The Federal-Aid Highway Act of 1956 and the Interstate Highway System in the United States

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Abstract

Construction of the interstate highway system in the United States began in the mid-20th century as a result of persistent legislation and the determination of President Eisenhower. Though not yet entirely complete, this was the most substantial road-building program in the history of the United States. The endeavor was approved by the Federal-Aid Highway Act of 1956 (better known as the National Interstate and Defense Highways Act), but earlier legislation was also responsible for its ultimate fruition. While the legislative history is complex and the public law of 1956 contained many provisions, this paper intends to explore why the system was necessary, how the undertaking was accomplished, and will also briefly summarize the legislation which authorized the project.

Methodology

Basic information about this complex topic was first located on the internet via particularly helpful sites such as the U.S. Department of Transportation (Federal Highway Administration), the National Atlas, and the Dwight D. Eisenhower Presidential Library & Museum which contained a digital archive of documents related to the Interstate Highway System. Subsequently, legislative materials (bills, acts, reports, and hearings) were consulted at the Alexander Library at Rutgers University. Lastly, reports of the Department of Commerce, journals and reports of the Federal Highway Administration, and maps were also examined.
On July 11, 1916, the Federal-Aid Road Act was passed in order to improve the nation’s roads. Most “roads” during this time were nothing more than trails—they were not paved, were dusty during dry weather, and they were extremely muddy during wet weather. Roads were either a state or county’s responsibility and therefore many routes became overly neglected. In the early 1890s, when the bicycle became a popular means of travel, states began attempting to address the issue and as a result, the federal government established the Office of Road Inquiry in 1893 to provide road-improvement advice to states.¹

During the early 1900s, the Office of Road Inquiry deemed that the federal government should offer monetary aid to the states, but this notion was dismissed in the Congress. Other similar bills were subsequently presented and also rejected. However, significant events would soon transpire: a Supreme Court decision of 1907 which ruled that the federal government had the power to build interstate highways, the introduction of Henry Ford’s Model-T in 1908, the formation of the American Automobile Association, the creation of the American Association of State Highway Officials in 1914, and the increased presence of the Office of Public Roads.²

In 1913, Congress passed the problematic Post Office Department Appropriations Bill which was aimed to improve postal roads by providing monies not only to states, but to counties as well. The next important piece of legislation

² Ibid.
was the Federal-Aid Road Act of 1916 which would furnish each state with a highway agency with engineering professionals to achieve federal-aid projects. Only $5 million was utilized for road construction the first year, the progress was slow, and then another setback occurred—the United States entered World War I. While military supplies for the war effort were initially being transported via the railroads, the trains just could not keep pace with the amount of freight and congestion and delays ensued. As a result, the trucking industry proceeded to transport supplies but their heavy loads damaged the nation’s roadways even further.

A few years afterward, the Federal Highway Act of 1921 would curtail federal aid to a system of federal-aid highways, and this system would not exceed seven percent of all roads in a given state. Two years later, the Bureau of Public Roads finalized the federal-aid system which then measured 272,000 kilometers. Construction projects progressed throughout the 1920s but were significantly impacted during the next decade by the Great Depression.

In 1935, a section of the autobahn in Germany was completed and was inspected by federal officials and engineers from the United States. While they found both positive and negative aspects of the autobahn, nevertheless they came away with new inspiration and ideas. President Roosevelt believed a system of “super highways” was necessary and that its construction would put

\[3\text{ Ibid.}\]
\[5\text{ Ibid.}\]
many unemployed people to work. The Federal-Aid Highway Act of 1938 authorized the director of the Bureau of Public Roads (later to renamed the Public Roads Administration) to examine the viability of a six-route network and ultimately produced a two-part report. President Roosevelt consequently presented the report to Congress and in 1941 he appointed a National Interregional Highway Committee which then produced a report which also recommended an interregional highway system.\(^6\)

The next legislative action was the Federal-Aid Highway Act of 1944 which called for a 65,000 kilometer National System of Interstate Highways. States subsequently submitted suggestions as to which roads should be included in the interstate system. Construction was slow, some states considered the federal aid to be too little, and by 1950 the country was involved in the Korean War. Two years later, the Federal-Aid Highway Act of 1952 approved $25 million for construction of the interstate system and half of funds were to be matched by the states.\(^7\)

Although successive legislation took place during the first half of the 20\(^{th}\) century, development of the interstate system was slow and by 1953, the year that Dwight Eisenhower was inaugurated, only 24% of the routes were considered sufficient for increased traffic. Eisenhower was a driving force behind the Federal-Highway Act of 1954, which approved $175 million towards the construction of the interstate system. However, the formula used to calculate aid

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\(^7\) Ibid.
would be different this time and would take the following factors into consideration: a state’s population, roadway distance, and land area.⁸

Even with the Federal-Aid Highway Act of 1954, there was still much disagreement about how road construction would proceed and how it would be financed. Stalwart that a road building program would be realized, President Eisenhower called for a “dramatic” strategy of “self-liquidating” highway construction.⁹ He believed that roads could be financed in a way that would not be contributory to the national debt.

