Origins Of The Interstate Maintenance Program

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Origins Of The Interstate Maintenance Program

by
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> *Every President and succeeding Congresses have honored the strong bipartisan commitment to the Interstate System that was reflected in the Federal-Aid Highway Act of 1956 signed by President Dwight D. Eisenhower. That commitment continued through the construction stage, but evolved to include a strong desire to preserve the taxpayers' investment in the Interstate System by helping the States keep the network in shape. Although the Interstate System envisioned by the Federal-Aid Highway Act of 1956, as amended, is essentially complete, the commitment to preserving the Nation's investment remains strong.*

"The state of our transportation system affects
our commerce, our economy, and our future."

President Ronald Reagan

Although the origins of the Interstate System can be traced to the late 1930s, the Federal-Aid Highway Act of 1956 launched the Interstate Highway Program. This legislation authorized Interstate Construction (IC) funds for use at a Federal-State matching ratio of 90-10. It also committed the Federal Government to a cost-to-complete philosophy of paying 90 percent of the cost to build the Interstate System to full standards, whatever the cost turned out to be.

One thing the landmark 1956 Act did not do was provide for maintenance of the Interstate highways. This is not surprising. Since the Federal-aid highway program began in 1916 under President Woodrow Wilson, the States had been responsible for maintenance based on the concept that the States own and operate the roads. Because the Interstate routes were to be owned by the States and built by the State highway agencies (with Federal funding assistance and oversight), the 1956 Act retained the long-standing premise that the States would maintain the new highways.

Further, the 1956 Act focused on initial construction to Interstate standards. The legislation did not provide for upgrading the Interstates to meet changing demands or wear and tear years after they were built. Again, not surprising. Just as a person who builds a new home does not begin putting money aside for a new roof, the Members of Congress trying to find $27 billion to build the Interstate System did not worry about what would happen after years of heavy-duty service.

War Half a World Away Stuns the USA

By the 1970s, the Interstate System was showing signs of wear and tear. Part of the problem was that pavements built in the 1950s and early 1960s were reaching their design life (the number of years a pavement is expected to last, with proper maintenance, based on estimates of the loadings it will absorb during that time, particularly truck loadings). Because the Interstates were carrying more and heavier traffic than predicted, many segments absorbed 20 years of wear and tear in far fewer years than expected.

In October 1973, oil-producing countries in the Middle East, eventually working through the Organization of Petroleum Exporting Countries, announced they would stop oil exports to the United States to protest American support of Israel during the Six-Days War. The resulting oil shortages in the United States led to long lines at gas stations and higher prices for fuel, prompting the country to seek ways to reduce oil use.

Although the oil boycott ended in March 1974, the shock of dealing with the problem made clear that the country would have to reduce its dependence on foreign oil. As a result, conservation efforts continued through the 1970s, with a second shortage and panic in 1979 related to the Iranian Revolution reinforcing the need to reduce dependence on foreign oil. People continued carpooling, using transit, or riding bicycles instead of single-occupant automobiles. Automakers joined their Asian competitors in producing vehicles that were smaller and more fuel-efficient than the "gas-guzzlers" that had been common in an era of cheap gasoline. To help conserve gasoline, Federal legislation enacted in January 1974 prohibited Federal-aid highway project approvals in any State that did not adopt a maximum speed limit of 55 miles per hour - a speed that uses fewer gallons of gas per mile than the higher speeds common at the time. (This restriction would not be fully lifted until 1995.)

America's vitally important effort to reduce oil dependency had the unintended consequence that the reduced use of gasoline resulted in declining gas tax revenue for highway construction and maintenance. Further, because oil is a component in the cost of highway construction and maintenance, costs were increasing at the same time revenue was reduced or at least not increasing as rapidly as expected. Many States had to make tough decisions about how the available gas tax revenue would be used. The result in many cases was that maintenance suffered. In addition, high inflation resulting from economic policies of the 1960s and the increased price of gasoline rippling through the economy resulted in an unusual case of "stagflation" (a stagnant economy with high inflation).

