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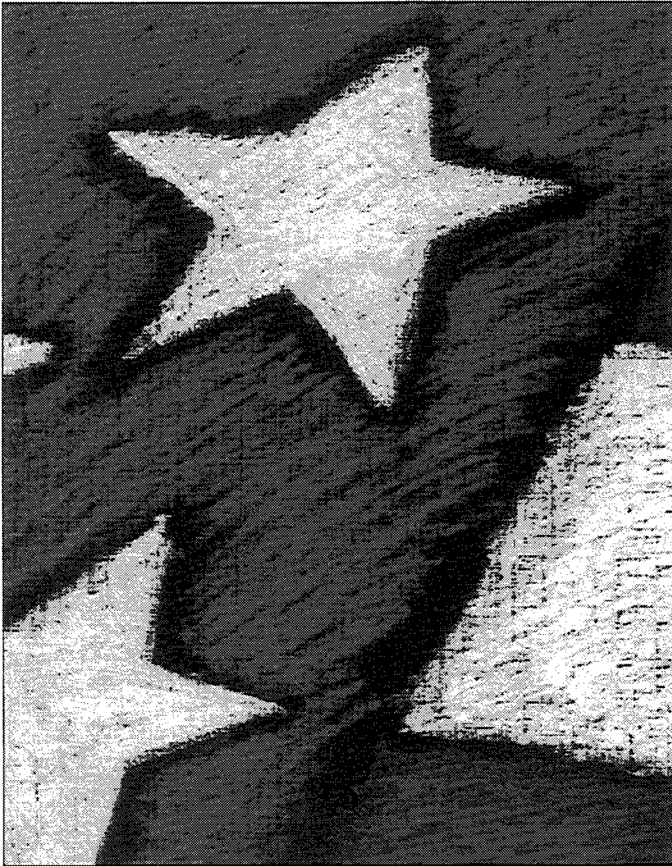

REBUILDING AMERICA: *PARTNERSHIP FOR INVESTMENT*

Our Nation will achieve the greatest benefits from its infrastructure facilities if it invests wisely and continually improves the quality and performance of its infrastructure programs...Consistent with the public interest, agencies should work with State and local entities to minimize legal and regulatory barriers to private sector participation in the provision of infrastructure facilities and services.

President Clinton
January 26, 1994

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FOREWORD

This report summarizes the efforts and progress made to date by the Department of Transportation (DOT) and focuses specifically on the Federal Highway Administration's (FHWA's) implementation of important financing initiatives in President Clinton's Executive Order 12893 of January 26, 1994. The purpose of the Executive Order is to enhance existing programs and to develop more effective investment in infrastructure. FHWA established the *Innovative Financing—Test and Evaluation Project (TE-045)*, referred to here as the *Innovative Financing Initiative*, in order to identify existing transportation financing barriers and to advance innovative financing mechanisms that would increase highway investment. The initiative asks State and local governments to identify specific projects which could be advanced through new ways of financing. This document is organized as follows:

- ***Section 1*** gives an overview of the *Innovative Financing Initiative*.
- ***Section 2*** discusses in detail the emerging financial strategies, covering traditional approaches, the increased flexibility provided by the Intermodal Surface Transportation Efficiency Act (ISTEA), and the new horizons for innovative financing in the coming years. It also provides examples of the ways in which various States propose to apply new financial strategies for leveraging Federal and State funds and increasing infrastructure investment.

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SECTION 1: OVERVIEW

DEPARTMENT OF TRANSPORTATION INITIATIVES

A Message from the Secretary of Transportation

We have always been a nation in motion. Americans have moved further, gone faster, and made more progress in our short history than any other nation on earth. As we approach the next century, our transportation system remains critical to the well-being of the nation we have built together. Our economic future depends on upgrading our $2.4 trillion transportation system so that American workers and American companies can compete and win in the global markets of the 21st century. The stakes are enormous: every 1 percent gain we can make in national transportation efficiency translates into $1 billion in savings for our economy over a decade.

But in an era of continuing budget discipline at all levels of government, we cannot simply "spend our way out" of our transportation problems. We must find new ways to mobilize resources to meet the rising travel demands of a growing population and America's fast-growing global trade. We need to find creative ways to finance new infrastructure and to maximize the use of what we already have.

That's why, in early 1994, I ordered every element of the Department of Transportation to join in—and lead—a new Partnership for Transportation Finance. We asked States, cities, and private businesses across America to come forward with new and creative ideas—using a vast array of financial techniques—to fill the "investment gap" between America's public resources and Americans' transportation needs.

None of these projects could have gotten under way as quickly if we had relied only on traditional means of finance. But through this initiative, we will move transportation projects forward that might never have gotten under way. We will foster creative solutions to meet the challenge of increasing America's transportation investments at a time of limited Federal resources. And by igniting a real spirit of enterprise and creativity with public and private partners coast to coast, the DOT has answered Vice President Gore's call to "re-invent government" so that it "works better and costs less."

We have already made a promising start. But we mean to do more. These new partnerships, this use of innovative finance, this engagement of private business in meeting America's transportation challenges—all of these are here to stay. I applaud all those who have worked with us to make this initiative a success. And I encourage States, local governments, and private businesses across America to follow this example. Bring us your ideas. We are ready—and eager—to be your partner.

Federico Peña
Secretary of Transportation

Transportation's Role in the Economy

Transportation is essential to our nation's economic well-being. It plays a central role in creating jobs and stimulating lasting growth for the nation and, at the same time, enhances the country's international competitiveness. The important link between a healthy economy and a sound transportation system is reinforced by the increasingly global economy, greater reliance on efficient inventory systems, growing demand for travel, and the added economic cost of an aging infrastructure. Together these changes have revealed the need for additional investments and new investment strategies for the nation's transportation infrastructure in order to ensure efficiency and to remain competitive.

ISTEA declares that an integrated, seamless transportation system will be "the centerpiece of a national investment commitment

to create the new wealth of this nation in the 21st century."

Importance of Transportation

The evidence of transportation's importance to the economy is documented by the following economic and societal factors.

- In order to compete globally, companies are demanding production efficiency. By 1995, it is estimated that more than half of U.S. manufacturers will be using just-in-time inventory systems. This inventory approach requires support from a unified transportation system.
- Other countries realize the necessity of improving transportation infrastructure. Japan and other governments in Asia will spend upwards of $1 trillion on infrastructure by the end of the century. Governments in Europe are spending $1.5 trillion on a continent-wide system of high-speed rail and motorways.
- Congestion imposes a staggering and unacceptable cost on our nation. Commuters in the country's 50 largest metropolitan areas experience congestion delays with an estimated cost of $43 billion annually in lost time and fuel alone.
- Each $1 billion invested in transportation produces more than 25,000 new construction-related jobs and eases bottlenecks that slow commuters and commerce alike.
- Each person in the United States spends an average of $2,500 per year on personal transportation. The United States as a whole spends nearly $1 trillion per year—17 percent of the gross domestic product—on transportation services.

Delaying improvements increases future costs and adds a variety of costly economic burdens. For example, deferred maintenance adds as much as 40 percent to the per mile cost of operating vehicles. Deferring $1 in highway resurfacing can impose up to $4 in additional reconstruction costs in just two years. Improvements can increase costs resulting from accidents and traffic delays as well as costs associated with environmental problems, such as air and water clean-ups.

Funding Challenges

Today's transportation-related funding challenges are more diverse and fundamentally more complex than in the past, when the challenge for the transportation sector was straightforward: design and construct the Interstate Highway System. Because traditional government sources simply cannot provide sufficient funds to meet current transportation infrastructure needs, new approaches and financing mechanisms must be developed and implemented to use Federal transportation dollars more effectively. Addressing the growing disparity between the increasingly complex needs of America's transportation system and the current level of investment in the system is the challenge for transportation today. It is a challenge shared by the Federal, State, and local governments as well as the private sector.

The *Innovative Financing Initiative* is carrying forward actions that ISTEA authorization initiated in 1991: to make use of multiple financing strategies, to bring the experiences of other public and private finance programs to bear on transportation finance, and to encourage new partnerships between Federal, State, local, and private investment funding sources.

Context

President Clinton's Executive Order 12893, *Principles for Federal Infrastructure Investments*, establishes infrastructure investment as a priority for the Administration and directs agencies to establish programs for developing more effective investment from current federal funds.

Executive Order 12893 of January 26, 1994
Principles for Federal Infrastructure Investments

A well-functioning infrastructure is vital to sustained economic growth, to the quality of life in our communities, and to the protection of our environment and natural resources....Each executive department and agency with infrastructure responsibilities shall seek private sector participation in infrastructure investment and management. Innovative public-private initiatives can bring about greater private sector participation in the ownership, financing, construction, and operation of infrastructure programs.

President Clinton
January 26, 1994

The President's commitment to transportation infrastructure is tangible. In a time of deficit reduction and budget caps, the President's budget submission to the Congress increased the 1995 transportation budget by 3 percent over 1994, and by 15 percent over 1993.

In response to concerns of the Administration, Congress, and the States, a series of major evaluations of infrastructure investment was completed in 1993. Included were the report of The Commission to Promote Investment in America's Infrastructure, the *National Performance Review*; the report of the U.S. Advisory Commission on Intergovernmental Relations, *High Performance Public Works*; the 1993 DOT report, *Highways and Transit Conditions and Performance: Report to Congress*, and the ISTEA Commission's *Infrastructure Investment Commission Report*. In late 1994, the National Commission on Intermodal Transportation completed *Toward a National Intermodal Transportation System*, a Congressionally mandated report based on input from hearings held in 11 cities across the country. It, too, identified finance as a top priority.

Beyond simply confirming the critical role that infrastructure investment plays in supporting the nation's economy, each report shared similar conclusions. Most noteworthy were the following common observations:

- A great number of investment needs are unmet;
- Forecasts of future investment plans are pessimistic; and
- Funding pursuant to traditional Federal grants will be insufficient to address these shortfalls.

Although the issues identified throughout these reports were similar, the solutions they recommended varied.

DOT Task Forces

DOT has taken the initiative in responding to President Clinton's Executive Order. Recognizing the transportation-related impacts of a changing business and economic environment, DOT has established strategic goals to meet the new challenges. One of the primary goals is to develop a strategy to repair, re-build, and maintain intermodal transportation infrastructure, including highway, rail, transit, and aviation projects. DOT's initiative is also designed to develop a comprehensive, continuing program for financing transportation infrastructure, including expanded use of innovative mechanisms and private sector investment to leverage the benefits of Federal investment.

