



Celebrating 50 Years of the Interstate Highway System
Post Interstate System

TODAY'S POST-INTERSTATE ERA



Reconstruction is a hallmark of the post-Interstate era. Here, I-70 west of Salina, Kan., is completely rebuilt and widened, one direction at a time.

By Tom Kuennen

The current roadway system balances national priorities with state and local control

In 2005, even as the last segment of the Interstate system approached completion – Boston’s Central Artery/Tunnel (I-93, I-90) project – the nation finds itself well into the post-Interstate era.

In the 1980s – as the end of the era of Interstate construction drew near – political wrangling over the disposition of federal fuel taxes, the Interstate’s environmental impact, mass transit’s share of the federal fuel taxes, and a desire of states to have more control over how surface transportation funds were spent threatened to tear the federal program apart and “devolve” all transportation funding to the states.

Instead, these surface transportation proponents came together to shape the post-Interstate era, characterized by significantly higher funding levels for both highways and mass transit, more state and local control over

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where and how dollars are spent, more balance with environmental needs, and a renewed federal program.

Post-Interstate Era Arrives

The post-Interstate era arrived with the 1990s. In it, federal surface transportation policy would embrace transit even more than, in previous years, encourage high-speed rail, and move closer to highway system preservation and asset management. No longer would the main thrust of federal transportation policy drive construction of new expressways through cornfields or neighborhoods.

At the same time, under the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21, 1998), authorizations for federal funding for our nation's highways and bridges increased 69 percent over six years, and 44 percent over six years through 2003, respectively.

Today's Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy For Users (SAFETEA-LU) – passed by both houses of Congress and signed by President Bush on Aug. 10, 2005 – continues this largesse with a 38 percent increase above the guaranteed funding levels of TEA-21 over six years.

Since ISTEA, for the first time on a federal basis, highway user fee-generated funds made available through the federal program began to approach demonstrated needs.

Through ISTEA's (and its successors') concept of flexible funding, state departments of transportation received enormous freedom in how federal transportation dollars could be spent.

ISTEA mandated Congress to establish a National Highway System (NHS), made up of the Interstate system and other highways of national significance, all of which benefit from federal funding. A secondary system of state and local roads also is identified.

And in this post-Interstate era, beginning with ISTEA in 1991, federal funds now can be spent for development of privately-owned highways such as toll roads. This enables expressways in suburban and rural areas to be built faster than could be programmed by the state DOTs themselves. Both the motoring public and the construction industry benefit.

Early '80s: Sounding the Alarm on Condition

Understanding that the days of massive system-building are over, the post-Interstate era also permits spending of substantial federal funds on system maintenance and preservation, as opposed to new construction on new rights-of-way. The alarm on system condition was sounded in the early 1980s, and its lesson was not lost on those who crafted post-Interstate era funding legislation.

National attention on system condition was brought to bear in the 1983 publication of Dr. Pat Choate's *America in Ruins: The Deteriorating Infrastructure*, and a companion piece, *Bad Roads: The Hidden Costs of Neglect* (the latter published by the National Asphalt Pavement Association). Choate, who held policy positions in the U.S. Department of Commerce and the Tennessee and

Oklahoma governments, focused attention on the nation's declining transportation infrastructure for all modes.

"The effect of deteriorating roads on the economic vitality of the nation is clear," Choate wrote. "When the decay of the nation's airports, railroads, inland waterways, ports and mass transit systems also is considered, it becomes obvious that the hidden costs of allowing America's transportation systems to deteriorate are already much too high."

These widely distributed books elicited news media attention, galvanized the highway community, and started the highway establishment thinking about what the post-Interstate era should look like. The books documented the much higher economic and social costs of an inadequate road system, compared to the costs of improvement. Today, Choate directs a Washington-based policy institute, the Manufacturing Policy Project, and teaches at George Washington University.

Yet another contemporaneous publication turned conventional wisdom on its ear. For years it was assumed that the bulk of America's morning and evening commutes were from the edges of the core city and suburbs to the downtown, or central business district, and back again. This assumption drove urban planning and transportation expenditures for decades.

