regularly and make any needed repairs. These men from Franklin County, NY, received \$3 a day each, when they were needed.

After the war, the program's flaws were evident, particularly the limitation to rural post roads. This limit was burdensome for large western States where railroads, not motor vehicles, carried mail over long distances. Moreover, States tended to use Federal-aid funds in as many political subdivisions as possible (the pork barrel that critics had predicted), without regard for creation of a connected road system.

The long-distance road supporters advocated replacing the program with their favored approach using Federal construction of interstate roads. The rift between advocates of farm-to-market roads and long-distance roads ended with the Federal Highway Act of 1921, which limited eligibility for Federal aid to up to 7 percent of the roads in each State, with at least 60 percent of those roads required to be "interstate in character." This system orientation, which balanced interstate and farm-to-market interests, ended the rift

and became a central feature of the Federal-aid highway program for decades to come.

Part II: The Federal-Aid Highway Act of 1956

When President Dwight D. Eisenhower, known universally as Ike, signed the Federal-Aid Highway Act of 1956, he was probably in his pajamas. He was in his last day of a stay at Walter Reed Army Medical Center (now the Walter Reed National Military Medical Center) following surgery in June, and he had 27 bills to sign, which his aides split between morning and afternoon batches. President Eisenhower signed the Federal-Aid Highway Act without fanfare, a photograph, or a statement.

Press Secretary James C. Hagerty told reporters that the President “was highly pleased” about signing the legislation. Secretary of Commerce Sinclair Weeks said it launched “the greatest public-works program in the history of the world.”

The 1956 Act declared that early completion of the “National System of Interstate and Defense Highways” was “essential to the national interest.” It authorized interstate construction funds through fiscal year 1969 on a 90 to 10 Federal-State matching ratio to complete the network simultaneously in each State “as nearly as practicable” in 13 years.

After the first few years, the Bureau of Public Roads would apportion construction funds to the States based on the cost of completing the routes to full standards in each State compared with the national total. Turnpikes, built or planned, in designated interstate corridors would be incorporated at no cost to the Federal Government.

The act called for uniform design and construction standards to be agreed on by the Secretary of Commerce in cooperation with the State highway agencies. Interstate routes were to be adequate for traffic forecast for 1975. (Congress, in 1963, changed this requirement to 20 years after approval of construction plans.)

The Highway Trust Fund, created by the legislation, would pay for the interstate system and other Federal-aid highway programs. The U.S. Department of the Treasury would credit revenue to the new fund from Federal excise taxes, such as the gas tax, which was increased to 3 cents a gallon. This revenue had previously gone into the general Treasury without a link to highway programs.

In the mid-1950s, virtually no one opposed the interstate system. Why, then, was Congress unable to complete the legislation, as was widely expected, in 1955?



A 1919 trip across the country with a U.S. Army convoy convinced future President Eisenhower of the need for good, two-lane highways, but his observations of Germany's autobahn network (this stretch is from the Berlin-Munich section) convinced him of "the wisdom of broader ribbons across the land."

The Long Gestation Period

In 1938, Congress asked the Bureau of Public Roads to study the feasibility of a network of toll superhighways. In *Toll Roads and Free Roads* (1939), the bureau reported that only a few corridors had enough traffic to support financing superhighways by bonds to be retired by toll revenue. Instead, the bureau recommended a network of toll-free express highways, including freeways in cities to help relieve

congestion, limit suburbanization by making cities more attractive for residents and businesses, and restore municipal tax revenue by revitalizing decaying areas near the center city and promoting growth within the city limits.

Based on a second report expanding on the concept, *Interregional Highways* (1944), Congress in the Federal-Aid Highway Act of 1944 authorized the Bureau of Public Roads to work with the State highway agencies to designate a 40,000-mile (64,374-kilometer) “National System of Interstate Highways” linking principal metropolitan areas, cities, and industrial areas to serve the national defense and connect at suitable border points with Canada and Mexico. Congress did not include a financial program to pay for the new system.

After considering proposals by State highway officials, the Public Roads Administration (the bureau’s new name in the 1940s) designated 37,681 miles (60,642 kilometers) of the interstate system on August 2, 1947. The total included 2,882 miles (4,638 kilometers) carrying the routes through urban areas, but the Public Roads Administration reserved 2,319 miles (3,732 kilometers) for urban circumferential and distributing routes to be designated later after consultation with State and urban area officials.

In 1952, Congress authorized the first interstate construction funds: a token amount, \$25 million a year for fiscal years 1954 and 1955, to be expended using the 50–50 matching ratio. In 1954, Congress authorized \$175 million a year for fiscal years 1956 and 1957, and increased the Federal share to 60percent. Much more would be needed to make headway on the program.