In addition, the Secretary of Transportation established a task force in each modal administration. While recognizing the varying mission of each modal administration, these task forces identified the following areas for focus:

- Identify Federal financing methods, in addition to grant programs, that more effectively support the formation of public and private sector capital targeted to transportation;
- Evaluate the potential effects of DOT's participation in proposed infrastructure "banks," revolving funds, subordinated loan programs, asset-backed securities, credit pools, and other credit concepts;
- Identify any unmet or unacommodated institutional investor needs which may limit the supply of investment capital for infrastructure (pension fund investments, rating agency needs, and, possibly, mutual fund insurance fund investments); and
- Review grant administration procedures, policies, and regulations, to ensure that grant monies support and complement the leveraging of private capital in projects.

Several of the modal administrations in DOT have been addressing innovative finance issues. Events to date are summarized in the table below.

Innovative Financing Initiatives

Agency	Federal Register Notice	Response Due Date
Federal Highway Administration	April 8, 1994	April 29, 1994
Federal Railroad Administration	September 23, 1994	November 15, 1994
Federal Transit Administration	September 12, 1994	December 30, 1994
Federal Aviation Administration	Anticipated December 1994	30 days after publication

FHWA INNOVATIVE FINANCING INITIATIVE

A Word from the Administrator

At the Federal Highway Administration, we are trying something new. As part of the Department of Transportation's commitment to stimulate infrastructure investment, FHWA is breaking ground for DOT's innovative financing efforts. In March, I announced the Innovative Financing—Test and Evaluation Project (TE-045) through which we will work with the States to explore strategies that encourage increased investment in transportation-related infrastructure. The initiative was published in the Federal Register on April 8.

Why the initiative and why now?

In response to President Clinton's vision of long-term economic prosperity through infrastructure investment and fulfillment of the Secretary's strategic plan, we are taking a proactive approach to stimulate investment in the nation's highways, bridges, and other facilities eligible for Federal highway funds. By working with the States to identify and overcome barriers to the financing of transportation-related infrastructure, we will improve the odds and decrease the cost of highway investments by ensuring the use of all available innovative finance tools.

What are we trying to achieve?

The TE-045 Innovative Financing Project has four immediate goals: (1) to move projects into construction more quickly than under traditional financing procedures; (2) to create incentives for States to take full advantage of ISTEA financial opportunities; (3) to assist States in their efforts to leverage their current spending to produce additional capital investment, both public and private, for transportation; and (4) to create a record of achievement by advancing projects that will develop a base of knowledge and help frame future legislation to provide more ways for State and local projects to proceed with optimal financing.

What will this initiative mean for transportation financing and for you?

I am confident that the Innovative Financing Initiative will increase investment in transportation infrastructure, with near-term benefits for commuters, commerce, and employment. While the initiative will advance a number of projects which otherwise would be delayed, as a pilot program, it is only a beginning. The results of this pilot, however, will be used to inform future policy decisions regarding the most promising areas for increased financing flexibility and thus will have long-term benefits of much greater magnitude.

As a former State Highway officer, I recognize how challenging it is for new financing concepts to be implemented at the local level. The Innovative Financing Initiative is designed to establish a track record of success with a number of targeted projects from which the transportation community can learn. These projects can serve as examples to stimulate new innovative ideas that reduce additional financial barriers.

For transportation professionals and finance officers, that will mean more projects can get under way sooner, with job creation and economic benefits. And for the financial community, it will mean more investment opportunities and support for an improving economy.

Rodney E. Slater
Federal Highway Administrator

Results To Date

The provisions of ISTEA and Title 23, and innovations in the world of finance served as the basis for FHWA's *TE-045 Innovative Financing Project*. Just a few years ago, virtually everyone believed that highway infrastructure could be provided only by the public sector and financed almost exclusively on a "grant reimbursement" basis with Federal tax dollars. (The Federal government reimburses States on a matching basis—usually 80 cents for each dollar spent—for project expenditures.)

Reliance on a single financial strategy for highway investment has not allowed transportation to keep pace with the Nation's needs in a growing economy. There is increased recognition that States must use multiple financing strategies in a manner similar to the commercial markets. Since supporting transportation users in the private sector segment of the economy is a prime goal of transportation, keeping pace with its development and participating in new plans for economic development requires use of similar financing tools. FHWA established the *TE-045 Innovative Financing Project* to explore potential new financing strategies designed to augment the traditional approach, drawing on the expertise of State officers and the private sector investment community.

With this initiative, FHWA hopes to demystify the financial options made available by ISTEA and Title 23 of the U.S. Code (U.S.C.) by building experience with innovative project financing. To do this, FHWA will not only clarify for States what is permissible under current law and make guidance more flexible but will also create incentives for State DOTs, State financial officials, and private investors to invest in transportation infrastructure. FHWA intends to make full use of its regulatory and statutory flexibility to facilitate those projects that best leverage Federal funds.

The responses to FHWA's solicitation have been extremely positive and have provided insight into how new ideas can yield a new era of transportation finance. The level of response also reveals the willingness of State and local governments to undertake these issues. To date, 29 States have submitted 60 project proposals. These projects offer innovative solutions to overcome common financial barriers. The creativity of the responses provides insight into how transportation finance may evolve in the future.

Findings

Several key points emerged during the evaluation of the States' project proposals. These points are categorized under the four subheadings below.

Fees and Charges

There is greater than anticipated willingness to levy local fees and tolls to provide the funding necessary to accelerate project construction in a targeted area. Many States propose such charges as local option gas taxes and development impact fees. States support this equitable mechanism because local economic initiatives often require greater transportation infrastructure support.

Credit Support

States respected the FHWA ground rules of no "new money" for this phase of the initiative. States also indicated that if additional Federal funds were available, then they were prepared to use the funds in new and innovative ways. In addition, "loan guarantees" are much less in demand than expected. However, a much greater interest was expressed in various Federal "credit support" concepts, such as lines of credit, credit enhancement, and project-specific loans. These concepts are particularly important during the riskier periods of construction and initial operation of a project. There is also an evident need to provide particular assistance to projects that are targeted towards interstate commerce or that have multi-State benefits.

One option identified by a number of States is a Federal-level revolving loan fund secured with future apportionments of formula funds from the Highway Trust Fund.

Establishment of State-level revolving loan funds for county, city, and transportation authority projects is also desired, if the States can maintain their current levels of construction activity while capitalizing the funds. Requests for credit support also reveal explicit demand to expand the capacity of the traditional "grant reimbursement" program to serve as a project "construction financing" program, as seen in private development projects.

Policy Changes

There is a demonstrated need to modernize and standardize obligation and outlay rules to smooth the role of Federal money in the construction stage of projects. In particular, the States recommend that FHWA permit, encourage, and support State-issued "anticipation notes" to help improve project cash flow and to foster additional project starts. The current reimbursement practices lead to "serial" instead of "parallel" construction methods and, therefore, create a bias against starting larger projects due to single-year obligation constraints.

Compared with traditional approaches, the share of Federal and State money in many project proposals is reduced, and the share of local and private capital is increased, again allowing more projects to proceed sooner. In support of this, States asked that the definition of "non-Federal match" have greater flexibility, to allow more than just State cash expenditures and, for instance, give credit for private capital and assets, as well as for local, authority, and district financial participation, on a direct basis.

Assisting States

As States contemplate using bonds and other debt instruments for project finance, they may need assistance in addressing rating agency and debt market concerns regarding authorization risk, appropriation risk, trust funds, contract authority, and budget authority. FHWA might also provide additional assistance to States by enhancing credit in cases where States are willing to begin tolling, including, for example, allowance of a rate covenant and pledge of revenues to pay debt service.

With FHWA support, States propose to take greater advantage of the financial opportunities available under ISTEA, such as

- The creation of revolving loan funds;
- Greater private sector involvement in building, maintaining, and operating toll roads and bridges; and
- Flexibility to match Federal funds through investment credit provisions.

Next Steps

To advance towards the goal of promoting additional investment opportunities in highway financing, FHWA will continue to accept proposals from and coordinate with State transportation officials. Using the knowledge gained from Phase 1 of the *TE-045 Innovative Financing Project*, FHWA will implement Phase 2, in which it will evaluate and approve additional projects for implementation. FHWA will use the findings from both phases to examine the current operating framework and update regulations or guidance. In the near term, where administrative discretion allows and where the results suggest that a change in the regulatory framework will improve transportation, FHWA will make administrative, policy, and regulatory changes. In the longer term, FHWA will recommend and advance legislative changes in the ISTEA reauthorization cycle or sooner, as appropriate, subject to discussion with Congress.

Timeline for FHWA Innovative Financing Program 1994 First Round

JAN — President Clinton issues an Executive Order, *Principles for Federal Infrastructure Investment*, which directs the Federal agencies to establish programs for developing more effective infrastructure investment.

FEB — In response to President Clinton's Executive Order, Secretary Peña establishes the Department of Transportation's Innovative Financing Task Force.

MAR — FHWA Administrator Rodney Slater establishes FHWA task force on innovative highway financing and launches the *Innovative Financing- Test and Evaluation Project* (TE-045).

APR — Coordination of TE-045 with FHWA Regional and Division Administrators and field staff.

MAY — FHWA conducts an outreach program aimed at State DOTs, Transportation and Toll Authorities, State Financial Officials, Investment Banks and Financial Advisors.

JUN — State DOTs use ideas collected for the Finance and Transportation community to develop project proposals using Innovative Financing. States submit proposals to FHWA.

JUL — State DOTs work with FHWA to refine proposals.

Congressional testimony on Innovative Finance.