But a groundbreaking report challenged this assumption. In *Commuting in America*, published in 1987 by the Eno Foundation for Transportation, Alan E. Pisarski established that the major commute had shifted from suburb-to-city to suburb-to-suburb. Pisarski described an explosion in new jobs and workers, the growth of suburban jobs having far outstripped those in the central city, and an enormous leap in the number of private vehicles used in commutes, which was undermining mass transit use. Pisarski's new paradigm had great impact on post-Interstate transportation legislation and led to new attitudes in transportation planning.

Other voices reinforced this sea change in transportation policy. "Since World War II, much of the federal effort in transportation has been directed toward building a comprehensive infrastructure, from Interstate highways to a network of modern airports," said U.S. Transportation Secretary Sam Skinner in *Transportation Builder* magazine in early 1989. "As we enter the 21st century, we must redirect our efforts toward maintaining that [transportation] infrastructure, maximizing its capacity, and providing new capacity to meet further demand."

What Did America Want?

Inside the Beltway there was no shortage of ideas on how the post-Interstate era should be configured. With that in mind, the American Association of State Highway & Transportation Officials (AASHTO) and its partners looked outside the Beltway for input from America as to how the process should change. Transportation 2020 was the result.

Enter Francis B. Francois, Jr., executive director of AASHTO from 1980-1999. In an era when road construction and the automobile





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were under attack, Frank Francois made sure that our soft-wheel transportation infrastructure remained the centerpiece of our national transportation policy.

Francois built bridges and coalitions among national agencies and associations to make sure a common voice was heard by Congress "inside the Beltway." And as head of AASHTO during this transitional period and the Transportation 2020 research, he was critical to the smooth passage of our national transportation policy from an Interstate-era policy keyed to building Interstates, to a post-Interstate policy responsive to state and local desires.

Later, he worked tirelessly to promote intermodal linkages in our system, to ensure that transit got its fair share of the pie for its future livelihood, and to help lay the foundation for the intelligent highway infrastructure of the future.

Transportation 2020 actively pursued a national consensus on the nation's transportation needs through the year 2020, and built a plan to meet those needs. With completion of construction on the Interstate system pending, transportation leaders in AASHTO and other organizations agreed upon the need to examine the mission of the nation's highway system.

Yet another factor leading to Transportation 2020 was the disastrous pursuit of the 1986 federal program reauthorization. The existing program had expired Sept. 30, 1986, without reauthorizing legislation in place, and then Congress adjourned at the



Given the incredible traffic volumes on our Interstate system, night work has become a fact of life in the post-Interstate era. Here, jersey barriers are placed ahead of night work under traffic in Pennsylvania.

then, national transportation leaders realized they needed, more than ever, to present a consensus-driven transportation policy as the nation transitioned to a post-Interstate era.

Transportation 2020 was organized by AASHTO into a four-phase process. In the first phase, AASHTO set the stage by identifying needs and issues. The second phase sought input from member state transportation departments, the Federal

sored 65 forums nationwide that involved some 9,000 people for Phase III. The result was a comprehensive report on what Americans wanted called "Beyond Gridlock: The Future Of Mobility As The Public Sees It." This effort was followed by Phase IV, a "futures" conference in June 1988, which brought all of these findings to the front.

"In every state, whether it is a growth state or a stable state, whether it is an agricultural state or an urban state, everyone

CHANGING HIGHWAYS: An exact count of the number of interchanges on the Interstate system is not available. However, a 1978 count found 14,231 interchanges. This number has likely increased somewhat over the intervening years.

end of the year without passage, leaving the entire program in abeyance.

On return in January 1987, the new Congress passed the new bill, but it was vetoed by President Ronald Reagan as a means of asserting his continued authority in the wake of the Iran-Contra scandal. With the entire federal program in dire jeopardy, the veto was overridden by one vote. By

Highway Administration (FHWA), and other stakeholder associations and agencies. The result was a widely distributed report, "Keeping America Moving: The Bottom Line."

Then, in a remarkable outreach effort, AASHTO - with the help of the Highway Users Federation, now the American Highway Users Alliance (AHUA) - spon-

who shows up has some sort of complaint about some current shortfall in some aspects of the transportation system," said former FHWA associate administrator and Highway Users Federation president Les Lamm in November 1987.