The Grand Plan

When President Eisenhower took office on January 20, 1953, he had other things on his mind, such as the war in Korea and calls from his Republican colleagues to devolve many Federal programs, including the Federal-aid highway program, to the States.

Eisenhower had definite ideas about highways, however, based on his experience in 1919 with the U.S. Army's first transcontinental convoy of military vehicles and his observation of Germany's autobahn network of multilane, access-controlled freeways. In a post-White House memoir, he wrote, "The old convoy had started me thinking about good, two-lane highways, but Germany had made me see the wisdom of broader ribbons across the land."



Courtesy of Dwight D. Eisenhower Library

The day after signing the Federal-Aid Highway Act of 1956 at Walter Reed Army Medical Center, President Eisenhower and his wife Mamie left the hospital to continue recovery from surgery at Camp David. A photographer called out, "Give us that wave, sir." The weakened President replied, "All right, but only one."

Motoring Presidents

As biographer Gene Smith wrote, President Woodrow Wilson loved relaxing on chauffeur-driven rides around Washington: "In the afternoons when the weather was good, he and one or more of his womenfolk went riding in one of the White House Pierce-Arrows, big

open cars with right-hand drive and the President's Seal on the door. He mapped out a series of routes, and the chauffeur was not allowed to deviate from them: The Number One Ride, The Southern Maryland Ride, The Potomac."

Although President Dwight D. Eisenhower had been a motorist early in life, he spent the 1940s and 1950s being driven instead of driving. After two terms in the White House, he retired to his farm in Gettysburg, PA, but had a hard time adjusting to civilian life--to the little things he had not done on his own for 20 years. Biographer Stephen Ambrose reported that he had no idea how to make travel arrangements or pay tolls on the Pennsylvania Turnpike. When he wanted to go quail shooting in Augusta, GA, he told his friend Ellis Slater, "I can't drive all that way, and I'm just wondering how I'll get there." Slater arranged for a ride on a friend's airplane.

On May 6, 1954, President Eisenhower signed the Federal-Aid Highway Act of 1954, with its \$175 million a year for the interstate system. He hailed the legislation in public ("Our highways badly need modernization and expansion to accommodate today's vastly increased motor traffic"), but was running out of patience in private with the highway planning in his administration. He told his staff he wanted a "dramatic" plan for \$50 billion worth of self-liquidating highways with priority on interstates. By "self-liquidating," he meant a plan such as bond/toll financing that would not contribute to the deficit.

He planned to go public in an address on July 12, 1954, to the Nation's Governors. When the President was unable to attend after a death in the family, Vice President Richard M. Nixon addressed the Governors from the President's notes. The President wanted "a grand plan for a properly articulated system that solves the problems of speedy, safe, transcontinental travel--intercity communication--access highways--and farm-to-market movement--metropolitan area congestion--bottlenecks--and parking." He cited the penalties attributable to the Nation's deteriorating road conditions: the deaths of 40,000 people on the roads,

the waste of billions of dollars in congestion, the civil suits clogging the courts as a result of crashes, the reduction in efficiency in goods movement, and the “appalling inadequacies to meet the demands of catastrophe or defense should an atomic war come.”



On May 6, 1954, President Eisenhower held a signing ceremony, surrounded by Members of Congress, for the Federal-Aid Highway Act of 1954, which authorized \$175 million a year for 2 years for the interstate system.

The Governors, who were preparing their annual message on devolution of the Federal-aid highway program, were shocked by the speech, but after calming down, agreed to work with President Eisenhower on the Grand Plan. The President asked his friend, advisor, and former colleague, retired General Lucius D. Clay, to head an advisory committee to work with the Governors on a plan that would call on each level of government to upgrade the roads under its jurisdiction.

The President's Advisory Committee on a National Highway Program reported in January 1955. The committee estimated that the interstate system would cost \$27 billion. The price of the Governors' cooperation was a Federal share of 90 percent. The States' 10-percent share meant they would contribute only the dollar amount they were required to provide to match the \$175 million authorized in the 1954 Act on a 60–40 matching basis. They would not have to increase taxes to pay their share.

To pay for the interstates, a Federal highway

corporation would issue \$20 billion in long--term bonds to be repaid over 32 years (1956–1987). The corporation would retire the bonds by dedicating the revenue from the existing gas tax of 2 cents a gallon for this purpose. The corporation would have “a mandatory call” on the U.S. Treasury for loans up to \$5 billion to ensure investors of the ability to meet obligations.