In February of 1955, President Dwight Eisenhower addressed the Congress and provided several reasons why a highway program was of utmost importance. While a highway system would not only facilitate communication and travel, it would enable hasty evacuation in case of a nuclear attack. Additionally, highways would remedy foreseen congestion and traffic delays. The President reiterated the necessity for sensible program and provided a proposal of how it would be financed. The highway system would “and should stand on its own feet.”¹⁰

In 1956, President Eisenhower again fervently called for a modern highway system, this time in his State of the Union address on January 5th. Eisenhower asserted that the infrastructure was “needed for personal safety, the general prosperity, [and] the national security of the American people.”

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⁸ Ibid.
President pointed out that in 1956 alone the number of motor vehicles on the roads increased from 58 to 61 million and that a total of 38,000 persons had lost their lives as a result of highway accidents. Eisenhower called for a “vital 40,000 mile interstate highway system over a period of 10 years at a cost of $25 billion.”

The time had come for a compromise. On January 26, 1956, George Fallon (D-MD), the chairman of the Subcommittee on Roads in the House Committee on Public Works, introduced HR 8836 (The Federal-Aid Highway Act of 1956), a bill that would supplement the Federal-Aid Road Act of 1916 by authorizing appropriations for road construction. The bill was co-authored by Senator Albert Gore Senior (D-TN), whose son later became the nation’s Vice-President. The measure authorized $24.8 billion for the system of highways over a 13-year period.

Just a few days later, on February 6th, T. Hale Boggs (D-LA) of the Ways and Means Committee introduced HR 9075, the Highway Revenue Act of 1956, which would conserve highway taxes collected solely for road construction. Hearings on HR 9075 were held February 14-21 in the House and several individuals (George M. Humphrey, Secretary of the Treasury; Matt Triggs, American Farm Bureau Federation; Jack G. Scott, National Association of Motor Bus Operators; and others) provided testimonies expressing their opinions that

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12 Hearings before the Subcommittee on Roads of the Committee on Public Works, House of Representatives, 84th Congress, Second Session on HR 8836. (1956). Washington: GPO.
the bill would bring about additional financial burdens. Truck taxes were debated on February 17-21 and then one month later, HR 9075, the Highway Revenue Act of 1956, was approved with amendments. The following proposals were agreed upon: gasoline taxes were to be increased from two to three cents a gallon for highway vehicles (local transit vehicles were excluded), tire taxes were to be increased from five to eight cents per pound and a new three cent tax would be imposed on retread material, a highway trust fund would be created, and manufacturers’ tax on trucks, trailers, and buses would be increased to 10 percent. Other taxing mechanisms and a report to be completed by the Secretary of Commerce were also anticipated. 14

Subsequently George H. Fallon introduced the Federal Highway Act of 1956 (H.R. 10660) in the House of Representatives on April 19th. The bill incorporated Fallon’s earlier piece of legislation as Title I and Boggs’ bill as Title II. The measure would authorize a 65,000 kilometer interstate highway system to be constructed over a 13-year period. The undertaking would be financed 90% by the federal government at a cost of $24.8 billion. Fallon’s proposed increased gasoline taxes and levies on truck tires to fund the program. 15

On April 27, the bill passed the House by a vote of 388 to 19. The measure was afterward presented to the Senate, where it was reviewed by the Senate Finance Committee. At that time, Secretary George Humphrey informed Chairman Harry Flood Byrd (D-VA) of his worry that costs might eventually exceed income. Senator Byrd was extremely opposed to deficits of any kind and

15 Ibid., p. 402-403.
in response to Humphrey’s concern he crafted a stipulation that would later be known as the Byrd Amendment. This stated that if the balance in the Highway Trust Fund was insufficient to meet highway costs, the Secretary of Commerce would be authorized “to reduce the apportionments to each of the States on a pro rata basis to eliminate the estimated deficiency.”