At all levels of government, resources for infrastructure construction and maintenance suffered. As maintenance declined, the media focused attention on the Nation's "crumbling infrastructure," with deteriorating highways, including Interstates, and bridges adding evidence to the growing sense that the Federal Government should do something to reverse the trend.

3R to the Rescue

The Federal-Aid Highway Act of 1976 took the first step in addressing the problem for the Interstate System. It authorized $175 million a year for fiscal years 1978 and 1979 "for resurfacing, restoring, and rehabilitating those lanes on the Interstate System which have been in use for more than five years and which are not on toll roads." The Federal share would be 90 percent. The 1976 Act also modified the statutory definition of Federal-aid "construction" to include "resurfacing, restoring, and rehabilitating." As a result, activities that had been considered "heavy maintenance" and, therefore, ineligible for Federal-aid funding became eligible, whether on and off the Interstate System.

The Conference Report on the 1976 Act explained the intended eligibility limits:

> The addition of the word "resurfacing" will make clear that Federal-aid funds may be used to restore existing roadway pavements to a smooth, safe, usable condition even though further reconstruction is not feasible. "Resurfacing" may be expected to include strengthening or reconditioning of deteriorated or weakened sections of existing pavement, replacement or malfunctioning joints, pavement undersealing, and similar operations necessary to assure adequate structural support for the new surface course.
>
> The definition as amended, coupled with the Secretary's existing authority on standards, would permit Federal funding of such projects as: resurfacing or widening and resurfacing, of existing rural and urban pavements with or without revision of horizontal or vertical lineament or other geometric features.
>
> This change confirms policy established by the Federal Highway Administration, and evidences no intent to fund normal periodic maintenance activities which remain a State responsibility.

In addition to these changes, the 1976 Act called for a study of Interstate 3R needs. The resulting Report to Congress found:

> The backlog of R-R-R work on approximately 8,000 miles of older Interstate segments is estimated to cost $2.6 billion (1975 dollars). Thereafter, the continuing annual need for R-R-R work is estimated to be $950 million (excluding inflation).

The Surface Transportation Assistance Act of 1978 made Interstate 3R funding a permanent category as Title 23, United States Code, Section 119, and authorized $900 million over FY's 1980-1983 for this purpose. The Federal share was changed to 75 percent. In addition, the legislation made Interstate toll mileage eligible for Interstate 3R funding if an agreement was in place to stop toll collection after enough revenue was collected to retire bonded indebtedness while covering operation and maintenance costs.

The Fourth R

With most of the Interstate System open, the focus was gradually shifting to completing the remaining mileage as quickly as possible while establishing a long-term program to protect the taxpayers' investment in the network.

The Federal-Aid Highway Act of 1981 took a major step in sorting out the issues. First, it redefined "completion" to focus IC funds on getting the remaining mileage open. This change modified the cost-to-complete commitment by limiting IC funds to construction needed to provide a minimum level of acceptable service. Second, it changed "3R" to include a fourth R, reconstruction, that would cover all the work that was no longer eligible for IC funding. Interstate 4R funding would be made available by formula (not on a cost-to-complete basis), with each State transportation department deciding which projects to develop within Interstate 4R funding limits.

Even with this infusion of funds, concern about the condition of the Interstate System continued to grow. Some headlines suggest the growing concern:

- "As the Interstates Near Completion, U.S. Faces Huge Road-Repair Bill" (The Wall Street Journal, January 31, 1978)
- "America's Highways: Going to Pot" (U.S. News and World Report, July 24, 1978)
- "Cures for America's Dying Highways" (Reader's Digest, April 1982)
- "The Decaying of America" (Newsweek cover story, August 2, 1982)

In June 1982, the Congressional Budget Office (CBO) released a report titled *The Interstate Highway System: Issues and Options* based in part on data compiled for the earlier Report to Congress and a 1980 update that was not released. In addition to describing a decline in revenue going into the Highway Trust Fund, the CBO summarized the problem of reconstruction:

> Unlike completion of the planned Interstate System, for which there is a history of strong legislative commitment, reconstruction projects are often of lesser national importance, and there is less support for them. The inadequacy of current authorizations to fund all reconstruction projects reflects a federal policy of providing partial rather than full assistance for such activities.
>
> Accordingly, this paper assumes that, under the continuation of the Current Programs option, funding for reconstruction would be set at a level sufficient to build half of all currently eligible reconstruction projects. Some states might view this arbitrarily selected level as restrictive, although it appears relatively generous compared to the levels set in the 1981 act, which provides funds for only about a quarter of all repair and reconstruction costs.