President Eisenhower submitted the plan to Congress on February 22, 1955. His transmittal letter began, “Our unity as a nation is sustained by free communication of thought and by easy transportation of people and goods.” He urged Congress to approve the plan to give the country “a modern safe highway system.”

The Solid Foundation

In a prosperous post-war era of big cars and cheap gasoline (about 30 cents per gallon), motorists wanted the new freeways. Congress wanted to deliver the roads to constituents. City officials saw the freeways as providing relief from congestion. The U.S. Department of Defense supported the freeways for national and civil defense.

Even transit and railroad interests supported it. Transit, which was provided primarily by privately owned bus and streetcar companies except in a few big cities that also had subways, asked only to be exempt from the gas taxes that were to repay the bonds. Railroad companies did not want their competitors in the trucking industry to receive this new network but knew the program was too popular to kill. Instead of opposing it, railroads wanted highway user tax rates to reflect the cost of providing thicker pavements and stronger bridges to support the trucks that would use them. Both transit and railroads received what they wanted.

Woodrow Wilson Said

New Jersey Governor Woodrow Wilson addressed the American Road Congress meeting in Atlantic City, NJ,

on September 30, 1912, a few weeks before the election that would make him President of the United States. He said: "I tell you very frankly that my interest in good roads is not merely an interest in the pleasure of riding in automobiles. It is not merely an interest in the very much more important matter of affording the farmers of this country and the residents in villages the means of ready access to such neighboring markets as they need for economic benefits. But it is also the interest in weaving as complicated and elaborate a net of neighborhood and State and national opinions together as it is possible to weave."

President Dwight D. Eisenhower Said

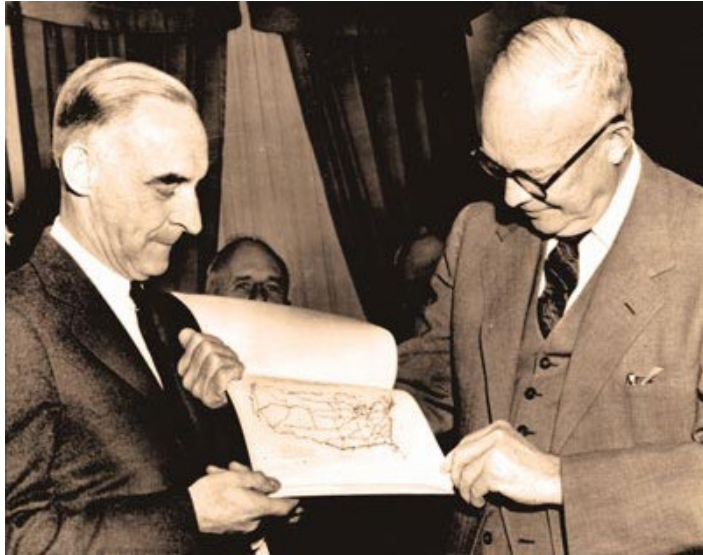
President Eisenhower, in transmitting his plan to Congress on February 22, 1955, said: "The Nation's highway system is a gigantic enterprise, one of our largest items of capital investment. Generations have gone into its building.... But, in large part, the network is inadequate for the nation's growing needs.... To correct these deficiencies is an obligation of Government at every level. The highway system is a public enterprise. As the owner and operator, the various levels of Government have a responsibility for management that promotes the economy of the nation and properly serves the individual user. In the case of the Federal Government, moreover, expenditures on a highway program are a return to the highway user of the taxes which he pays in connection with his use of the highways."

Surely, everyone thought, the plan would sail through Congress in 1955--and yet it failed dismally, even shockingly.

The Problem: How To Pay for It

In 1954, with Republicans in control of Congress, the Clay Committee could envision working on the financing plan with Senator Eugene D. Millikin of Colorado, the chairman of the Committee on Finance. However, the 1954 midterm elections gave Democrats control of both Houses of Congress. Perhaps if General Clay had known that Senator Harry Flood

Byrd of Virginia would become chairman, the committee might have changed the bond financing proposal. A highway booster during a long career in State and Federal offices, Byrd had become known for a trait that biographer Alden Hatch described as “an almost pathological abhorrence for borrowing that went beyond reason to the realm of deep emotion.”



Courtesy of Dwight D. Eisenhower Library

President Eisenhower asked his friend, colleague, and advisor, General Lucius D. Clay (Retired), to work with the Nation’s Governors to create a “self-liquidating” way of advancing the Grand Plan for highway development, including the interstate system. In January 1955, he delivered the plan to the President, shown here with Clay looking at a map of the proposed interstate system.

