

**GARVEE ROUNDUP****Four Lanes to the Four Corners: Completion of New Mexico's First GARVEE Project**

In 1998, New Mexico was the first state to issue bonds backed solely by a pledge of future Federal-aid funds. These GARVEEs were issued for the improvement of New Mexico State Route 44 (now called U.S. Highway 550), the primary trade and tourist route for northwestern New Mexico. The scenic road runs from I-25 just outside of Albuquerque to Bloomfield, New Mexico, leading to the Four Corners area where Utah, Colorado, Arizona, and New Mexico come together. In addition to a high accident rate on the narrow, two-lane road, the lack of a four-lane highway impeded economic development in the area.

**Financing Innovations**

Initially, the biggest challenge was the sheer size of the project. The estimated construction cost of \$215 million represented nearly 84 percent of the average annual funding of \$256 million that New Mexico expected to receive under the Transportation Equity Act for the 21st Century (TEA-21). Under traditional financing and construction approaches, the New Mexico State Highway and Transportation Department (NMSHTD) estimated that the project would take 27 years to complete.

Taking advantage of the debt financing provisions under the National Highway System Designation Act of 1995, as well as the additional funding security provided by TEA-21, NMSHTD financed approximately 40 percent of the project cost through the issuance of GARVEE bonds to be repaid through future Federal funds. The balance was financed with the proceeds of state road bonds.

The \$100 million GARVEE bond issue paved the way for other states to issue debt repaid with Federal funds without a backstop of state revenues.

The bond issue also incorporated an innovation in the form of a "present-value" match that was approved under TE-045. Through this innovation, the state was able to use a portion of the project that had already been paid for with state funding as a match for the future Federal funds that would be used for the project's debt service. The value of the match was determined by calculating the present value of the initial investment over time, a method that gave the state credit for the time value of the early funding.

**Contracting Innovations**

The project was begun in June 1999 and completed three years later in November 2001, under an innovative development agreement between NMSHTD and Mesa PDC, a limited-liability corporation owned by Koch Industries. Under the agreement, Mesa was responsible for overall project and quality management. Mesa contracted with CH2M HILL to work on the design, and Flatiron Structures to manage construction. Due to existing state law limitations on design-build contracts, the project was divided into four bid packages, which NMSHTD awarded to four separate contractors. The contractors simultaneously worked on individual sections of the 118-mile corridor.

NMSHTD also decided to obtain an innovative, long-term warranty, to guarantee the overall performance of the highway.

*continued on page 2*

**FEDERAL CREDIT PROGRAM****U.S. DOT Announces Availability of FY 2002 TIFIA Funds**

On November 21, 2001 in the *Federal Register* (66 FR, 58549), the U.S. Department of Transportation formally announced that up to \$2.4 billion in credit assistance is available for projects approved during Federal fiscal year 2002 under the Transportation Infrastructure Finance and Innovation Act (TIFIA) program. This Notice of Funding Availability (NOFA) also outlines the TIFIA application and selection process. Those familiar with the TIFIA program know that along with the \$2.4 billion authorized in FY 2002 another \$2.6 billion in Federal credit assistance is authorized in FY 2003. To support this assistance, TIFIA provides budget authority to fund subsidy costs of \$120 million in FY 2002, and \$130 million in FY 2003, subject to the annual obligation limitation. The NOFA can be viewed at the web site of the National Archives and Records Administration: <http://www.nara.gov/fedreg/>.

*continued on page 3*

***Also in this issue ...***

GARVEE Questions . . . . .	2
Rating TIFIA Debt . . . . .	3
TIFIA Trivia . . . . .	5
SIB Activity Remains Steady . . .	6
Texas SIB: A Progress Report . . .	6
Delaware SIB Demonstrates Leveraging Benefits . . . . .	8
STP Program-Wide Approval . . . . .	9
FHWA's Test and Evaluation Program . . . . .	9

*Four Lanes to the Four Corners, continued from page 1*

The state paid \$62 million up front for the warranty, but will save \$89 million in maintenance costs over the next 20 years.