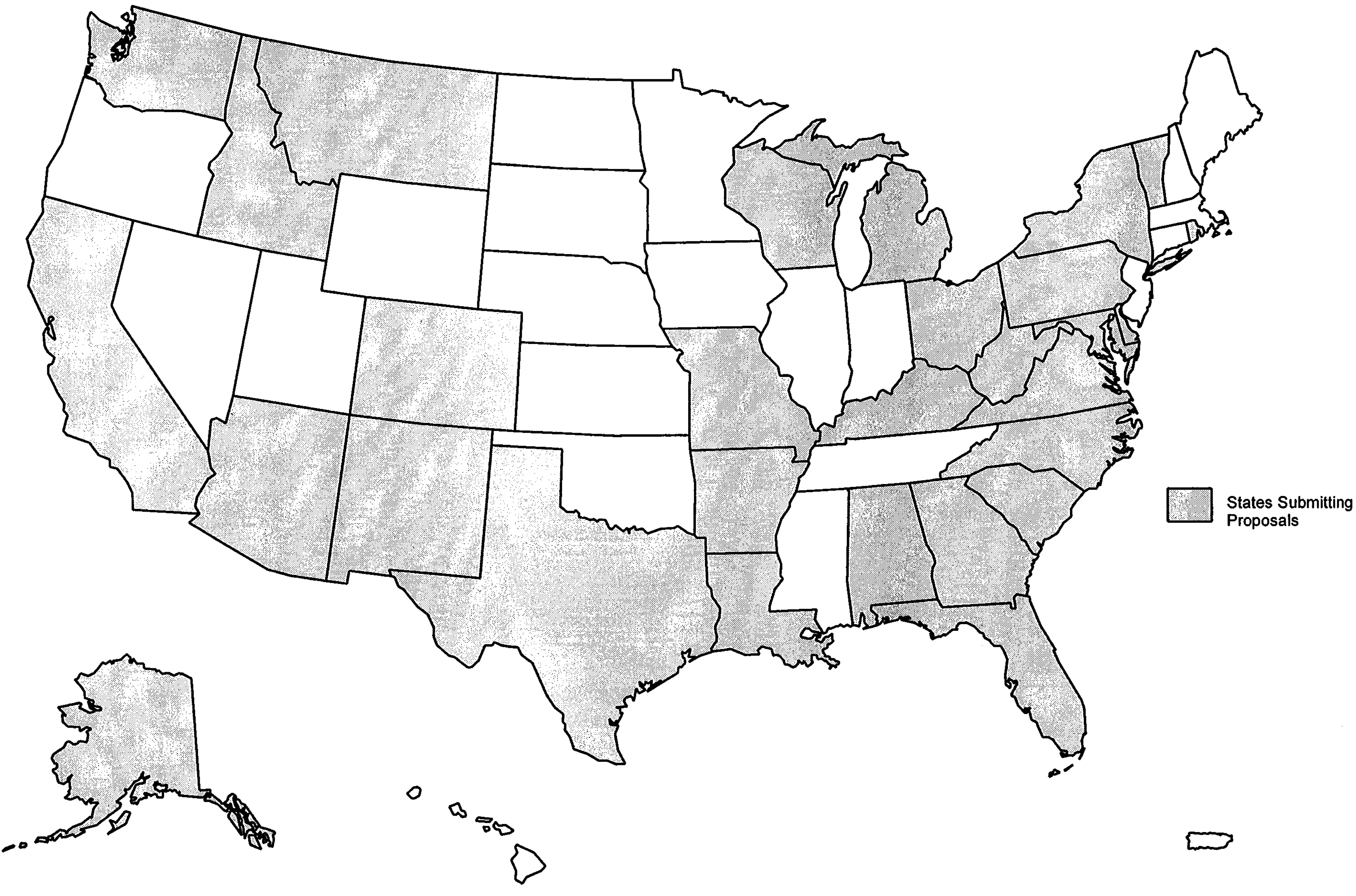
FHWA symposium held to support outreach and discuss proposals.

AUG — FHWA reacts to State DOT proposals and works with the DOTS to refine proposals.

SEP — FHWA evaluates final proposals and issues letters of approval.

OCT — Implementation begins.

STATES PARTICIPATING IN THE FHWA INNOVATIVE FINANCING PROGRAM



SECTION 2: EMERGING FINANCING STRATEGIES

OVERVIEW

The *TE-045 Innovative Financing Project* initiative is the first stage of a new effort by FHWA to move the current transportation financing process from a single strategy of Federal funding on a "grant reimbursement" basis to a diversified approach that provides new options drawn from the most innovative financing concepts developed by both the public and the private sectors. By creating incentives and removing barriers, FHWA hopes to increase States' use of the flexibility introduced under ISTEA. A prime objective is to maximize the ability of the States to leverage Federal capital for needed investment in our nation's transportation system.

The response to *TE-045* has surpassed all expectations. A number of States have proposed innovative financing strategies that will improve investment in highways and bridges. FHWA, working with the States, is refining those proposals that advance emerging financial mechanisms and enhance its current highway funding process. The various financing innovations developed to date fall into five categories:

1. Innovative management of Federal funds;
2. Bonds and other forms of debt financing;
3. Expanded matching opportunities;
4. New leveraging tools, including revolving funds; and
5. Innovative income generation.

Any discussion of these techniques requires an understanding of the nature of risk and how it affects project financing.

PROJECT RISK AND INNOVATIVE FINANCE

Several of the innovative financing tools proposed under FHWA's innovative finance initiative will help manage, reduce, or negate the perceived risks associated with highway finance. For the purpose of developing an optimal financing plan, project risk can be divided into three stages: (1) preconstruction, (2) construction, and (3) operation. In many situations, a plan of finance targeted for each stage will often minimize costs because each can be tailored to the unique interests of different types of investors seeking different investment risk/return tradeoffs. Establishing a financing plan for each stage helps to avoid a "high-risk" profile for an entire project.

- *Preconstruction:* Preconstruction includes project design; planning and cost estimation; environmental, economic, and other impact assessments; and right-of-way acquisition for a project. The greatest uncertainties and financing risks are found at this time. Because of these uncertainties, the capital markets often regard this stage of project execution as highly speculative. Thus, financing for expenditures can be difficult for a State to secure before construction. If a State is able to secure financing at all, it may be available only at much higher interest rates than would be required for financing at later stages of the project.

- *Construction:* The construction stage of a project has more definable financing risks. Although a project in the construction stage will have undergone environmental assessments and design studies, there is still a possibility that problems will arise with construction logistics and costs. In addition, while there is great investor interest in financing at this stage of project development, often these investors do not seek to tie up their capital for the long term. In addition to the *Innovative Financing Initiative*, FHWA has also launched an *Innovative Contracting Initiative*, to facilitate and expedite projects during the construction stage.

- *Operation:* Comparatively, the operational stage of a project presents the least financing risks. During this stage, the only significant risks may be whether or not projected levels of traffic and revenue will be achieved.

INNOVATIVE MANAGEMENT OF FEDERAL FUNDS

Traditional Funding

Under traditional funding procedures, the share of Federal funds for a surface transportation project is not differentiated by stage of project development.[1] Thus, a State may have difficulty funding the completion of needed feasibility studies and environmental assessments. This could be problematic if the State hopes to bring the project to the private capital markets.

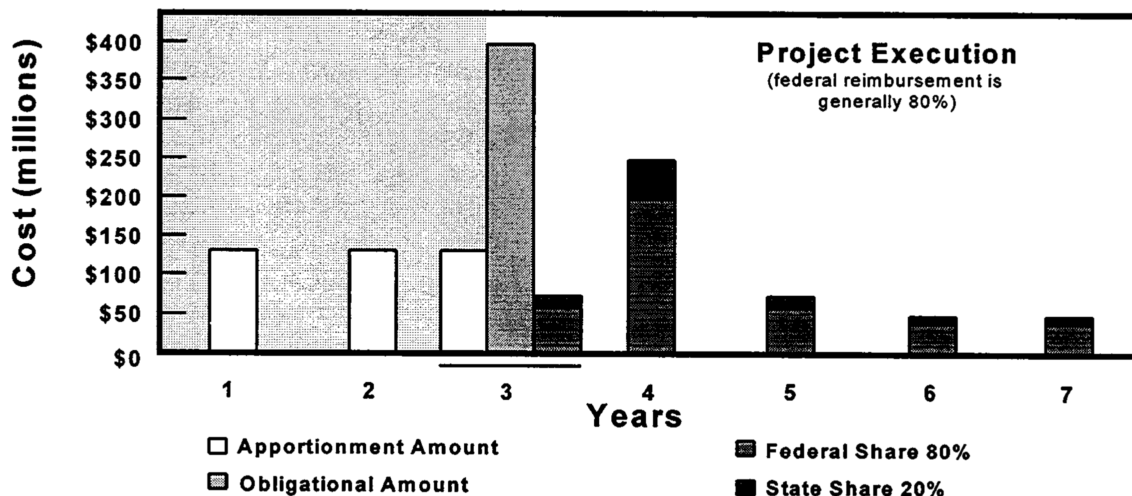
States also have been required to have enough obligational authority to cover the entire Federal share of a Federal-aid project before construction starts. For example, if a State has available only $133 million in apportionment amounts (Federal funds) and obligational authority (authority to commit)[2] each year and wants to execute a $500 million project, of which the Federal share would total $400 million, the State would have to limit Federal funding for the project or build it in phases.

This approach tends to impede construction of large-scale projects because of the number of years it takes for States to reserve the full obligational authority needed before construction can commence. Also, to reserve sufficient obligational authority for a large-scale project, a State would have to delay Federal reimbursement on smaller-scale projects. For example, States generally would prefer to obligate $10 million to a project that can begin construction and show visible results in the same year, rather than postpone smaller projects and set aside their obligational authority for a $100 million project. This may occur even if the larger project would have substantially greater benefits.

[1] For more information about the Federal-Aid Highway program, see Federal Highway Administration, *Financing Federal-Aid Highways*, Publication No. FHWA-PL-92-016, May 1992.

[2] Obligational authority is usually less than the apportionment amount, due to congressional ceilings.

Traditional Process



The requirement that States set aside obligational authority before beginning construction also presents difficulties for States interested in beginning several large projects simultaneously. For example, if a State had $300 million in obligational authority each year and wanted to begin two projects costing $200 million each, it could begin only one of the projects, even if the project expenditures would occur over several years. Developing constituent support for a State-wide transportation plan can be enhanced if projects can be developed more effectively in parallel.