As the White House might have surmised, Byrd opposed the Clay Committee’s financial proposal, describing it as “thoroughly unsound.” He objected to the Federal Highway Corporation, which would issue long-term bonds outside the national debt limit, backed only by the U.S. Department of the Treasury, not the full faith of the Federal Government, and beyond congressional control. Retiring the bonds would require interest payments of \$11.5 billion that would benefit bondholders, not roads. He said, “You cannot avoid financial responsibility by legerdemain.”

Republican and Democratic leaders in Congress also were unenthusiastic about the financing plan. Critics considered it a “bankers bill” that would provide too

much benefit to investors at the public's expense. By March, *Engineering News-Record* told readers that Eisenhower's plan was in "a quickly developing political fight." In short, the plan was "in trouble--bad trouble."

Looking for a Solution

In February, Senator Albert Gore of Tennessee, chairman of the Subcommittee on Roads, introduced the Federal-Aid Highway Act of 1955 that would authorize the Federal-aid highway program. Because one of the "most important objectives" was prompt completion of the interstate system, the bill authorized \$7.75 billion in construction funds over the 5 years covered by the bill, with a Federal share of 90 percent. The Gore bill was silent on the source of the funds--the most controversial point of the President's plan--because the Constitution required the House to originate tax measures. The Senate approved the Gore bill on May 25, 1955, after rejecting a motion, by a vote of 31 to 60, to substitute the Administration's bill.



Senator Albert Gore (TN), chairman of the Senate

Subcommittee on Roads, was one of the three primary authors of the Federal-Aid Highway Act of 1956. His son, Al Gore, would become Vice President (1993–2001).

Representative George H. Fallon of Maryland was chairman of the Subcommittee on Roads in the House. After the Senate rejected the Administration's bill, he looked for an alternative. To help in this effort, he received permission from Speaker of the House Sam Rayburn to include tax measures in the bill that under House protocol would normally originate in the House Ways and Means Committee.

Instead of the Clay Committee's upfront financial plan, the Fallon bill adopted a pay-as-you-go approach by basing financing on highway user taxes, including a penny increase in the gas tax to 3 cents and increased taxes on truckers. With the increased revenue, the renamed "National System of Interstate and Defense Highways" could be built in 12 years with a Federal share of 90 percent.

Although the interests that would be taxed, particularly the truckers, criticized the plan, everyone expected Fallon's Federal-Aid Highway Act of 1955 to pass.

On July 26, the House voted 178 to 89 against a plan to expand highway construction without specifying a way of paying for it. That was expected. Next, the House defeated a motion to substitute the Administration's bill. Again, no surprise.

The House then rejected the Fallon bill, 123 to 292, much to the shock of observers. The *New York Times* called "the one-sided defeat of the Democratic measure one of the session's biggest upsets for the party's House leaders." The defeat was even more astonishing because debate during the day had been objective and sincere, but even strong supporters of the highway program voted against the Fallon bill.

Many people blamed the truckers. Representative Fallon, for example, received more than 100,000 telegrams from truckers objecting to the added taxes. Representative Carl Albert of Oklahoma, the

Democratic Whip, said, “They are the ones that would get the most commercial benefit from the program. Yet they are the ones who killed the bill.”

Other commentators suggested that politics played a role because Democrats were hesitant to approve a popular program that President Eisenhower could take credit for during his 1956 re-election bid. Still others thought the breach of protocol that allowed the Public Works Committee to draft the tax measures prompted many to vote against the bill.



After winning election to the House in 1944, Representative George H. Fallon (MD) devoted much of his career to road legislation. As chairman of the House Subcommittee on Roads in 1955–1956, he was one of the main authors of the Federal-Aid Highway Act of 1956. Despite his pivotal role in the history of the interstate system, he disliked freeway driving.

In the aftermath, Speaker Rayburn made it clear that

“there is no chance of getting a bill up this session--none whatever.” The House adjourned for the year on August 2 without revisiting the roads bill.

President Eisenhower was as surprised as anyone about the failure. “The nation badly needs new highways...but contention over the method should not be permitted to deny our people these critically needed roads.” He “devoutly hope[d]” Congress would reconsider. Aides advised him to call Congress back for a special session on the bill, but in his memoir, Eisenhower repeated his answer: “‘Well,’” I said, somewhat ruefully, ‘the special session might be necessary--but calling it could be at the cost of the sanity of one man named Eisenhower.’ There was no sense in spending money to call them back when I knew in advance that the result would be zero.”

Journalist Theodore H. White observed that backers of the interstate system had learned a simple truism about roads: “For the politics of American highways has always been dominated by one overwhelming truth: everyone loves roads, but no one wants to pay for them.”