There are two warranties, one covering the pavement, and the other covering the structures, such as bridges. Like an automobile warranty, each comes with usage and time factors that are intended to adjust for variations in future conditions. The warranties also place a cap on the total amount of expenditures that Mesa will have to make for maintenance. The pavement warranty will last for 20 years, or until a certain amount of traffic (measured both by weight and number of vehicles) has used the road, or until Mesa expends 1.8 times the warranty fee. The structures warranty will last for 10 years, with a similar traffic usage cap, and an expenditure cap of 2.0 times the warranty fee. The condition of the pavement and structures will be assessed on a periodic basis, and an annual maintenance plan will be submitted to NMSHTD for review and comment.

### Summary

The combination of innovative financing and design/construction management allowed Corridor 44 to be completed in 3.5 years. The project, which involved a unique collaborative

effort between the state, local governmental units, the Federal government, and the private sector, has received eight national and international awards, for everything from construction to public outreach. Overall costs were within six to seven percent of original estimates, compared to an industry standard of eight percent. The project culminated in renaming and redesignating the road as U.S. Highway 550, which means a bolder mark on standard road maps, and another draw for tourism and trade traffic. The project will significantly improve roadway safety and expand economic development opportunities in northern New Mexico.

While NMSHTD took time to celebrate the finish of this historic project, the agency is not resting on its laurels. As reported in *IFQ's* Winter/Spring 2001 issue, New Mexico is continuing its role as a GARVEE pioneer, having issued an additional \$18.5 million of GARVEEs for the U.S. 70 Corridor reconstruction, and it anticipates using many of the innovative construction management and warranty techniques pioneered on NM 44 in the future.



### Contacts:

*Reuben Thomas, FHWA, New Mexico Division,  
505/820-2022 or  
Charlie Trujillo, NMSHTD, 505/827-5258.*

## GARVEE "Questions of the Quarter"

Each issue of *IFQ* features questions and answers on the GARVEE program. This issue focuses on GARVEEs and the non-Federal matching share. Note that answers to these questions are not regulatory or legislative, but represent FHWA's current administrative interpretations. If you have questions or want to confirm any of this information, please contact your local FHWA Division office, or the GARVEE contacts listed in the Fall 2000 issue of *IFQ*. GARVEE guidance is also available at <http://www.fhwa.dot.gov/innovativefinance/garguid1.htm>.

### How is the Matching Ratio Set For GARVEEs?

The maximum Federal share of the cost of a bond issue project approved under Section 122 is the share as defined under Section 120 of Title 23 (or other statutory reference). This constitutes the legal pro rata share in effect at the time of execution of the project agreement which may be adjusted in accordance with sliding scale provisions. For any bond issue, the Federal share eligible for reimbursement depends on the amount of bond proceeds applied to approved Federal-aid projects, including payment of soft costs such as capitalized interest, issuance expenses, and credit enhancement fees.

In situations where 100 percent of project costs are debt financed through one bond issue, the bond-related costs may be measured on a nominal, current-year basis (e.g. 80 percent of each payment will be payable from Federal-aid and 20 percent from state match.) This simplifies both State Transportation Improvement Program (STIP) planning and the calculation of reimbursement amounts and shares. However, this may not always be the case. The Federal and non-Federal share may be financed separately. For example,

the Federal share may be debt financed, while the state share is funded on a pay-as-you-go basis or satisfied with an in-kind match such as donated property or toll credits.

### Could Tapering Be Used in Conjunction with GARVEEs?

Tapered match (allowing the Federal share to vary over the life of the project, as long as it is ultimately the appropriate ratio) will not be permitted on debt-related reimbursements. However, if approved, a Net Present Value match can serve as a form of tapering, by allowing the non-Federal contribution in advance of future Federal contributions.

### What is a Net Present Value Match?

With special approval, a state may be permitted to apply the net present value of existing contributions as non-Federal match to future Federal participation, using an appropriate discount rate to equate today's dollars with the value of these dollars in the future. The State of New Mexico received approval for a non-Federal match under such a scenario.

### Can GARVEEs be Matched with Non-Cash Donations?

Yes, non-cash matches can be used as the non-Federal share of a GARVEE project.

### Can GARVEEs be Matched with Section 1044 Toll Credits?

Yes, Section 1044 toll credits can be used as the non-Federal share of a GARVEE project.

### Can GARVEEs be Matched with Interest Earned on Bond Proceeds?

Yes, interest earned on bond proceeds is considered eligible as non-Federal match.