Transportation 2020 determined that:

- The new surface transportation program should include a renewed



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Top: Volume-induced congestion is the bane of urban expressways. Here, morning rush-hour traffic builds on I-5 in Orange County, Calif. Above: The use of computer simulation for National Highway System planning is a defining characteristic of the post-Interstate era. Here, the South Carolina DOT used a program called MicroStation V8 to develop a complex, three-dimensional model of its entire North Myrtle Beach Connector project. The agency produced visualizations in various media for display at public meetings, and virtual tours of the model were valuable in communicating construction decisions regarding sound walls, placement of sign bridges, and landscaping.

federal commitment to a national highway system, public transportation, and an increased emphasis on urban/suburban mobility and rural access.

- Bridge rehabilitation and replacement is a high priority and should be an eligible expenditure from highway programs.
- Funds for federal-aid highway programs should be allocated and apportioned to states. Within states, federal funds for state and local programs should be further distributed by states and appropriate local officials in cooperation with each other. Federal funds for public transit to support existing systems, services, and programs should continue to be provided directly to designated recipients. Federal transit funds for

rural and small urban areas should continue to be provided to and through the states.

ISTEA Becomes Post-Interstate Law

The first surface transportation legislation of the post-Interstate era was quietly developed and rapidly passed by the U.S. Senate. ISTEA, signed into law in December 1991, provided a radically different structure for distributing surface transportation funds, but neutralized any opposition by providing drastically increased levels of highway funding.

ISTEA contained greatly increased funding, reduction of the unobligated balance of the Highway Trust Fund, and higher motor fuel taxes to support the expanded program. The act made an astonishing \$151 billion available to state DOTs from fiscal years 1991 through 1997, an average \$25.2 billion yearly.

While ISTEA provided vast new amounts for surface transportation construction, other elements were less palatable to some legislators and their state DOTs, and to highway lobbyists.

For example, the new law gave states and local governments unprecedented flexibility in moving highway funds to transit. Surface transportation funds could be “flexed” by states and metropolitan regional councils away from highways and roads, where the funds originated, and spent on other transportation projects. By allocating gas tax money through metropolitan areas to spend on roads or on transit as the council chooses, ISTEA sidestepped state DOTs, which miffed some agencies. Also, donor states – those states that send more money to the federal program than they get back – demanded a higher rate of return.

ISTEA also permitted gas tax money to be spent on a wide range of non-roadbuilding-related end uses, such as subsidies for mass transit and high-speed rail, and non-roadbuilding “transportation enhancements” such as tourist facilities, bicycle paths, scenic byways, and recreational trails, and even day care centers adjacent to mass transit stops.

“Flexibility is the common thread running through the highway program reauthorization legislative proposals that have been prepared by the [George H.W.] Bush administration and both the House and Senate,” said American Road & Transportation Builders (ARTBA) president Pete Ruane in early 1991, prior to ISTEA’s passage. “The problem is that too much flexibility could mean that the nation’s enormous highway and bridge capital needs will remain unmet well into the next century as highway user dollars are diverted to non-highway activities.”

Perhaps most vexing, due to the direct linkages between the Clean Air Act, ISTEA, and its successor, TEA-21, funding for road improvements could be blocked in metropolitan areas not meeting stringent air pollution guidelines as determined by the U.S. Environmental Protection Agency (EPA).

But the higher spending levels made ISTEA all but impossible to resist, the bill was passed, and the industry benefited.

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BENTLEY SYSTEMS, INC. IMAGE



OLDEST SEGMENT: *The oldest Interstate segments actually predate the establishment of the Interstate system. An early example is a portion of the Grand Central Parkway in Queens, N.Y., which was opened to traffic in July 1936 and later was incorporated into the Interstate system as I-278.*

ISTEA's Employee Commute Options

One of the most onerous, but largely forgotten, elements of ISTEA was its attempts to reduce traffic congestion through behavior modification on a national scale. The idea was that if commuters could be forced out of their vehicles, less concrete and asphalt would have to be placed with less environmental disruption.

Thus the Employee Commute Options feature of ISTEA required that states pass laws forcing employers of more than 100 in air pollution non-attainment areas to reduce single-vehicle commutes by 10 percent in phases.

By requiring the states to run the programs, the U.S. Congress effectively passed the buck to the states. And because the states forced private businesses to do the dirty work, they were insulated as well.