The Committee on Public Works reported on HR 10660 by an 11-2 vote on May 10th. At this time, the committee increased the mileage of the Interstate System to 42,500 miles. Subsequently, the Committee on Finance held hearings on May 17-18 at which time Secretary of the Treasury George Humphrey still expressed some hesitation and stated the need for amendments in his testimony. As a result, tax amendments were approved on May 25th.

On May 28-29th, the Federal-Aid Highway Act of 1956 was debated in the Senate during a 14-hour session. The Senate finally passed the bill by voice vote on May 30th and authorized federal expenditures of $28.88 billion. Subsequent hearings took place and to the surprise of many, reconciliation was offered on June 25 (H Report 2436). Federal spending would amount to $24.825 billion, non-highway users would be exempt from taxes, and state costs would be based on estimates for 1958. The next day, the Senate passed the measure by a vote of 89 to one. Senator Russell Long (D-LA) was the sole opponent who disagreed with the gas tax increase contained in the bill.

16 Ibid. p. 403.
Three days later, while President Eisenhower was recovering from an intestinal ailment at the Walter Reed Army Medical Center, he signed the Federal-Aid Highway Act of 1956 (Public Law 84-627). It was anticipated that the 41,000-mile system of roads would connect approximately 90 percent of all cities which contained populations of over 50,000.19

On June 29, 1956, the Federal-Aid Highway Act was enacted. The legislation intended to complete as much of a highway system simultaneously as possible over a 13-year period. A Highway Trust Fund was to be established and funds were to be allotted as follows: one billion dollars through June 30, 1957; $1.7 billion the following fiscal year; and two billion dollars in subsequent years. The Secretary of State would be authorized to make right-of-way arrangements and whenever individual states needed to relocate utility facilities, they would be reimbursed by the Federal government.20 One hundred percent of collected gasoline taxes would be placed into the Highway Trust Fund where funds would be collected for future road building expenses.21

The system of interstate and defense highways was increased from 65,000 kilometers to 66,000 kilometers. Soon after, another bill was introduced which stated that the head of the Bureau of Public Roads would be appointed by the President, and that the individual would also be a Federal Highway Administrator.

By August 16, 1956, significant headway had taken place. President Eisenhower received a progress report from Secretary of Commerce Sinclair Weeks and was very pleased with the state of highway planning. Weeks informed the President that several days after the bill was passed, the state highway departments adopted the standards for the improvement of the Interstate System. Weeks also notified the President that the first contract being funded by the Federal-Aid Highway Act of 1956 was given by the Missouri State Highway Department in early August.\(^2\)

In the autumn of that year, President Eisenhower selected Bertram D. Tallamy, the Superintendent of Public Works in New York and the chairman of the New York Thruway Authority, as the Federal Highway Administrator of the Bureau of Public Roads. Tallamy would not be able to take office until February of the following year and an interim administrator, John A. Volpe, was selected.

In August of 1957, the AASHO revealed the interstate highway numbering scheme and adopted today’s well-recognized blue, red, and white interstate shield. Even numbered routes would run east and west and odd numbered highways would run north to south. Major interstates would be assigned a one or two digit number while supplemental routes or connectors would have a three-digit number.

By the end of the 1957 fiscal year, $1,482,019,052.61 had accumulated in the Highway Trust Fund. Meanwhile, total expenditures for that year totaled

$965,683,563.53. However, not long afterwards, highway construction problems began to surface. The planned urban routes were causing conflict, some states detected deception, the funding mechanism was undermined, and then a recession would hit the country in 1958.

As a result, President Eisenhower somewhat apprehensively signed The Federal-Aid Highway Act of 1958, a measure which augmented Interstate authorizations from $6.4 billion to $7.2 billion during that period and which also discontinued the Byrd Amendment. Although he expressed hesitation about increasing funding, he believed this was the only way to hasten highway construction which would consequently put more people to work.