*U.S. DOT Announces TIFIA Funds, continued from page 1*

### **New York TIFIA Loan Agreement Executed**

U.S. DOT signed a loan agreement with the City of New York on December 19, 2001 to provide a \$159 million TIFIA loan for the Staten Island Ferries and Terminals project. This project, approved for TIFIA credit assistance in FY 2000, has become part of the rebuilding of lower Manhattan in the wake of the tragic events of September 11. The \$463.1 million project, supported by the \$159 million TIFIA loan, includes the rebuilding of the Whitehall Ferry Terminal in Manhattan and the St. George Terminal in Staten Island, as well as replacement of three ferry boats that have been in operation since the 1960s.

The Staten Island Ferry system consists of the two terminals and seven ferry vessels. It is a major commuter link that transports more than 60,000 passengers daily and a world-renowned tourist attraction. An estimated 20 million passengers use the ferries each year for commuting or tourism. Extensive renovation of bus and subway connections at the Whitehall Terminal will accommodate greater intermodal access, while the St. George Terminal is planned to become the hub of a Staten Island redevelopment. The three new ferry vessels will have an increased capacity of about 25 percent and include the latest pollution-control features. Completion of the project is expected in 2004.

### **Bay Bridge Selected for TIFIA Loan**

The California Department of Transportation's San Francisco-Oakland Bay Bridge Seismic Retrofit Project has been approved to receive TIFIA credit assistance. This is the first project to be selected under TIFIA's rolling solicitation process in FY 2002. The \$3.3 billion project, supported by a \$450 million TIFIA loan, consists of the Seismic Retrofit of the West Span, and the replacement of the East Span of the 8.5-mile San Francisco-Oakland Bay Bridge. These project elements are part of a comprehensive Toll Bridge Seismic Retrofit Program established by legislation in 1997.

The existing bridge, heavily damaged during the Loma Prieta earthquake in 1989, carries about 280,000 vehicles per day. Replacement of the East Span and improvements to the West Span are critical in order to address seismic safety deficiencies, and to provide emergency relief access following a major seismic event. Project debt will be repaid by revenues generated by a seismic toll surcharge on a seven-bridge system of the State of California. Completion of the project is expected in 2006.



*Contacts:*

*Mark Sullivan, TIFIA JPO, 202/366-5785 or*

*Duane Callender, TIFIA JPO, 202/366-9644.*

## **A Perspective on Rating TIFIA Debt**

With five TIFIA credit agreements worth more than \$1.5 billion now completed and several others pending, the credit rating agencies – which provide critical validation of the market acceptance of TIFIA debt – have developed experience in reviewing TIFIA assistance. Based on FHWA's discussions with Fitch, Moody's Investors Service, and Standard & Poor's, several characteristics can be highlighted that distinguish TIFIA from traditional capital markets debt.

### **The Benefits of TIFIA Assistance**

Congress created TIFIA so that transportation projects on the borderline of capital market access could obtain financing by utilizing the Federal government's inherent ability to realize investment benefits over the long term. As a patient investor willing to take a generous view of time horizon, liquidity needs, and near-term uncertainty, the TIFIA program can provide subordinate lien capital and back-loaded repayment schedules in financing up to 33 percent of project costs. Remaining project debt, thus enhanced by TIFIA assistance, can then attract the more typical securities investor. A "stand-alone" or "non-recourse" project financing, supported by user-based revenues, is the program's main target.

However, TIFIA's unique credit features can add value to a broad range of project financings, many reliant on tax revenues or other government payments. Several of such projects have sought TIFIA assistance not for market access, but to lower their financing costs and increase financial flexibility. For these projects, the rating agencies have applied fairly standard credit evaluation procedures, adjusted to specific conditions. Still, even for these projects, a few aspects distinguish the TIFIA credit from other capital market financings.

### **Cash Flow Analysis**

Throughout much of 2001, the TIFIA borrowing rate, equivalent to the yield on taxable U.S. Treasury securities of comparable maturity (see "TIFIA Trivia" box on page 5), has remained less than 25 basis points higher than the market's tax-exempt interest rate for AAA-rated credits. Lower-rated debt, of course, must pay a higher interest rate to attract investors, and TIFIA's "taxable rate" can be less than the comparable tax-exempt figure. For instance, the interest rate on New York City's TIFIA loan for its Staten Island Ferries and Ferry Terminals project, closed on December 19 (see story above), is 38 basis points less than what the city's other option, tobacco settlement revenue bonds, would have priced in the tax-exempt market. Combined with flexibility

*continued on page 4*

*A Perspective on Rating TIFIA Debt, continued from page 3*

in structuring loan disbursements and repayments, the TIFIA assistance also permits an accelerated construction schedule. For the Staten Island Ferries loan and for tax-backed loans such as the Miami Intermodal Center, and the Cooper River Bridges, the rating analysis has focused primarily on projected cash flows and coverage.