Employee Commute Options was passed by Congress within ISTEA with great enthusiasm as a solution to congestion and pollution woes, but as deadlines approached, the program was seen to be physically unworkable. It died quietly, abandoned and alone.

But behavior-modification, traffic demand management schemes such as congestion pricing still are thought in many circles to be the only long-term solution to traffic overload in an environmentally and economically "sustainable" transportation system. Behavior modification worked with tobacco abuse, say supporters, and it can be done with America's addiction to petroleum as well.

National Highway System Incorporates Interstate

One problematic element of ISTEA was its requirement that a National Highway System (NHS) be designated by Congress by Oct. 1, 1995, or billions of dollars of funding would be lost for the duration of the bill.

Timely designation was a must for the nation, but as typical "must-pass" transportation legislation, it didn't. When the NHS bill failed to pass by Oct. 1, \$5.2 billion in FY 1996 NHS and Interstate Maintenance highway funding was held in abeyance.

By late November, though, the bill was in conference, and the new law was passed shortly thereafter. The bill designated 161,000 miles of highways of national significance, including the Interstate system, and eliminated the unpopular 55 mph National Speed Limit (1973-95), a relic of the Carter administration.

As the debate continued as to what should replace ISTEA, the first surface transportation legislation of the post-Interstate era, some wondered if there had to be a federal program at all. In particular, donor states wanted more from the program.

These states wanted to limit, or eliminate, the federal program altogether. Known as "devolution," the concept existed in at least two permutations. A moderate devolution of the federal road program to the states was introduced in the summer of 1996 and was known as STEP-21, for Streamlined Transportation Efficiency Program for the 21st Century. STEP-21 attempted to solve the problems of donor/donee inequity while maintaining a moderate federal presence.

But near the end of the 104th Congress, the Transportation Empowerment Act of 1996 (TEA 1996) was introduced by Rep. John Kasich, R-Ohio, and Sen. Connie Mack, R-Fla. After

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a two-year transition, the act would have lowered the federal gas tax dedicated to the trust fund from 14 cents to 2 cents, and allowed dozens of federal programs to expire while eliminating others. The remaining two cents would continue to fund a core federal program, including Interstate maintenance and federal lands, and more. Kasich and Mack reintroduced the bill as TEA II in 1997.

In March 1997, AASHTO's Francois warned that unless proponents of competing reauthorization concepts could get together, there might be no reauthorization of federal surface transportation, period.

Among the successors to ISTEA were:

- STEP-21, introduced in the Senate as S. 335.
- NEXTEA, from the Clinton administration, introduced in the Senate as S.468. This was the six-year, \$175 billion, National Economic Crossroads Transportation Efficiency Act of 1997. While providing funds on a scale of ISTEA, NEXTEA contained several elements that were unpalatable to the industry.

Among other issues, NEXTEA's environmental elements were problematic. At NEXTEA's debut, President Clinton described NEXTEA as "one of the most important pieces of environmental legislation that will be considered by the Congress in the next two years."

- ISTEA Works!, a proposal by Northeastern states – primarily urban states with intense transit interests and "donee" states

- which would retain ISTEA and its distribution formulas, and
- STARS 2000, for Surface Transportation Authorization and Regulatory Streamlining Act 2000, drafted by Sens. Max Baucus, D-Mont., ranking Democrat on the Senate Environment and Public Works Committee, and Dirk Kempthorne, R-Idaho. STARS 2000 reflected the needs of low-population Western states. Their bill would call for full use of the Highway Trust Fund to allow annual highway spending of some \$26 billion.

BESTEAs: "Mother Of All Transportation Bills"

Ultimately, the successful bill – the Building Efficient Surface Transportation and Equity Act, or BESTEA, ultimately TEA-21 – was crafted by then-House Transportation and Infrastructure Committee Chairman Rep. Bud Shuster, R-Pa. Paraphrasing Saddam Hussein, Shuster called his effort the "mother of all transportation bills," which, when coupled with a drawdown of existing excess balances in the Highway Trust Fund, could increase federal surface transportation spending alone from \$26 billion in FY 1998 to as much as \$33 billion in FY 2000.

Removal of highway spending from yearly budget-balancing was justified, he maintained, because funds for highway spending at the federal level are collected in advance from highway users at the gas pump, and do not increase the federal deficit in any way.