ISTEA/Innovative Finance

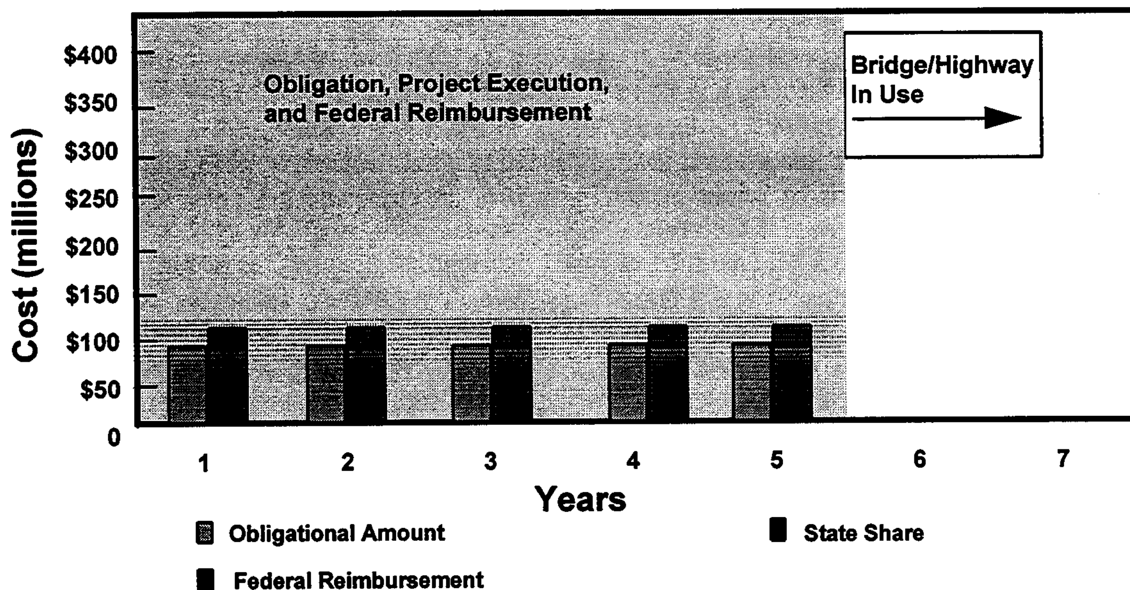
As a result of the programmatic changes defined in ISTEA, policies regarding the timing and administration of Federal funds can now increase States' ability to finance transportation projects. New consideration is being given to innovations that will remove procedural barriers to project finance, with the goal of improving the ability of State and local governments to leverage Federal funds more effectively, thereby accelerating projects and avoiding increasing costs. At the core, these innovations seek to provide States with more options for using their Federally apportioned money to match both the States' and the private sector's needs. Included under the *Innovative Financing Initiative* are the following:

- Phased funding;
- Tapering;
- Advance construction; and
- Partial conversion of advance construction.

Certain of these techniques have been available (although used sparingly), as alternatives to the traditional process, but they need to be updated or redefined to fit in with the full range of project finance tools that are becoming available. Others have been proposed by States in response to the FHWA's innovative finance initiative. The flexibility and improved cash-flow management provided by these innovations will help States begin a greater number of projects, expedite project construction (thereby delivering transportation economic benefits earlier), and manage capital for larger projects which take time to develop.

Phased Funding

Phased funding allows States to begin projects before they have accumulated the full budget capacity to cover the Federal reimbursement of total project costs. Under *phased funding*, States can obligate an amount of Federal-aid Highway (FAH) funds in each year of a project equal to the estimated construction expenditures in that year. This would permit a State to begin two large projects at once, as long as sufficient budget capacity is available to cover reimbursement for construction expenditures in each year. *Phased funding* will assist in accelerating a project. In order to use *phased funding*, the State must enter into an agreement with FHWA that commits the State to completing the project. Under *phased funding*, where a State does not yet have full budget capacity, FHWA and the State share the funding risks involved in preconstruction and construction. This is in contrast to the traditional approach, where a State must set aside the entire amount of obligational authority required for a project in order to shelter FHWA from what might otherwise be undefined risks.



Application of Phased Funding

In order to improve transportation to a geographic area isolated by waterways, one State proposed that FHWA permit *phased funding* for construction of a second bridge. The existing bridge provides an insufficient level of service because road traffic is stopped periodically during the day to allow marine traffic to pass. These stoppages, on average four to five per day, impair commerce and leave the area isolated from emergency facilities.

The cost of this single project represents over 30 percent of the State's annual allotment of Federal funds for this type of project. Although staged construction was explored as an option for managing funds, the nature of the project was such that it could not be subdivided into a variety of construction contracts. More importantly, though, the State has indicated that a 5 percent savings in project costs could be realized by structuring a single construction contract if *phased funding* were approved.

Innovative financing techniques will permit completion of this project several years earlier than would have been possible with conventional funding approaches. By building the bridge earlier, the State will avoid construction cost inflation and will therefore realize significant savings. Based on current benefit/cost ratios for highway projects, FHWA estimates an overall return to the economy of 15 percent on average for each year a project is advanced.

New Horizons for Innovative Financing

Historically, *phased funding* agreements have been limited to Interstate completion projects and could not extend beyond the current highway bill reauthorization. Also, Federal reimbursement has not extended beyond the project's construction period.

Upon completion of the *Innovative Financing Initiative*, FHWA will assess the value of making *phased funding* available to projects other than Interstate completion projects and possibly, on a targeted basis, across authorization periods. For example, it is possible that *all* maintenance projects should be eligible for *phased funding* since it has been shown that delayed maintenance is very costly. Also, a class of large-scale, high-priority projects which significantly increase leveraging of Federal funds by

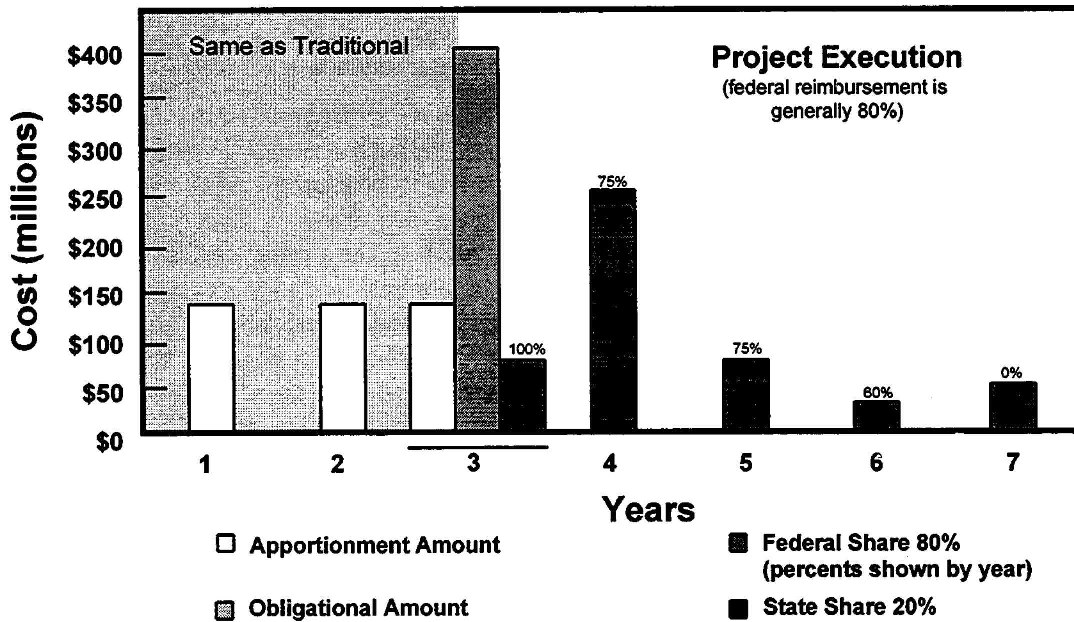
attracting additional private and/or local capital might justify taking the risks perceived to be associated with expanding eligibility for *phased funding*. Once defined, implementation may require changes in policy, regulations, or the authorization act.

Tapering

Tapering is an alternative means of making the Federal reimbursement to the States. Under this concept, the Federal share of the project may vary from year to year, as long as the overall Federal contribution does not exceed the Federal-aid limit. For example, the Federal contribution could start out at 100 percent and taper off to zero as the project nears completion. The figure below models this possibility for a $500 million project, where the Federal share is $400 million (80 percent).

Tapering may help shift, reduce, or otherwise negate the high financing risk found in the preconstruction stage and allow States to begin projects that may be feasible only after preconstruction activities are funded. Tapering has the additional benefit of allowing States to maximize the use of private capital to finance the remainder of the costs after the preconstruction stage, when the risk profile is lower and the pool of potential capital is likely to be larger.

Tapering the Federal Share



Note: Accumulation period can be eliminated by combining tapering with phased funding

Application of Tapered Funding

A series of existing toll bridges in one State requires major rehabilitation, including upgrading and capacity increases to serve projected growth in the area's traffic. While much of the cost of the project could be covered by toll revenues, it is unlikely that all costs could be recovered exclusively using revenue-backed debt financing. In addition, at this early stage of development, the projected increases in traffic are so uncertain that they have limited credit market value and therefore have limited potential for leveraging funds.

In order to evaluate a series of innovative financing options which are anticipated to include both public and private capital, as well as build-operate-transfer and build-transfer-operate options, the State proposed that Federal funds be permitted to cover the full costs of the financial feasibility analyses. Recognizing that the feasibility stage of the project is less likely to attract private capital than later stages, FHWA has approved the State's *TE-045* proposal to use Federal funds without a State match for this phase of the project. An effective feasibility study will increase the State's ability to attract private capital and/or use revenue bonds when appropriate. As a result, in the proposal, a direct connection was established between permitting an increased Federal share on the front end of project development and providing the possibility that it could be decreased on the back end, because there could be substitution of private capital.

Advance Construction

Through the concept called *advance construction*, a State can independently raise the up-front capital required for a project and preserve eligibility for future Federal-aid funding for that project. At a later point, the State can obligate FAH funds for reimbursement of the Federal share. This allows a State to access capital from a variety of sources, including its own funds and private capital in the form of anticipation notes, commercial paper, bank loans, etc. This technique also allows a State to build a transportation project that is eligible for Federal aid when the need arises, rather than having to set aside obligational authority for the Federal share. In order to receive future reimbursement for an *advance construction* project, a State must have FHWA "designate" the project and approve it as an *advance construction* project. However, the State itself can determine when to obligate funds for reimbursement of the project, by later "converting" the entire project to a regular Federal-aid highway project in a single year—assuming the State has the capacity to obligate sufficient funds for the full Federal reimbursement in a single year. This allows States to manage their FAH funds more effectively, by choosing when to seek reimbursement.