Why was financing such an issue? A variety of reasons have been identified over the years. Firstly, the total estimate of highway construction was considerably skewed, since the cost calculated in 1956 was based on a report submitted to Congress a year earlier by the Bureau of Public Roads. Secondly, this initial report proposed the construction of 60,697 kilometers of highways, although the act of 1956 called for 66,000 kilometers of roads. Additionally, the BPR report of 1955 approximated that 11,270 kilometers of roads would provide two lanes for traffic. However, the BPR and the AASHO later devised higher roadway standards and determined that most of the highways would require four lanes in order to accommodate the increasing number of vehicles on

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26 Ibid.
the roads (the Federal-Aid Highway Act of 1966 would later require all interstates to have at least four lanes).\textsuperscript{27}

An attempt to remedy the situation occurred with the endorsement of the Federal-Aid Highway Act of 1959, which stepped up the gas tax from one cent to four cents through June of 1961. The bill also decreased authorizations for Interstate construction to $2 billion for 1961. Since another Presidential election was to take place in 1960, these were viewed as short-term answers. During this time, President Eisenhower was shocked and troubled when he learned that his program included urban freeways, which were proving to be extremely costly. Eisenhower had always imagined freeways that would go around cities rather than traverse them. He demanded a review of this issue and selected General John S. Bragdon to evaluate the program, but the final report was largely inconsequential and was ultimately forgotten.\textsuperscript{28}

By 1960, highway construction had slowed and was still plagued with financial dilemmas. The Federal-Aid Highway Act of 1960 approved monies for the portions of the Federal-Aid Highway Program not associated to Interstate funding. After the election of John F. Kennedy, this was followed by the Federal-Aid Highway Act of 1961 which augmented Interstate funding, amended the authorization schedule through the year 1971, preserved the 4-cent gas tax which earlier was only supposed to be imposed until 1961, and also modified


\textsuperscript{28} Ibid.
other highway taxes to satisfy the project’s financial requirements.29

When Eisenhower left office, he was satisfied with the program and the progress of construction. By this time, approximately 25% was completed for user travel. While Eisenhower was clearly pleased, the project was met with discontent from some critics. Homes and businesses had to be relocated and there were incessant accusations of waste and fraud. In response to growing disapproval, the Bureau of Public Roads initiated a media campaign in order to promote the project’s great benefits. During this time, the BPR released a video entitled *The Road to Prosperity* (ca. 1961) which documented the successes of Interstate-35 in Kansas City. The promotional video boasted how the interstate drew in factories and new industries, supplied people with jobs, accommodated the transportation of freight via trucks, created new shopping centers and housing developments, decrease travel time, and prompted urban renewal.30

The first project funded by the Federal-Aid Highway Act of 1956 was U.S. 40 in Missouri (later renamed 1-70 Mark Twain Expressway). It was a joint decision by the Bureau of Public Roads (BPR) and the American Association of State Highway Officials (AASHO) which authorized the AASHO to assign numbers to the highways, but final approval must now be granted by the Federal Highway Administration. Meanwhile, the first roadway completed under the provisions of the act was a portion of U.S. 40 in Kansas since the final paving

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contract was funded under the new law.\textsuperscript{31}

Over time, The Highway Trust Fund grew steadily and reached $8 billion by 1980. Two years later, The Surface Transportation Act of 1982 would increase motor fuel tax from four cents to 9 cents.\textsuperscript{32} On October 15, 1990, President George H. W. Bush signed Public Law 101-427, an Act to redesignate "The National System of Interstate and Defense Highways as The Dwight D. Eisenhower System of Interstate and Defense Highways."\textsuperscript{33} Five years later, President Clinton signed the National Highway System Designation Act of 1995. This measure designated 160,955 miles of roads as the National Highway System (NHS) and permitted the distribution of future NHS and Interstate Maintenance (IM) funds to the states.\textsuperscript{34}

Presently, the Interstate System spans 46,876 miles. It is owned and operated by the states, with the exception of one segment (the Woodrow Wilson Memorial Bridge over the Potomac River) which is owned by the federal government. While the Federal-Aid Highway Act of 1956 was both preceded and succeeded by numerous pieces of highway legislation, on its own it was a significant measure which stimulated the largest highway building program in the United States. It received perpetual support from President Dwight Eisenhower who not only recognized the inadequacies of the nation’s roads, but also foresaw

unavoidable future problems: increased cars on the roads, congestion, more deadly accidents, deficient transport of goods, and inability to mobilize in the event of a war.

The Federal-Aid Highway Act of 1956, also known as the National Interstate and Defense Highways Act, represented a necessary compromise in Congress which expressed a commitment to developing the nation’s highways. The “pay-as-you-go” program would be funded by user taxes which would be collected into a Highway Trust Fund so that the country would not incur any debt. The legislation was vital towards creating a modern highway system and it was President Eisenhower who aptly recognized that trucks and other vehicles would be an integral part of the future development of the United States.
Bibliography