And on June 1998, President Clinton signed BESTEA's successor, TEA-21, the largest federal investment ever in the nation's transportation infrastructure. While retaining ISTEA's essential features, it made some of ISTEA's proclivities more acceptable to the industry, and authorized a six-year, \$217 billion program for state and local highway and mass transit programs.

Pavement Preservation and Maintenance

In the post-Interstate era, a growing federal focus on preserving the existing system of state, local, and national pavements is underscoring today's new emphasis on preventive pavement maintenance.

In the 1980s – as the nation entered the post-Interstate era – emphasis began shifting from construction of new pavements to maintenance of existing pavements. Much of this was fueled by ISTEA, which explicitly provided maintenance funds via its Interstate Maintenance Program and Surface Transportation Program (STP) funds, which generally could be used as a state saw fit.

The FHWA actually first became involved with funding for maintenance activities on the Interstate system as a result of the 1976 program reauthorization that established the 3R program to fund Interstate resurfacing, restoration, and rehabilitation. The Federal-Aid Highway Act of 1981 expanded the program by adding a fourth "R," reconstruction.

ISTEA terminated the I-4R program, except for a small discretionary set-aside, and established a new Interstate maintenance (IM) program along with the NHS program, which includes the



Attractive highway rest areas – like this one on I-40 in eastern Tennessee – are a substantial expense for state DOTs in the post-Interstate era.

PHOTO COURTESY OF TOM KUENNEN



Interstate system. The IM funds may be used on the Interstate system for 3R work and for reconstruction of bridges, interchanges, and overcrossings along existing Interstate routes, but may not be used for the construction of new travel lanes other than high occupancy vehicle lanes or auxiliary lanes.

The 1998 TEA-21 expanded eligibility for funding under the IM program to the fourth R, reconstruction. As a result, the addition of new interchanges, new rest areas, and new noise walls became eligible for IM funding. However, IM funding of added lanes, except HOV and auxiliary lanes, was not allowed.

But now, an advancing philosophy of "asset management" – adapted from the corporate world – is providing new momentum and excitement for pavement preservation, and it's being spearheaded at the federal level by the FHWA's Office of Asset Management, created in February 1999. The concept of asset management makes sense when you consider the change in focus of the highway program from building new highways on new thoroughfares to maintenance of the existing infrastructure.

There is a perceived need by many transportation professionals for a comprehensive management approach to road systems, given their common background in aging infrastructure, always less-than-adequate budgets despite the magnitude of resources, constrained staff resources, while at the same time the public is increasing its expectations of what the transportation system can provide. Transportation asset management makes that easier.

SAFETEA-LU Continues Post-Interstate Era

Last year's SAFETEA-LU authorizes an investment of \$286.4 billion over six years on highway and transit infrastructure projects. A total of \$295 billion in contract authority and \$286.4 billion in guaranteed spending over six years is provided for federal highway, transit, and safety programs.

The six-year bill reflects a 38 percent increase over the guaranteed funding levels of TEA-21. The five-year total from fiscal years 2005 through 2009 is \$244.15 billion. Contract authority is set at \$295 billion, and an \$8.6 billion rescission (or rollback) of old contract authority is not slated to take place until the end of fiscal year 2009, the final year of the bill.

The bill provides a total of \$189.5 billion in obligation limitation for highways with another \$3.7 billion for programs exempt from that limitation, such as emergency relief, a total of \$193.2 billion – a record amount for highways. The bill also provides \$45.3 billion for mass transit. The allocation for highway safety programs and motor carrier safety programs over five years amounts to \$5.65 billion.

The obligation limitation or ceiling is the maximum amount that can be programmed for current and future projects in a given fiscal year, while contract authority is a form of budget authority that permits obligations to be made in advance of appropriations.

The investment level of the final conference report – in which the House and Senate versions of reauthorization were reconciled and resubmitted for vote – was \$2.5 billion more than the House-passed TEA-21 reauthorization bill and \$7.5 billion less than the Senate version.

The annual levels of guaranteed obligations under the conference report, which covers five fiscal years (2005-09), are \$34.4 billion for 2005, \$36 billion for 2006, \$38.2 billion for 2007, \$39.6 billion for 2008, and \$41.2 billion for 2009.