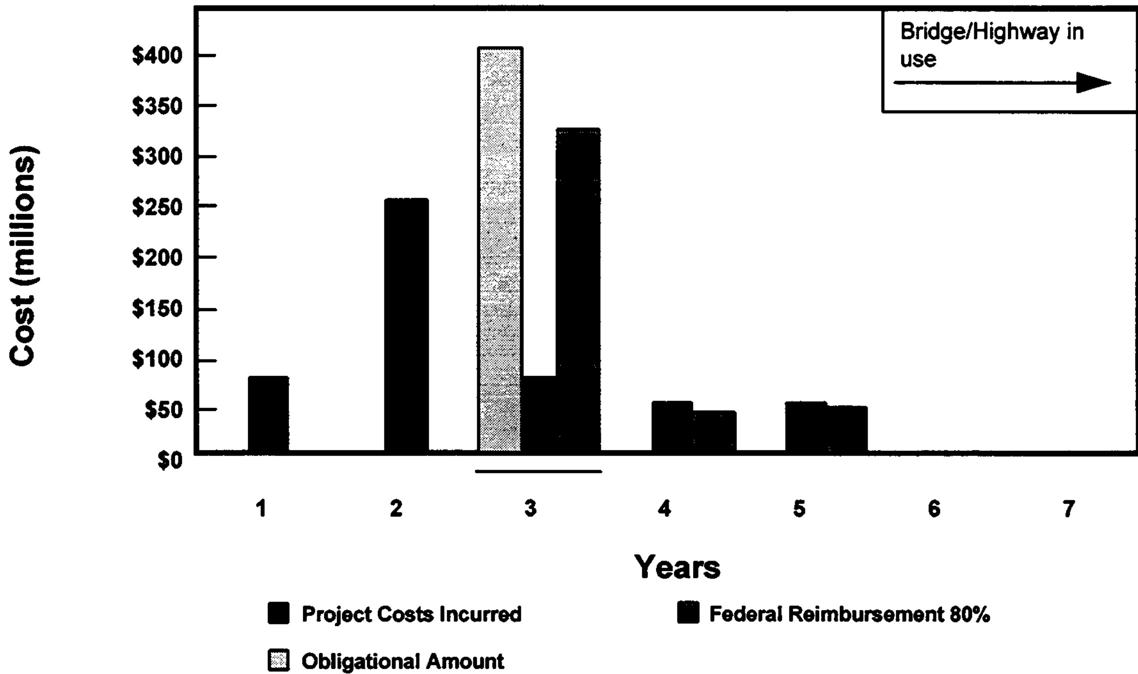
If a State is prepared to accept greater responsibility for managing project costs and funding, then using *advance construction* allows the State to deliver transportation benefits to the public earlier, to better coordinate transportation development with its other economic initiatives, and to preserve its eligibility for Federal aid. If a State chooses to finance *advance construction* through debt instruments on a National Highway System (NHS) project, it can also receive reimbursement for most, if not all, of the interest costs it incurs. (Current law limits the reimbursement for interest costs to the prevailing construction inflation rate.)

When used to the fullest, this approach can resemble the "construction finance" seen in private capital markets such as commercial real estate development, where a developer uses short-term debt to finance construction and then replaces the short-term debt with long-term debt after construction is completed and the building is ready to generate revenue or provide benefits to the public. Essentially, this approach can define the

Plan of Finance for construction separately from that for post-construction. This financial segmentation can lower a State's overall project costs by managing perceived investor risk and making use of short-term debt. If the State can combine *advance construction* with a public-private partnership, it can share some of the preconstruction and construction risks with the private partner. For example, a number of States are considering design-build-transfer arrangements for constructing projects.

Like phased funding, *advance construction* eliminates the need to set aside full obligational authority before starting projects. As a result, a State can start a greater number of concurrent projects under *advance construction*. Absent this concept, the requirement to set aside or "tie up" obligational authority years ahead of construction commencement can impede construction of other projects, particularly if the project represents a significant share of the State's annual obligational authority. *Advance construction* also permits construction of large projects without hampering smaller projects' ability to use Federal funding.

One drawback to *advance construction* is the need to set aside obligational authority for the full Federal share of project costs before "converting" the project and, thereby, receiving any Federal reimbursement funds. For example, suppose a State constructed a $500 million project, anticipating the $400 million Federal share to be paid out of the State's annual obligational authority. The State would have to set aside the $400 million of obligational authority necessary to convert the project from one financed exclusively with State funds to one receiving 80 percent Federal funding.



Application of Advance Construction

An Interstate highway requiring both resurfacing and the addition of two lanes will be advanced by four years as a result of a proposal submitted by a State under *TE-045*. The State proposed issuing "anticipation notes" in the private capital market to develop a source of funds. These funds will cover the period between construction and Federal reimbursement. The notes will be paid off once obligational authority has become available to the State.

Although the State was already preparing to construct parts of the identified corridor, it was deferring construction of sections because of limited funding. This would have presented users with a "bottleneck" in the flow of traffic for a number of years, preventing the State from realizing its significant potential for economic growth.

In effect, the fragmented construction in the corridor brought about by traditional pay-as-you-go funding would have reduced the benefit of the State's current investment in the other segments of this corridor. Approval of *advance construction* to complete the entire corridor provides two incremental benefits. First, construction of the additional segment will be completed sooner at lower cost. Second, completion of the additional segment will increase the value, and therefore deliver greater benefits, to users of the originally programmed investment by avoiding the creation of a bottleneck.

Other States have proposed that FHWA approve a package of projects for *advance construction*. This approach allows a State to develop statewide support for the highway program and economize on the issuance of "anticipation notes" through a larger offering.

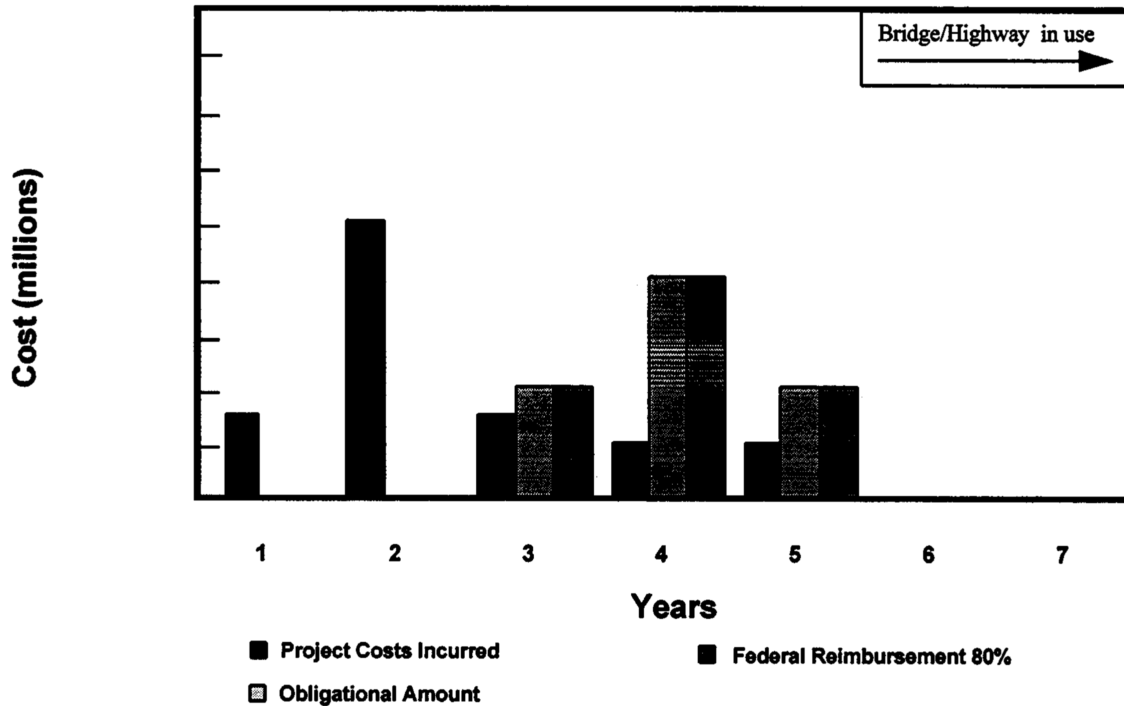
Partial Conversion of Advance Construction

Under *advance construction*, prior to a State's request to "convert" an *advance construction* project to a regular Federal-aid project, the State must have obligated the full Federal share of the project costs. The effect of this limitation on the construction of other projects was outlined in the section on *advance construction*.

Partial conversion of advance construction is a form of *advance construction* in which the State converts, obligates, and receives reimbursement for only part of its funding of an *advance construction* project in a given year. This removes any requirement to wait until the full amount of obligational authority is available. The State can therefore obligate varying amounts for the project's eligible cost in each year, depending on how much of the State's obligational authority is available.

In addition to securing project benefits earlier and improving cash flow to a State, *partial conversion* is particularly useful when a variable revenue stream is dedicated to the cost of a project (e.g., increment sales taxes, development impact fees, local option gas taxes, and tolls). In many of these situations, particularly when there is no revenue history (as is frequently the case with tolls), it is not clear at the time of construction exactly how much Federal funding is going to be needed by the project. For example, up to 50 percent of a local project's cost is eligible for Federal aid. Given the scarcity of Federal funds available to the State, though, there is a need to minimize the Federal funds required for any given project. Using the option to partially convert the Federal share after the revenues have materialized makes bond and note financing more viable and Federal-aid funds available to support a greater number of eligible projects.

Partial Conversion of Advance Construction



Application of Partial Conversion of Advance Construction

Although certain States have used the *advance construction* provision of Title 23 in the past, several pointed out that the traditional rules regarding "converting" the project under *TE-045* have limited the appeal of this technique. Other States have indicated that without the ability to partially convert these projects, the cash flow costs of delayed reimbursement may outweigh the potential benefits of conventional *advance construction*.

One State which has used *advance construction* in the past proposed that *partial conversion* be used to help it accelerate construction of additional HOV lanes in a highly congested area. In this case, the availability of *partial conversion* increases the willingness of the State's financial decision-makers to support interim funding of this priority project. This approach allows transportation officials to demonstrate reduced cash flow costs to the State compared with conventional *advance construction* techniques.

Another State has opted to use dedicated revenue sources (e.g., tolls, dedicated gas taxes, sales taxes) to cover its share of a project's costs. In some years, revenues from dedicated sources may exceed the State's targeted share of project costs. Under partial conversion, the State and FHWA can modify the Federal share of costs each year, allowing the State to apply any higher-than-expected revenues to offset project costs and thus free up Federal funds for other projects.