Success in 1956

In the aftermath of the 1955 shock, prospects for success in 1956 did not appear good. As Representative Fallon put it in August 1955, “If they wouldn’t vote for taxes to pay for highways this year, how can they be expected to in 1956, an election year?”

Still, by 1956, much of the controversy was gone.

In September 1955, the Bureau of Public Roads released maps depicting interstate networks in major cities. These maps completed the 40,000-mile (64,374-kilometer) interstate system that Congress had authorized in 1944. The maps let Members of Congress from urban areas see what they would receive in return for their vote.

Perhaps the most important change since 1955 was that, over the winter, AASHO and other highway

interests had met with White House officials, congressional leaders, and industry groups. These efforts led to compromises on taxation that would be tolerable to all parties. Even the truckers agreed to a tax increase, although smaller than in the Fallon Bill. William Belson of American Trucking Associations, explained, “We’re not such stupid idiots as to be opposed to a road program we need as much as anyone else.”

On January 5, 1956, President Eisenhower said in his report on the State of the Union that approval of the interstate system was “even more urgent this year than last.” The country had fallen another year behind in providing roads “for the personal safety, the general prosperity, the national security of the American people.” He said, “The whole interstate system must be authorized as one project, to be completed approximately within the specified time” and within “the bounds of sound fiscal management.”

On January 26, Representative Fallon released his new bill authorizing \$24.8 billion to complete the interstate system in 13 years. Per House protocol, he did not include the tax changes needed to reach that amount. The House Ways and Means Committee would have to come up with a way to link the revenue from highway user taxes to the highway program.

President Eisenhower accepted the pay-as-you-go financing because, as he explained in his memoir, “I grew restless with the quibbling over methods of financing. I wanted the job done.”

Representative Hale Boggs of Louisiana found the solution to linkage during a hearing when Secretary of the Treasury George M. Humphrey suggested using the Social Security Trust Fund as a model. Representative Boggs developed legislation creating the Highway Trust Fund linked to the taxes all parties had accepted, and the last critical piece was in place.



Courtesy of Dwight D. Eisenhower Library

Shown here with President Eisenhower, Representative T. Hale Boggs (LA) developed the legislation creating the Highway Trust Fund, the key to financing construction of the interstate system. In addition to serving on the Ways and Means Committee, Boggs would rise to House Majority Leader, the position he held in October 1972 when a plane in which he was a passenger went down in Alaska, killing all aboard.

With Representative Boggs' Highway Revenue Act of 1956 added to the Fallon bill as Title II, the House approved the measure on April 27 by a vote of 388 to 19.

The Senate sent the Fallon bill for committee review. In the Finance Committee, Chairman Byrd was pleased by the tax-based, pay-as-you-go plan but concerned that expenditures might someday exceed income. Here was an issue--debt!--that he could not ignore. He added what became known as the Byrd Amendment. If the balance in the Highway Trust Fund could not meet required expenditures, apportionments to the States were to be reduced on a pro rata basis to eliminate the deficiency.

After the Senate approved the revised bill by voice vote, a conference committee reconciled differences between the Senate and House bills. On June 26, the

Senate approved the bill 89 to 1, with Senator Russell Long of Louisiana being the lone negative vote. The House approved the bill by voice vote. With that, the bill was ready to be signed by a highly pleased President Eisenhower on June 29, 1956.

Beyond Calculation

The Federal-Aid Highway Act of 1956 launched a Federal-State partnership to build a network that has become integral to the Nation's mobility, economic competitiveness, national defense, and way of life. One of its surprising features has been its flexibility in accommodating changes in population (about 170 million in 1956 to 322 million in 2015), where people live (north to south, city versus suburban), and shifts in the economy (industrial to service-based in a global marketplace). Nevertheless, the interstate system has been criticized on a range of subjects, including adverse impacts on cities, the environment, and transit.

Today, the Dwight D. Eisenhower National System of Interstate and Defense Highways is nearly 47,000 miles (75,639 kilometers) long, but regularly grows despite a lack of special funding for new routes. Seeking economic and mobility advantages, States use other funds to build roads that meet interstate standards and would be a logical connection or addition to the network. Under Federal law, FHWA can approve these segments as part of the interstate system.

President Eisenhower, in his memoir, predicted that the system would "change the face of America," and its economic impact would be "beyond calculation" (by coincidence, the same phrase *The Washington Post* had used to describe the impact of the 1916 Act).

The impact of these two landmark acts may be incalculable, but they helped make the United States the most mobile country in history.

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