"Progress takes time, but this bill represents strong progress and we're very pleased with it," said AASHTO Executive Director John Horsley. "With the certainty and funding this new law can provide, state transportation departments can finish out this construction season and plan with confidence for the next several years' work."

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ANOTHER OLDIE: *Among other oldest Interstate segments, the Pennsylvania Turnpike between Irwin (southeast of Pittsburgh) and Carlisle (west of Harrisburg) was officially opened in October 1940 and is now designated as I-76 and I-70. Other freeways and toll roads were incorporated into the system rather than building new, competing Interstate routes.*

Innovative funding is advanced by the bill. "This bill also opens the door to the use of federal tax-exempt bonds to help finance some highway and bridge projects," Ruane said. "And it includes provisions that unquestionably will increase safety in highway construction work zones and help get transportation projects completed sooner."

That the financing of the federal system is at a tipping point also is addressed by SAFETEA-LU. "Perhaps most significantly, Congress has recognized the current revenue stream to the Highway Trust Fund is not sufficient to meet the federal government's responsibilities in transportation," Ruane said. "The bill mandates the creation of a bipartisan, 'blue ribbon' commission to identify the best ways to finance federal transportation investments post-2009."

"Considering the budgetary constraints, House and Senate conferees used every available revenue source to increase funding," said Steve Sandherr, president, Associated General Contractors of America. "Transportation needs remain great and, while this legislation moves us in the right direction, fully addressing those needs should remain a priority. This bill includes many solid policy changes that we recommended to Congress, changes that will help our members deliver projects quicker and safer."

Special Interest Politics?

The bill also contained over 6,300 so-called "pork barrel" projects, with funds earmarked for specific projects within a U.S. representative's districts. While these "demonstration" projects are condemned by taxpayer watch groups and disavowed by state DOTs because they circumvent the agencies' programming processes, they still represent bridge and road projects that will be built which are funded within the context of the overall surface transportation bill.

Watchdog groups such as the Council for Citizens Against Government Waste (CCAGW) formed a chorus of critics of the legislation. Alaska, the third-least populated state, got the fourth most in earmarks, \$941 million, thanks largely to the work of its lone representative, House Transportation and Infrastructure Committee Chairman Don Young, reported CCAGW. "That included \$231 million for a bridge near Anchorage to be named 'Don Young's Way' in honor of the Republican," the group said. "Meanwhile, House Ways and Means Committee Chairman Bill Thomas, R-Calif., nailed down \$630 million, including \$330 million for the Centennial Corridor Loop in Bakersfield, according to Taxpayers for Common Sense."

Reopeners and Rescissions

When it became clear that the White House would not support the \$300 billion level of funding, some legislators suggested that the future SAFETEA-LU contain "reopeners" that would permit the funding levels to be increased after a few years if additional funding sources could be located. That did not fly, but the bill does contain additional "contract authority" – the ability to authorize more spending – above the guaranteed level of \$286.5 billion. AASHTO reports both the House and the Senate conferees support the idea of a higher level of contract authority, because it gives states increased flexibility in the use of funds (TEA-21 contained \$20 billion in contract authority over the guaranteed levels, \$15 billion for highways and \$5 billion for transit). But in its effort to appear to reduce government spending, the White House opposed additional contract authority.

Now Congress will have to grapple with the potential rescission of the \$8.5 billion gap between total obligation ceiling limitations and total contract authority. Theoretically, on Sept. 30, 2009, the federal government will take back \$8.5 billion in SAFETEA-LU funding. This rollback was required by the Bush administration and will balance the difference between the bill's \$286.4 billion in obligation ceilings, and its \$295 billion in contract authority required to increase funding to donor states, thus making the bill more palatable to those states. Fortunately, Congress has four years to figure out how to get around the rescission.

Donor/Donee Issue Revisited

"The conferees were sensitive to the needs of donor states as well as donee states," said U.S. Rep. Tom Petri, R-Wisc., chairman, House Subcommittee on Highways, Transit and Pipelines, on July 29, 2005. "Donor states will see increases in their rate of return, reaching a 92 percent rate of return in 2008 and 2009. There is a minimum growth rate of 19 percent to protect other states."

A revamped highway safety construction program has been included, Petri said. "Likewise, we have revised the current border program into a formula fund to meet increasing needs for states facing high infrastructure costs from increasing foreign trade and growing traffic," Petri added. "Environmental streamlining, planning, and other administrative improvements seek to make project delivery more efficient without lessening protections."