New Horizons for Innovative Financing

Several initiatives could emerge to facilitate greater use and usefulness of *advance construction*. One incentive being considered is to set eligible interest costs equal to interest incurred by the State for its share of the project or to the comparable interest rate on

Treasury notes for an equivalent time period. This would eliminate any need to forecast construction inflation indices. New instruments may also become available, including a construction loan program and increasing market acceptance of anticipation notes for *advance construction* projects.

BONDS AND OTHER FORMS OF DEBT FINANCING

Traditional Funding

Historically, few States have built Interstate projects with the aid of bond financing for project costs, for the State and the Federal share. This is, in fact, permitted in Federal bond provisions in Section 23 U.S.C. 122 and regulations in 23 CFR 140. These provisions allow the issuance of debt backed by agreements between FHWA and the project sponsor to use Federal funds for debt service. According to 23 CFR 140:

> An SHA [State Highway Agency] that uses the proceeds of bonds issued by the State, a county, city or other political subdivision of the State, for the construction of [eligible] projects may claim payment of any portion of such sums apportioned to it for expenditures on such system to aid in the retirement of the principal of bonds at their maturities, to the extent that the proceeds of bonds have actually been expended in the construction of projects.

Interest costs are eligible for Federal reimbursement on some Interstate projects. Although some outdated limitations need improvement, most States do not use the bond provisions of Title 23. Generally, States defer construction until pay-as-you-go funding has been accumulated or they use bonding only for the State share of project costs.

ISTEA/Innovative Finance

Under the *TE-045* project, FHWA and the States are exploring ways to expand the use of the bond market to leverage Federal investment in surface transportation, as has been done effectively in other modes. In addition, States have indicated that they may be able to obtain investment grade bond ratings, and therefore make greater use of bond instruments, if they can structure a predictable Federal funding stream beyond the end of the current authorization period. FHWA cannot guarantee authorizations after 1997, but the Federal-aid program has existed for decades and has established a proven record of trust-fund-based financial stability. FHWA and the States are working together to determine how to structure FHWA assurances to be acceptable to bond market investors.

New Horizons for Innovative Financing

Increasingly, States are using Federal apportionments as a secondary source to support revenues pledged for bond payments (e.g., tolls and fees). FHWA has promoted testing the feasibility of this approach and expects to expand its use if practical. The use of Federal apportionments as credit enhancement would make it easier for States to raise private capital for projects.

Several States have proposed using their accumulated "contract authority," also known as their unobligated balance in the Federal Highway Trust Fund, to serve as credit enhancement for debt issuance. For example, they would like to be able to represent to potential bondholders that their unobligated Federal funds could be used as a reserve in the event that a bonded project is temporarily unable to make a payment

from its primary revenue sources. While certain Federal guarantees may cloud the tax-exemption for bond interest income and other innovative financing tools may be preferable, the States' requests have prompted FHWA to explore this concept.

Working with the Federal Transit Administration (FTA) and pursuant to Title 49 of the U.S.C. Section 9, some States use Certificates of Participation (COPs) backed by anticipated FTA funds to finance transit projects. The COPs are often backed, in part, by payments of Federal-aid funds and may be secured by subway vehicles, stations, or buses. FHWA and the States may explore ways to issue COPs backed by FAH funds apportioned to States.

Application of Bond Issue Provisions

In one State, construction of a new four-lane divided highway that would relieve urban congestion has been delayed for more than a decade, although the project has received its environmental approvals. Although this project would alleviate a number of transportation problems associated with existing traffic levels, the project's costs represent a significant share of the State's apportionment. The relatively large scale of the project, coupled with the traditional need to obligate the full Federal share of project costs, has prevented the identification of a project start date.

In order to advance the project, the State proposed to use the toll-road eligibility provisions of ISTEA by using a bond issue to assemble funds for construction. Although the State has multiple sources of capital for the project, the flow of these funds from various beneficiaries is difficult to secure prior to construction. In addition, certain portions of the funds can only be realized after the project is built.

The proposed use of a bond issue provides an "umbrella" for the various funding sources. It also permits the fund flows to be capitalized to pay for construction. Proceeds from the bond issue will cover portions of *both* the State share of project costs and the expected future Federal highway funds. It is anticipated that the non-Federal share will include toll revenues, local funds, and State monies in amounts to be determined as debt service payments are due. Also, the amount of Federal funds that need to be obligated to share in debt service payments can be determined annually.

Another State created a transportation improvement district which has the power to issue bonds and, therefore, can provide infrastructure to support and spur economic development. By using the bond issue provision as part of an economic development plan, this proposal would consolidate local funds and new revenue sources (such as tax increment funds and the sale or lease of land near the rights-of-way) with a fixed amount of State motor fuel taxes and Federal apportionments to pay bondholders. The ability to commingle repayment funds significantly enhances the marketability of bonds.

A number of States are exploring the use of public-private partnerships to finance highways. These partnerships take a variety of forms, but they generally use both debt market instruments, such as bonds and private equity investments. On a nationwide basis, only a handful of these projects in the next few years are likely to be sustainable by exclusively levying user fees to repay investors. As a result, States have proposed using the bond issue provision to offset mortgaged project costs over time. In most cases, this technique can minimize the use of Federal funds in these projects.

EXPANDED MATCHING OPPORTUNITIES

Under the *Innovative Financing Initiative*, States will have more options for matching the Federal share of highway projects. States may be able to use in-kind contributions, the value of public donated rights-of-way, private funds, or credit for previously constructed projects to match Federal shares.

Flexible Match

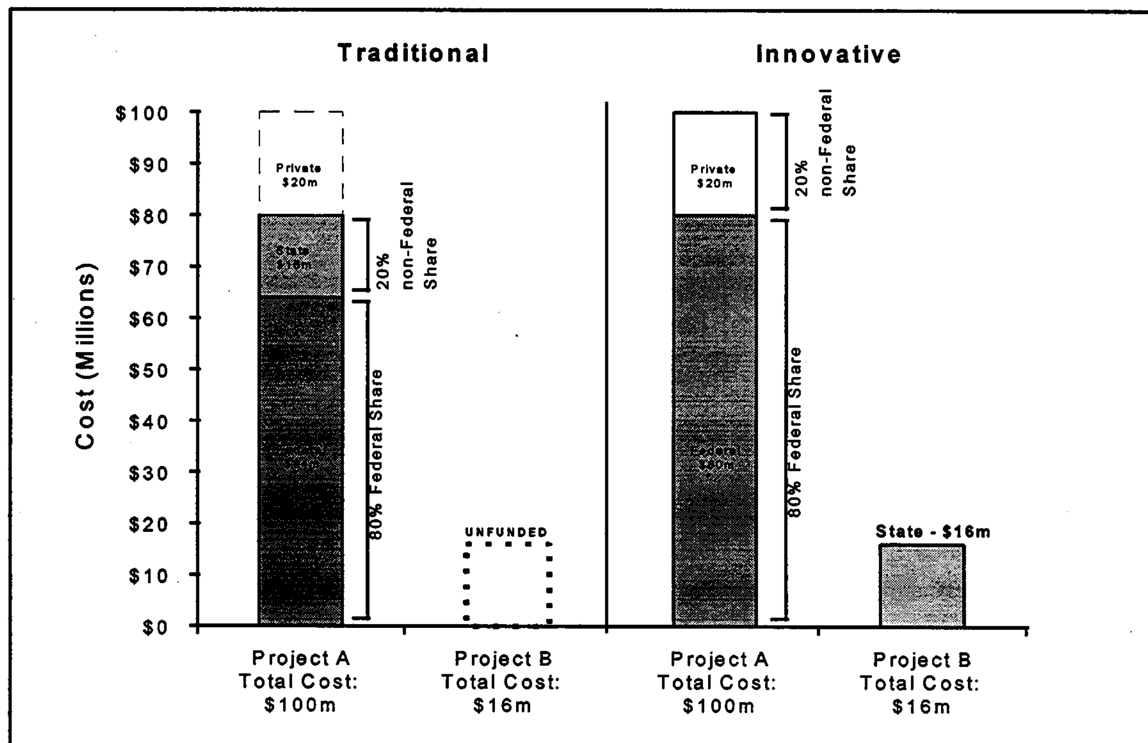
Traditional Financing

In order to receive their share of FAH money, States must fund a fixed, minimum percentage of a project's costs—in most cases, 20 percent. Traditional highway funding arrangements required States to fund the entire non-Federal matching requirement from State and local funds. Any in-kind contributions, except rights-of-way donated by a private entity, have been deducted from the total project cost before the level of Federal assistance is determined. States, therefore, have realized a savings of only 20 percent of such contributions. Evidence suggests that this restriction does not provide an incentive for States to identify and utilize all available local and private resources, nor does it minimize cost.

ISTEA/Innovative Financing

In an effort to maximize the use of all available resources, projects in the *Innovative Financing Program* may count private donations and local in-kind contributions towards the 20 percent non-Federal matching requirement. Under the *Innovative Financing Initiative*, local government capital, in addition to cash, is considered for non-Federal matching purposes. A number of proposals also use private capital as the required match.

Traditional Funding vs. Flexible Match



Application of Flexible Match

States' responses to *TE-045* have demonstrated that Federal dollars can be leveraged more effectively by providing flexibility in the form that the non-Federal match might take. A number of States confirmed that new approaches can lower the public's transportation development costs in an era of increasingly limited resources.

One State proposed leveraging Federal funds through local and private development of an Interstate highway interchange. The State offered a fixed sum of Federal funds, totaling less than 40 percent of project cost, contingent on coverage of the remaining costs by local and private beneficiaries. In addition to making limited Federal monies available to more projects throughout the State, this approach provided an added benefit: Under the agreement with the local officials, Federal funds would not be used to match any costs over the engineering estimate. The local-private matching share, in effect, would increase if project costs escalated.

A number of States identified intermodal projects for which FHWA's traditional rules for contribution of rights-of-way differ from those of the non-highway mode. In these cases, States proposed that FHWA allow in-kind contributions as part of the non-Federal match. States demonstrated that projects could be accelerated significantly and delivered at a lower public cost with the adoption of this approach.