### Debt Repayment Provisions

TIFIA loans offer a borrower rare flexibility in structuring repayment. For a non-recourse project financing, repayment can be deferred up to five years after substantial completion. Depending on cash flow needs, tax-backed borrowers may have to repay only interest during the early years of amortization. And no TIFIA borrower is penalized for prepayment. Rating agencies thus view TIFIA assistance as akin to equity in structuring a project's cash flow. However, a TIFIA loan may also include an interest penalty for certain defaults which, if triggered, could put additional pressure on project cash flows and potentially threaten repayment to a senior bondholder. Therefore, credit agencies would closely monitor conditions that might trigger an incremental default interest rate.

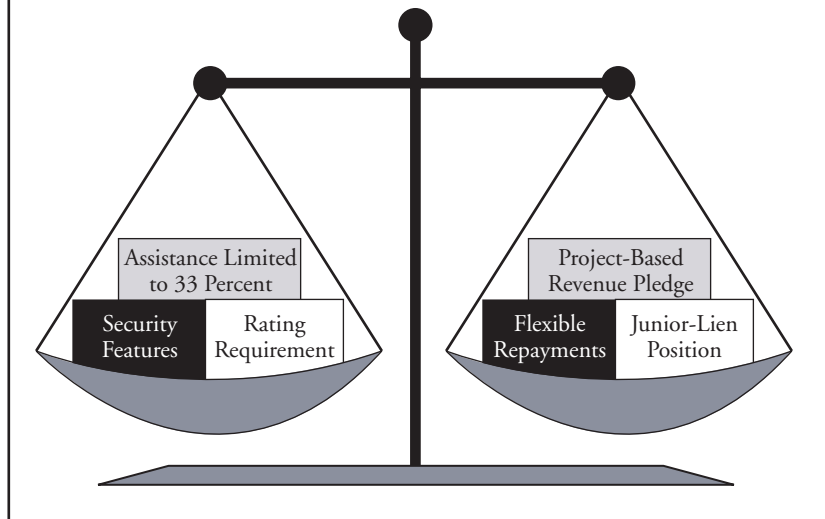
### Cross Default Considerations

These issues arise when a revenue source with multiple liens is pledged to repay the TIFIA loan. If, in addition, these revenues are independent of the project itself, the TIFIA loan agreement may contain default provisions applicable to the project developer and operator that, if carried through to the source of revenue, would put other creditors at risk. Any such default, however, should have no implications for other bondholders. The rating analyst will look to TIFIA to protect other bondholders from such remedial action taken under the loan agreement. In other words, a default by the project sponsor under the loan agreement would not constitute a default by the borrower under the bond indenture.

### Nonsubordination

In creating TIFIA, Congress required that – in the event of bankruptcy, insolvency, or liquidation – a TIFIA subordinate lien must rise to parity with any senior debt holder. This provision may create a credit risk for project bonds under an indenture, and amending existing indentures could be problematic. With several negotiations for TIFIA subordinate loans underway, some analysts believe TIFIA loan agreements should be more explicit regarding the procedure for invoking nonsubordination. A possible model for such an approach is the Federal Aviation Administration's "Chicago language" developed for financings using Passenger Facility Charges. Analysts believe a definitive procedure, including remedies and timeframe, would provide safeguards to mitigate the risk of

### **The TIFIA Program: A balance between the goal of facilitating access to capital markets and managing financial risk.**



U.S. DOT declaring nonsubordination without extensive interaction with senior bondholders, thus improving the acceptability of a TIFIA subordinate lien.