A Nickel a Gallon

This growing attention to the long-term problem resulted in an important change in 1982. On the advice of Secretary of Transportation Drew Lewis and Federal Highway Administrator Ray Barnhart, President Ronald Reagan agreed to support a 5-cent a gallon increase in the Federal gas tax. Because the President had said that only a "palace coup" would cause him to support tax increases, reporters asked him if a palace coup had occurred. The President explained that he had opposed a gas tax increase as part of an overall tax bill, but this proposal was targeted to the need for additional revenue to address infrastructure needs at a cost to individuals of about $30 a year. He addressed the need for this revenue a number of times in statements and speeches in support of legislation.

With the President's support, the Surface Transportation Assistance Act of 1982 increased the tax by a nickel, but not all of the increased revenue went to highway and bridge projects. The legislation split the Highway Trust Fund into a Highway Account and a Transit Account, with 4 cents of the new revenue going into the Highway Account, along with revenue from the other highway user taxes, while 1 cent of the nickel was credited to the Transit Account. The additional revenue allowed for increased Interstate 4R authorizations:

- FY 1983: $1.950 billion
- FY 1984: $2.4 billion
- FY 1985: $2.8 billion
- FY 1986: $3.15 billion

The Federal-State matching ratio returned to 90-10.

In addition, Section 115(a) of the 1982 Act established the I-4R Discretionary Program. Funds were to be derived from lapsed I-4R apportionments (funds the States did not use during their period of availability) and were available to States that (a) had obligated all their I-4R apportionments, except for amounts too small to pay for a project submitted for approval, and (b) were willing and able to obligate the funds within 1 year of the date they were made available, apply them to a ready to commence project, and, for construction work, begin work within 90 days of obligation.

Funding for bridge replacement and rehabilitation also increased significantly, addressing the other component in the campaign to improve the Nation's infrastructure.

President Reagan's statement on signing the 1982 Act on January 6, 1983, related mostly to the need for repairing the Interstate System:

> Today, as this bill becomes law, America ends a period of decline in her vast and world-famous transportation system. Because of the prompt and bipartisan action of Congress, we can now ensure for our children a special part of their heritage - a network of highways and mass transit that has enabled our commerce to thrive, our country to grow, and our people to roam freely and easily to every corner of our land...
>
> Anyone who's driven the family car lately knows what it's like to hit a pothole - a frustration, expense, a danger caused by poor road maintenance. Woeful tales of highway disrepair have become part of the trucking lore. Bridges are crumbling from under us in many of our older cities while growth is being stifled in our newer ones, because the transportation system can't cope with the expanding population.
>
> Overall, we have 4,000 miles of Interstate highway that needs resurfacing and 23,000 bridges that need replacement or repair... Common sense tells us that it will cost a lot less to keep the system we have in good repair than to let it disintegrate and have to start over from scratch. Clearly this program is an investment in tomorrow that we must make today. It will allow us to complete the interstate system, make most [of] the interstate repairs and strengthen and improve our bridges, make all of us safer, and help our cities meet their public transit needs.
>
> When we first built our highways, we paid for them with a gas tax, a highway user fee that charged those of us who benefited most from the system. It was a fair concept then, and it is today. But that levy has

> not been increased in more than 23 years. And it no longer covers expenses. The money for today's improvements will come from increasing the gas tax, or the highway user fee, by the equivalent of a nickel a gallon - about $30 a year for most motorists.
>
> The repairs and construction are expected to stimulate 170,000 jobs, with an additional 150,000 jobs created in related industries... While the action we take today will bring some relief to those of us who want to work and yet cannot find jobs, its principal benefit will be to ensure that our roads and transit system are safe, efficient, and in good repair. The state of our transportation system affects our commerce, our economy, and our future.
>
> That's why I'm pleased today to sign House resolution 6211, the Surface Transportation Assistance Act of 1982. It will help America enter a brighter and a more prosperous decade ahead.