Allowing the contribution of existing assets, such as rail stations, to constitute the non-Federal match was identified in "transportation enhancement" projects proposed by a number of States. States indicated that without an alternative interpretation, the advancement of relatively small projects required excessively cumbersome bureaucratic efforts. Enhancing States' ability to accelerate enhancement projects through alternative matching interpretations could help build support for a State's overall transportation construction program.

Section 1044 Investment Credits

Traditional Funding

Most highways providing similar functions have historically been categorized as either (1) highways receiving Federal aid for which there is no charge for use; or (2) toll roads which receive no Federal aid.

1. *Federal-aid Roads:* State-initiated highway projects are generally eligible for 80 percent Federal aid. States must fund 20 percent of the total project cost as a match of Federal funds. Sources of matching funds traditionally include State-contributed equity in a project in the form of State funds and/or proceeds from general obligation bonds.

2. *Toll Roads Receiving No Federal Aid:* Various States have independently developed toll roads which were not traditionally eligible for Federal-aid funding or which pre-date the Interstate Highway Program. Project costs were funded entirely by the State and/or the authority operating the toll road, with proceeds from revenue bonds backed by the expected toll revenues. These funds are often augmented with internally generated capital and/or State-contributed equity.

States which have developed both types of highways have been required to both:

- Fund the full cost of the toll road's construction and its ongoing maintenance, *and*

- Fund the matching share of Federal-aid highways.

In these States, there was little or no incentive to expand upon the toll road's ability to deliver and maintain transportation infrastructure and reduce the demand for State

and Federal-aid funds through user-fee financing.

ISTEA and Innovative Financing

Among the breakthrough changes under ISTEA were the following:

- New toll roads can now receive Federal aid, although at a reduced percentage compared with non-tolled roads; and
- Certain non-tolled roads can now be converted to toll roads, which would reduce the amount of public funds required for maintaining and rehabilitating such projects.

The NHS includes toll roads developed by States outside the framework of the Interstate program. In order to give those States that have been investing in toll roads on the NHS appropriate credit for their greater share of local highway investment, ISTEA incorporated the concept of investment credits. To the extent a State chooses to expand the role of toll-road authorities in constructing or reconstructing the State highway system, it can receive appropriate credit for this under the Federal-aid program in future years. For example, a State has $80 million in State funds available for highway projects. Under traditional funding, as shown in the chart, that $80 million accomplishes only two projects (Projects A and B) totalling $160 million. Under Section 1044 investment toll credits, the $80 million in State funds in conjunction with $20 million in toll revenues accomplishes four projects (Projects A, B, C, and D) totalling $280 million.

ISTEA, therefore, offers two potential benefits to the States. For those States that are constrained in funding the non-Federal match from traditional sources, credit for ongoing investment in other highways provides another mechanism to meet the non-Federal share requirement and secure Federal participation in projects. For those States that are already using all of the Federal-aid funding available to them, the investment credit permits them to use freed-up traditional State dollars for projects that might otherwise go unfunded.

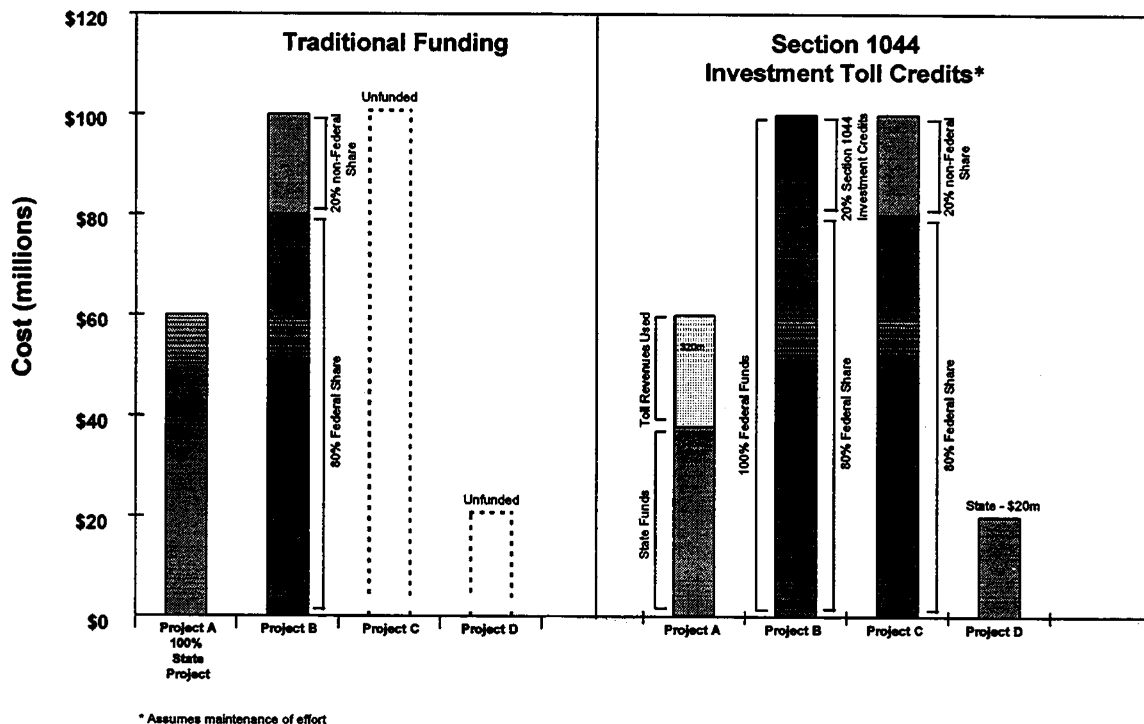
To be eligible for ISTEA Section 1044 investment credits, States must demonstrate their commitment to continue ongoing levels of investment in transportation each year by complying with the "maintenance of effort" provision outlined in Section 1044(b). Since enactment of ISTEA, 12 States have earned almost $2 billion in these credits. In the last few years, the effectiveness of this provision has been limited by State budgetary constraints. However, States have had difficulty complying with this provision, often due to insufficient investment in only one of several prior years.

Under FHWA's financing initiative, a number of States have indicated their willingness to make a greater budgetary commitment to *future* investment in transportation if State financial officials understand that they can qualify for Section 1044 investment credits. This use of a *prospective* commitment to the maintenance of effort will test an alternative interpretation of Section 1044. This structure can be used in a number of cases to build new partnerships between turnpike/toll-road operators and State DOTs for cooperation. In effect, this new approach dynamically rewards those States which are prepared both to leverage user-fee-financed capital and to provide a commitment to ongoing State investment in transportation.

New Horizons for Innovative Financing

ISTEA offers States the opportunity to develop new financing ideas for highways. The primary goal of the *Innovative Finance Initiative* is to work with and assist State and local governments in their efforts to boost investment in transportation infrastructure to rebuild transportation facilities that support the economy.

Traditional Funding vs. Section 1044 Investment Credit



In order to advance innovative ideas and to maintain support for Federal transportation funding, Federal innovation cannot substitute for State commitments to maintain investment. It is expected that some ongoing refinements to the "maintenance of effort" provision will be required.

Many States are faced with complex decisions regarding whether to use their limited Federal funds to build and repair non-tolled roads, or to make grant monies go further by leveraging user fee revenues received from toll roads. In an era of limited public funding, user-fee–financed roads can be in place sooner, delivering greater economic benefits in the State. FHWA anticipates that increased certainty about the availability and use of investment credits in the future may help State decision makers develop user-fee financing for new construction and repairs. Such guarantees are expected to be outlined as part of a comprehensive effort to reform regulatory and policy guidelines and as part of ISTEA technical corrections legislation.

Application of Section 1044 Investment Credits

Under current FHWA guidance, in order to earn Section 1044 investment credits, a State must meet a "maintenance of effort" (MOE) spending level test based on *past* spending levels. In response to *TE-045*, States have expressed the willingness to commit to *future* investments in order to gain access to investment credits. One State proposed to combine the credits developed from new investments in three toll facilities and distribute the benefits to two other State projects. The five projects identified in the proposal are geographically dispersed across the State and will provide benefits to different areas simultaneously. The proposal reflects a partnership between the State DOT, quasi-public transportation authorities, and private operators to advance needed investments.

Another State proposed using the investment credits generated in a specific county to accelerate the construction of additional connecting highways that will relieve congestion in the same area. In addition to using credits for the non-Federal match, the State will also use the *advance construction* provision for Federal funds. This combination of financing techniques will result in significant acceleration of project development and lower up-front costs, thus reducing the impact on the State's budget. In addition, other projects eligible for Federal aid will not be delayed in order to accelerate the delivery of the proposed project.

NEW LEVERAGING TOOLS—SECTION 1012

The FHWA *Innovative Financing Initiative* will provide States with access to alternative methods for leveraging the capital that funds their highway projects.

Traditional Funding

Under the traditional approach to highway funding, money from the Highway Trust Fund is paid to States only as reimbursement for highway construction outlays under Title 23. This limitation, in effect, requires that Federal funds be used only once, as an equity investment.

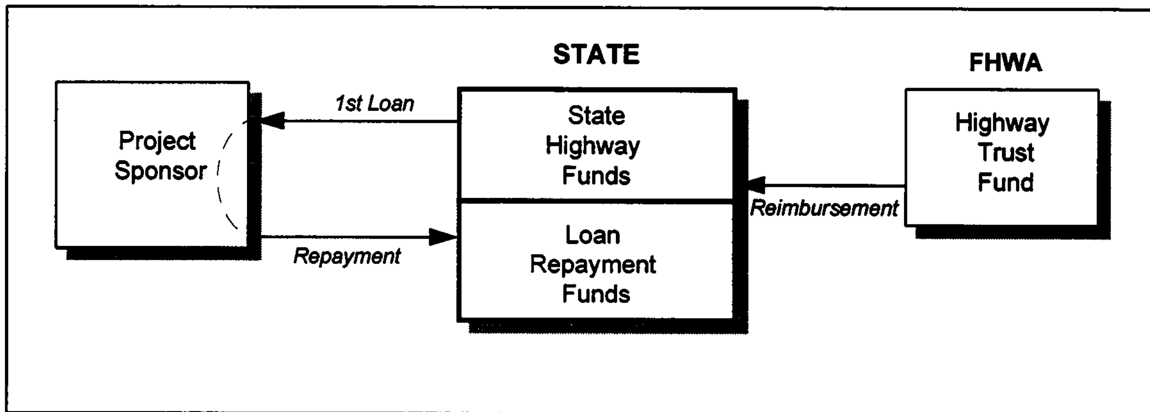
ISTEA/Innovative Financing

The enactment of ISTEA has given FHWA increased flexibility to leverage additional investment instead of relying solely on the Federal funds. Contained in ISTEA are several powerful tools with which FHWA can address the infrastructure gap by leveraging State, local, and private funds.