Thus SAFETEA-LU sets the stage for America's surface transportation system in the 21st century. In the rest of *Interstate 50*, we'll look at how the Interstate system was constructed from coast to coast in more detail, and we'll see how the highway system of tomorrow already is with us here, today.



Shifting the Focus of the Interstate Highway System to the Next 50 Years

By John Horsley

A half-century has passed since President Dwight David Eisenhower and the Congress set the nation on a course to connect America and ensure its prosperity through the construction of the National System of Interstate and Defense Highways.

Much of the Interstate was built by the mid-1980s, and since the enactment of the Intermodal Surface Transportation Efficiency Act of 1991, we have moved into what has been called the post-Interstate Era. Certainly, the highway and transit authorizations since that time have set dramatic new policy – giving states and municipalities greater spending flexibility; increasing public input in the planning process; linking transportation spending to air quality; and calling for an intermodal approach to transportation services.

The Transportation Equity Act for the 21st Century made reconstruction and rehabilitation of the Interstate Highway System a priority, strengthened the Surface Transportation Program and the bridge rehabilitation program, provided for long-range planning, and enhanced flexible spending between highways and transit.

The most recent surface transportation reauthorization – the \$286.4 billion Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) – maintains state spending flexibility, encourages innovative finance mechanisms, and emphasizes comprehensive safety planning.

As we look to the future of our transportation system over the next 50 years, I would suggest that we are entering the Neo-Interstate period, demanding a new vision as bold as the one that produced the Interstate legislation in 1956.

I am not alone in this perspective. Secretary of Transportation Norman Mineta said early this year, “We’re in a new century now. The rules have changed, and it’s time to start thinking about the next 50 years, and how we’re going to build and maintain those new roads to keep the economy moving forward.”

In SAFETEA-LU, Congress and the administration took a first step toward that new vision – creating the National Surface Transportation Policy and Revenue Commission. State departments of transportation, through AASHTO, are preparing comprehensive recommendations to this panel, including options for the future of the Interstate system.

The challenges are clear. As the U.S. Chamber of Commerce Foundation noted in its November 2005 report, it has been 13 years since the federal fuel tax was last adjusted.

Since 1993 it has lost 30 percent of its purchasing power. Recent price spikes in steel, concrete, asphalt, and petroleum compound this problem. The president’s 2007 budget confirms that the spending authorized by SAFETEA-LU will exhaust Highway Account reserves and confront the Trust Fund with insolvency in just three years. Industry observers have concluded that this crisis will either force Congress to adjust fuel taxes come 2009, or funding for the federal aid highway and transit programs as we have known it will collapse.

Revenue is only a part of the challenge to be faced in the new era. Population growth, travel increases, and dramatic growth in domestic and international freight will place tremendous strains on system capacity. We must begin with the mission of connecting America to the world, and determine what they will mean in terms of technology, a rationale for new alignments, new capacity to relieve congestion, and economic and environmental sustainability.

States can provide valuable models – such as the Trans-Texas Corridor (TTC). As one of the fastest-growing states in the Union, Texas leaders understand that in order to compete in the North American Free Trade Agreement and the world, the safe and efficient movement of people and goods is necessary. Largely following the path of Interstate 35, which runs north-south through the state, Texas is planning a superhighway that will be anywhere from four to 18 lanes in width. The corridor will have separate lanes for car and truck traffic, as well as space for freight rail, high speed commuter rail, and utilities.

Texas is taking on this task through a unique public-private partnership; entering an agreement with a U.S.-Spanish consortium to operate the corridor through a 50-year concession that will toll, build, and improve the TTC for a return on its investment. The project breaks new ground in terms of intermodal efficiency, capacity, and innovative finance.

Senate Environment and Public Works Chairman James Inhofe said recently, “The current challenges facing the highway trust fund – and hence the highway program – will be very difficult to resolve and not unlike the challenges faced by the authors of the 1956 act. It will be up to policymakers to be as visionary as they were 50 years ago. A new vision is needed in what the highway program will stand for in the next 50 years and how to pay for it.”

John Horsley is executive director of the American Association of State Highway and Transportation Officials.