By the mid-1980's, progress in getting ahead of the deterioration cycle - while one road is repaired, others deteriorate - was measurable. In 1987, Secretary of Transportation Elizabeth Dole submitted a report to Congress that documented significant improvement in the overall condition of the Nation's highways. In releasing the report, she said:

> States have made pavement reconstruction and resurfacing a priority since passage of the 1982 Act. As a result, the overall condition of pavement on major highways has improved, reversing a pattern established between 1980 and 1982, when highway surfacing was wearing out faster than it was being replaced... Today, new funding is enabling states to respond to highway capacity needs long postponed in the 1970s for lack of money.

The Surface Transportation and Uniform Relocation Assistance Act of 1987 (STURAA) retained the Interstate 4R Program, authorizing $2.815 billion a year for the Interstate 4R Program for FY's 1988 through 1992. Section 114 of STURAA also provided $200 million a year from the I-4R authorization for continuation of the I-4R Discretionary Program and provided criteria/factors to be used in distributing the discretionary funds.

The Post-Interstate Era

With the Federal-aid highway program authorized under STURAA through FY 1992, the transportation community realized that the time had come to plan for a post-Interstate program. As transportation interests debated a wide range of options for such a program, all parties accepted as a bedrock principle that the investment in the Interstate System must be preserved. The national interest recognized at the start of the Interstate Construction Program in 1956 was just as strong now that the program was winding down - and maybe stronger because the value of the Interstate System was clearer at the end of the program than at the start.

The result of the post-Interstate debate was the landmark Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). It reorganized the Federal-aid highway and transit programs in many ways. It also authorized the final IC funds through FY 1996 and eliminated the Interstate 4R Program. In its place, ISTEA created the Interstate Maintenance (IM) Program, which retained much of the eligibility under 3R, shifting the fourth R to the new funding category for the National Highway System (NHS), a network to be designated that would include the Interstate System plus other roads of national importance. Section 1009 of ISTEA stated:

> Activities authorized [for IM funding] ... include the reconstruction of bridges, interchanges, and over crossings along existing Interstate routes, including the acquisition of right-of-way where necessary, but shall not include the construction of new travel lanes other than high occupancy vehicle lanes or auxiliary lanes.

In addition, IM funds could be used for preventive maintenance for the first time if a State could demonstrate through its pavement management system that the work would extend Interstate pavement life in a cost-effective manner.

ISTEA authorized $17 million in IM funds over the 6 years covered by the legislation and provided funds for the I-4R Discretionary Program. These funds were from the National Highway System funds.

The FHWA's *A Guide to the Federal-Aid Highway Emergency Relief Program* contains the following description of the IM Program:

> The 1991 ISTEA established the IM Program which replaced the 3R portions of the superseded I-4R Program. The NHS funding was intended to address the fourth "R". The 1991 ISTEA modified 23 U.S.C. 104(b)(5)(B) to provide a new apportionment formula utilizing the same lane-mile (55 percent) and vehicular miles of travel (45 percent) factors, but including computations for Interstate routes designated under 23 U.S.C. 103 and 139(c), and for Interstate routes designated under 23 U.S.C. 139(a) before March 9, 1984. Each State was guaranteed at least 1/2 percent of the total IM funds apportioned annually. It also amended 23 U.S.C. 119(a) to permit the Secretary to approve IM funded projects for resurfacing, restoring, and rehabilitating routes on the Interstate System designated under 23 U.S.C. 103 and 139(c), and routes designated prior to March 9, 1984, under 23 U.S.C. 139(a) and (b). [These are routes built to full Interstate standards without IC funding, and approved for inclusion in the System because they are found to be a logical addition or connection.]
>
> The 1991 ISTEA also amended 23 U.S.C. 119(e) to allow IM funding for preventive maintenance activities when a State can demonstrate through its pavement management system that such work would cost-effectively extend the Interstate pavement life. It further modified 23 U.S.C. 119(f) to allow a State to unconditionally transfer up to 20 percent of its IM apportionment to its NHS or Surface Transportation Program. Amounts in excess of 20 percent may also be transferred if a State (a) certified that the sums to be transferred were in excess of its needs for Interstate 3R work, and (b) certified that it was adequately maintaining the Interstate System.