Using the *Innovative Financing Initiative* and ISTEA Section 1012, Federal funds can be used for:

- Eligible projects which include facilities with revenue-generating potential such as toll highways, tunnels, and bridges;
- Loans can be made to projects regardless of whether the sponsor is a public, quasi-public, or private entity;
- The loans are subordinated to senior debt and can have an extended repayment period; and
- In addition to loans, FHWA will consider other credit enhancement arrangements such as a line of credit or contingent loan.

Section 1012 Loan

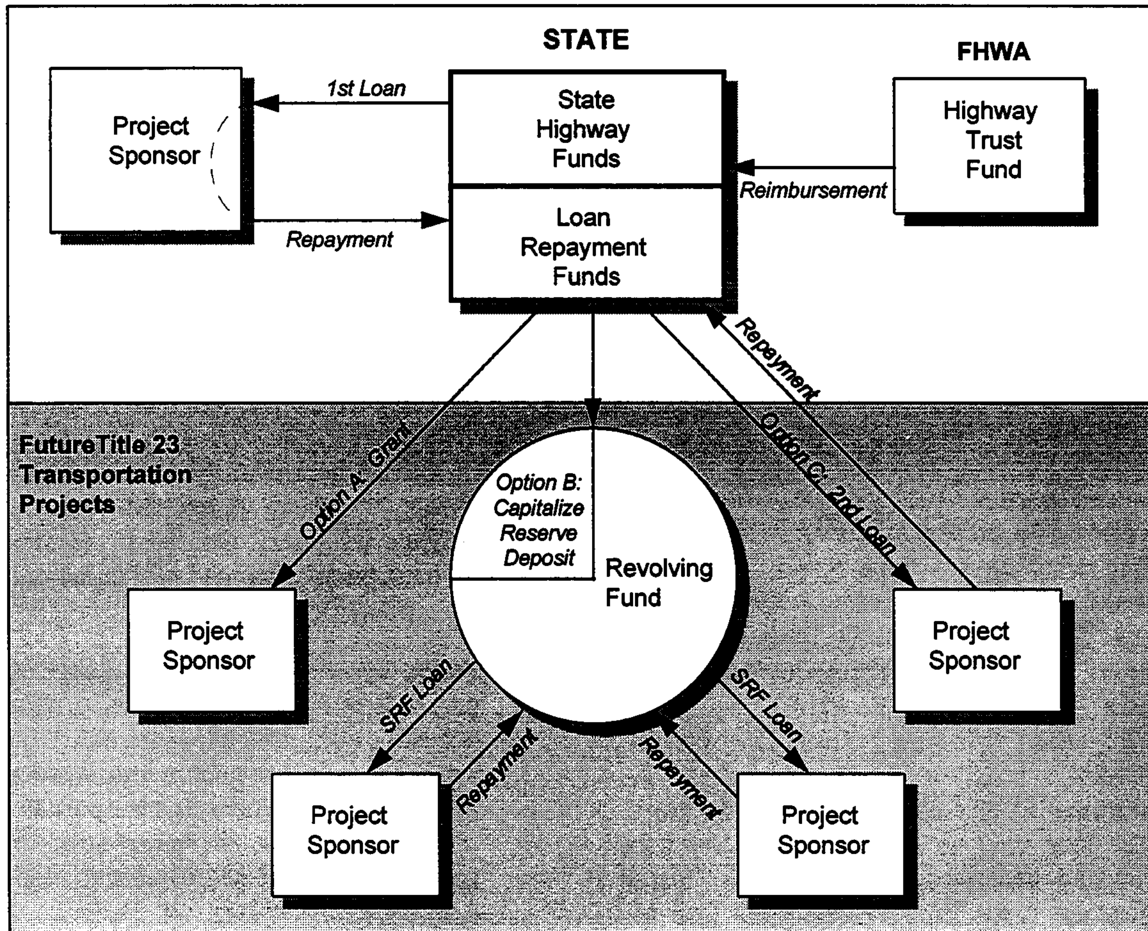


Under Section 1012, a State may loan money to a project sponsor. Federal funds can reimburse the State up to the Federal share of the project costs. States can lend any Federal-aid funding such as IVHS funds, Interstate Maintenance funds, Surface Transportation Program funds, and Congestion Mitigation and Air Quality (CMAQ) program funds to leverage investment in any eligible Title 23 projects. The loan may be repaid to the State with revenue generated by the project. States may use funds from Section 1012 loan repayments for a variety of eligible Title 23 transportation projects.

Although ISTEA states that loan repayment proceeds must be used to fund other surface transportation or ISTEA projects, it does not limit the State's financing options. When combined with the *Innovative Financing Initiative*, potential State uses of Section 1012 include the option to (1) grant the funds to one or more projects, (especially if those projects have limited revenue-generating capacity); (2) lend the funds to new projects, with repayment by project revenue; or (3) use the funds to capitalize a revolving fund. States can also use a combination of these three approaches.

- *Grant:* If a State adopts the option of making a grant, the level of non-Federal funds leveraged will equal only the amount of the initial loan.
- *Loan:* By choosing to loan repayment proceeds to other surface transportation projects with revenue-generating potential, a State can continue to leverage Federal funds to meet its transportation needs. Over time, the initial loan can sustain limitless new investment without requiring additional Federal or State aid, subject only to loan repayment schedules.
- *Capitalize a Revolving Fund:* Under this option, a State could establish a fund (through the State DOT or other agency) that would leverage the most non-Federal money while sustaining several projects at once. The revolving fund would issue bonds, backed by loan repayments by project sponsors from project revenues or other sources. The initial funds would provide coverage and act as a debt service reserve fund.

Potential Uses of Section 1012 Loan Repayment Proceeds



New Horizons for Innovative Financing

While ISTEA and the FHWA *Innovative Financing Initiative* have provided many significant breakthroughs, they represent only the beginning of what could be a new era in highway finance.

In the recently concluded 103rd Congress, legislation was introduced which would allow States to bypass the initial project loan and repayment cycle and use FAH funds to capitalize revolving funds immediately. By doing so, the benefits of the revolving fund could be realized earlier without the time lag associated with repayment schedules.

Application of Section 1012 Loan Provision

Prior to FHWA's *Innovative Financing Initiative*, no States had made any loans under ISTEA's Section 1012. A number of States have now proposed new ways to use the Section 1012 loan provision. The proposals include projects which

- Will develop alternative repayment sources beyond toll revenues (such as dedicated gas tax revenues, sales taxes, etc.);
- Recognize the link between Intelligent Vehicle Highway System/Intelligent Transportation System (IVHS/ITS) technology applications and their potential for revenue generation;
- Capitalize on the inherent economic efficiencies of the development of certain intermodal projects;
- Seek to use revenue bonds for projects (however, certain projects may not be able to develop sufficient capital to cover construction costs due to market requirements for debt service coverage and reserve account funding; in these cases, Section 1012 subordinate loans can be repaid relatively quickly from "coverage revenues"); and
- Benefit a toll facility but cannot be funded up front by the facility operator because of market, legislative, or jurisdictional limitations.

In a number of cases, the terms of the Section 1012 loan provision produce greater revenue for the State upon repayment than would have been seen through other uses of these funds.

INNOVATIVE INCOME GENERATION

FHWA recognizes that some financial techniques will be most useful during project operation, rather than during construction. Under *TE-045*, States may use techniques that will generate income. To the extent that future income flows can be anticipated as a result of changes in policy, these funds may be capitalized prior to construction, thereby enabling States to share the cost of projects with private entities and lowering the cost to the public. In addition, these techniques help increase the role of private partners in the provision of transportation services.

Public-Private Partnerships

Traditional Funding

Traditionally, States have been restricted in their ability to permit commercial activity along Interstate rights-of-way. Title 23, Section 1.23, of the Code of Federal Regulations states that

> All real property, including air space, within the right-of-way boundaries of a project shall be devoted exclusively to public highway purposes....The State highway department shall be responsible for preserving such right-of-way free of all public and private installations, facilities or encroachments.

Although the regulation was originally intended to address potential safety concerns, a number of States have indicated that it severely hinders their ability to generate ancillary income to defray transportation capital costs.

ISTEA/Innovative Financing

To shift the burden of transportation funding away from traditional funding generated from taxes, FHWA is encouraging States to identify and capitalize on available commercial income resources, where appropriate. To that end, FHWA is reviewing, on a case-by-case basis, some of the restrictions on conducting commerce along the NHS. As a result of their responses to *TE-045*, certain States may now enter into mutually beneficial public-private partnerships along Interstate rights-of-way.

Several kinds of income-generating activities are possible without compromising safety. States can earn revenue through a variety of methods, including leasing public facilities and/or rights-of-way to private entities, profit-sharing, and selling advertising space. These activities can free up State funds for other highway projects. State-proposed activities include the following:

- Leasing sub-surface Interstate rights-of-way for communication lines;
- Deferring the cost of electronic freeway management systems by offering limited advertising space; and
- Designing, financing, building, leasing, and/or operating transportation service facilities such as rest areas along Interstate highways.

Application of Income Generation

Through the shared use of Interstate rights-of-way with the private sector, one State is accelerating the development of a freeway management system which will improve traffic flow and reduce air pollution in an air quality non-attainment area. In its response to *TE-045*, the State demonstrated that the project has the potential to provide income from private partners and therefore could advance by several years the development of the full freeway management system covering nearly 100 miles of increasingly congested roads. The State will solicit proposals from private and public entities that wish to share in the cost of laying the conduit.

This partnership arrangement will result in benefits to both the State and the successful proposer. Responses to the State's Request for Proposals process will identify the structure of potential lease terms and the revenues expected to be generated through this type of opportunity. In addition, the State also proposed a revolving loan fund concept (reviewed in the discussion of Section 1012 loans). Income from the leases will be deposited in the revolving loan fund. Combining these two concepts will allow the State to "recycle" the Federal CMAQ dollars invested in this system and allow for future expansion of an intelligent highway system without imposing an opportunity cost on other transportation initiatives.

Additional information may be obtained from the FHWA Division or Regional office for your State or by contacting these individuals in FHWA's Washington, DC office:

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