In 1998, the Transportation Equity Act for the 21st Century continued IM funding, restored the fourth R to eligibility, and authorized a total of $23.809 billion through FY 2003. The Guide provided the specifics:

> The TEA-21 expanded the IM program to include reconstruction which allows IM funding to be used for new interchanges, new rest areas, additional noise walls, etc. The TEA-21 also extended IM fund usage to the following routes:
>
> - routes on the Interstate System designated under 23 U.S.C. 103(c)(1) and in Alaska and Puerto Rico, under 23 U.S.C. 103(c)(4)(A),
> - routes on the Interstate System designated before June 9, 1998, under subsections 139 (a) and (b) (as in effect before enactment of TEA-21), and
> - segments that become part of the Interstate System under Section 1105(e)(5) of the ISTEA.
> - toll roads, if subject to a 23 U.S.C. 129 agreement with the Secretary or continued in effect by Section 1012(d) of the 1991 ISTEA and not voided by the Secretary under Section 120(c) of the Surface Transportation and Uniform Relocation Assistance Act of 1987.
>
> The TEA-21 also authorized $23.8 billion for FYs 1998-2003 for the IM program. After deducting $50 million in FY 1998 and $100 million in each of FYs 1999-2003 for the Interstate Maintenance Discretionary Program, the remainder is apportioned:
>
> - 33 and 1/3 percent based on each State s share of total lane miles all Interstate routes open to traffic,
> - 33 and 1/3 percent based on each State s share of vehicle miles traveled on lanes on Interstate System routes open to traffic and
> - 33 and 1/3 percent based on each State s share of annual contributions to the Highway Trust Fund (other than the Mass Transit Account) attributable to commercial vehicles.

> Prior to the TEA-21, IM fund eligibility was limited to 3R work (resurfacing, restoration and rehabilitation) plus reconstruction of bridges, interchanges and overpasses along existing Interstate routes, including acquisition of right-of-way where necessary, but eligibility did not include the construction of new travel lanes other than high occupancy vehicle (HOV) lanes or auxiliary lanes. Section 1107(a) of the TEA-21 modified 23 U.S.C. 119 and expanded IM eligibility to include reconstruction, the fourth "R". As a result the construction of new interchanges and overpasses and the addition of new features, like rest areas, additional noise walls and etc., are now eligible for IM funding. The TEA-21 retained in 23 U.S.C. 119(d) the prohibition against funding added capacity. Therefore, the construction of new travel lanes other than HOV lanes or auxiliary lanes continue to be ineligible for IM funding.
>
> The TEA-21 repealed provisions of 23 USC 119 dealing with preventive maintenance. However, preventive maintenance activities for all features of an Interstate highway are eligible for IM funding under the general eligibility provisions for preventive maintenance established in 23 U.S.C. 116(d).
>
> The Uniform Transferability provisions of TEA-21, Section 1310, permit the transfer of no more than 50 percent of a State s IM apportionment without the certification required in ISTEA.

TEA-21 also continued the IM discretionary set aside, as reflected in this summary from the Guide:

> The Transportation Equity Act for the 21st Century (TEA-21, Public Law 105-178) continued this program by authorizing set-asides from the IM funds of $50 million in FY 1998 and $100 million in each of FYs 1999-2003. These funds are provided for resurfacing, restoration, rehabilitation and reconstruction of any route or portion thereof on the Interstate System (other than a route designated under 23 U.S.C. 139 as in effect before the enactment of TEA-21 and any toll road on the Interstate not subject to a Secretarial agreement under 23 U.S.C. 119(e) as in effect on December 17, 1991 [the day before President George H. W. Bush signed ISTEA].
>
> The funds could be used by any State that had:
>
> - Obligated or demonstrated that it would obligate in the fiscal year all its Interstate Maintenance apportionments, except for amounts too small to pay the Federal share of the cost of a project for resurfacing, restoring, rehabilitating, or reconstructing the Interstate System which had been submitted for approval, and
> - Indicated it was willing and able to obligate the funds within 1 year of the date they were made available, apply them to a ready to commence project, and, for construction work, begin work within 90 days of obligation.

In recent years, the Conference Report on each year's appropriations act for the Department of Transportation has designated projects for all IM discretionary funding.

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), approved August 10, 2005, authorized a total of $25.2 billion through FY 2009. A fact sheet on the FHWA Web site describes the current program under SAFETEA-LU:

> **Interstate Maintenance (IM) Program**
>
> | Year | 2005 | 2006 | 2007 | 2008 | 2009 |
> |---|---|---|---|---|---|
> | Authorization* | $4,884M | $4,961M | $5,039M | $5,119M | $5,199M |
>
> *Authorizations will be augmented by a portion of the Equity Bonus Program funds.
>
> ## Program Purpose

The Interstate Maintenance (IM) program provides funding for resurfacing, restoring, rehabilitating and reconstructing (4R) most routes on the Interstate System.

Statutory References

SAFETEA-LU Section(s): 1101(a)(1), 1111
Other: 23 USC 119, 104(b)(4), 118(c)

Funding/Formula

Funded by contract authority, to remain available for 4 years. Funds are subject to the overall Federal-aid obligation limitation. A State may transfer up to 50% of its IM apportionment to its National Highway System, Surface Transportation, Congestion Mitigation and Air Quality Improvement, Highway Bridge Replacement and Rehabilitation, or Recreational Trails apportionment.

The following funds are to be set aside from the authorized amounts:

Interstate Maintenance Discretionary

$100 million for each fiscal year 2005 through 2009 to be distributed at the discretion of the Secretary of Transportation for projects for 4R work (including added lanes) on any route or portion thereof on the Interstate System. Excluded are projects on any highway designated as a part of the Interstate System under 23 USC 139 as in effect before the date of enactment of TEA-21 and any toll road on the Interstate System not subject to an agreement under 23 USC 119(c) as in effect on December 17, 1991. Funds are available until expended. [1111(a), 23 USC 118(c)]

Funds are apportioned to States based on the following factors:

- 33-1/3% based on lane miles on Interstate System routes open to traffic
- 33-1/3% based on total vehicle miles traveled on Interstate System routes open to traffic
- 33-1/3% based on State's annual contributions to the Highway Account of the Highway Trust Fund attributable to commercial vehicles.

Each State shall receive a minimum of ½ percent of combined IM and National Highway System apportionments.

Eligible Use of Funds

Projects on routes on the Interstate System, except those added under 23 USC 103(c)(4)(A) that were not previously designated future Interstate under former 23 UCS 139(b), as well as any segments that become part of the Interstate System under Section 1105(e)(5) of ISTEA are eligible for funding. Construction of additional Single Occupancy Vehicle (SOV) lanes continues to be ineligible for IM program funds.

IM program funds may not be used on a facility where tolls are being collected under the Interstate System Reconstruction and Rehabilitation Pilot Program [TEA-21 1216(b)] or the Interstate System Construction Toll Pilot Program. [1604(c)(7)]

Federal Share

The Federal share is 90 percent, subject to the sliding scale adjustment. Certain safety improvements listed in 23 USC 120(c) have a Federal share of 100 percent.

The Future

Today, many observers in the transportation community view SAFETEA-LU as the last bill of its type. The next reauthorization bill, these observers say, will have to find new revenue sources and change the program to meet the realities of the 21st century. In recognition of this view, SAFETEA-LU called for two commissions to explore options for the next bill:

- A National Surface Transportation Policy and Revenue Commission, and
- A National Surface Transportation Infrastructure Financing Commission.

As a result, the direction of the Federal-aid highway program is unknown, but the commitment to preservation of the taxpayers' investment in the Interstate System, as reflected in legislation dating to 1976, is likely to remain strong.