### Summary

While exceptions are always the rule in analyzing complex financings, there are general considerations credit analysts use to review TIFIA credit assistance:

- ❖ The project's overall creditworthiness including cash flow, economics, and legal structure;
- ❖ If TIFIA is a subordinate lien, the extent to which this enhances the senior debt;
- ❖ Whether or not TIFIA is issued under an existing Indenture of Trust;
- ❖ The degree to which TIFIA loan provisions are material to bondholders; and
- ❖ The probability of nonsubordination.

Once a project is completed the rating analysis shifts to surveillance. The following types of events would raise rating agency concerns about the ongoing credit quality of a TIFIA loan:

- ❖ The project's fundamental economics are materially adversely affected;
- ❖ Any missed payment, whether senior or subordinate;
- ❖ A draw under a TIFIA line of credit or loan guarantee taken to avert a payment default;
- ❖ An incremental default interest rate is triggered; and
- ❖ An event of nonsubordination.



Contact:  
Cheryl E. Jones,  
TIFIA JPO,  
202/366-0317.



## TIFIA Trivia

### *The U.S. DOT Responds to Your Questions*

The “TIFIA Trivia” box provides responses to questions posed by our readers and other observers. We hope you find this “TIFIA Trivia” section useful and that you will submit questions to either of the *IFQ* co-managing editors (Max Inman or Suzanne Sale, FHWA).

#### *Question*

How does the TIFIA program establish interest rates for borrowers of secured loans?

#### *Answer*

The TIFIA statute requires that the interest rate on a TIFIA secured loan “shall be not less than the yield on marketable United States Treasury securities of a similar maturity to the maturity of the secured loan on the date of execution of the loan agreement” (23 U.S.C. 183(b)(4)). Consistent with this language and U.S. DOT’s policy objectives, the TIFIA program chose to set its borrowing rates as low as possible, i.e., equal to the corresponding Treasury rate without differential premiums for perceived credit risk.

Having made this policy decision, the U.S. DOT then faced the seemingly straightforward task of locating a source for these corresponding Treasury yields. The information also would need to be transparent to TIFIA borrowers, applicable to the range of maturities (10 to 40 years) expected for TIFIA loans, and responsive to any date of closing.

TIFIA found this information in a somewhat surprising location: the Treasury Bureau of Public Debt’s Daily Rate Table for State and Local Government Securities (the SLGS table), located at <http://www.publicdebt.treas.gov>. With one adjustment, the SLGS table can reveal the Treasury’s own estimates of the yields on its marketable securities. As specified in 31 CFR 344.2 (Regulations Governing United States Treasury Certificates of Indebtedness), the daily SLGS rates “are five basis points below the then current estimated Treasury borrowing rate for a Treasury security of comparable maturity.” TIFIA, therefore, simply adds five basis points to the published rates in order to identify the applicable Treasury security yield.

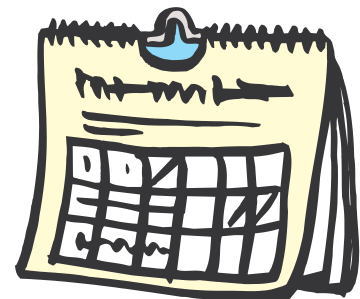
The SLGS table, which indicates maturities from one month to 40 years, is available to anyone with access to the Internet. Because it is updated daily by the Bureau of Public Debt, the TIFIA program uses the rate published on the day a loan agreement is executed.

Again, the TIFIA borrowing rate is based only on the maturity of the comparable Treasury security, *not* on the perceived credit risk. Once the TIFIA program negotiates appropriate safeguards in the loan agreement itself, each borrower – regardless of credit rating of its debt – is subject to the identical mechanism for establishing its comparable Treasury rate.

## Project Finance Workshop Reminder

FHWA and the Transportation Research Board (TRB) Committee on Taxation and Finance (A1A01) are sponsoring a comprehensive workshop on new financing approaches for surface transportation projects. The workshop will feature the latest developments in innovative finance techniques, covering a range of “tools in the toolbox” from GARVEEs to credit assistance options. The emphasis of the workshop will be on applying the tools and identifying best practices. Project sponsors will share their first-hand experiences in implementing the tools and will highlight “lessons learned.” Up-to-date information will be provided on TIFIA, addressing issues and outlook for the future. The workshop, intended to advance the knowledge base of innovative project finance, will be structured in an interactive format with time set aside for Q&As and dialogue with transportation finance experts.

The workshop will be held as part of the TRB Annual Meeting in Washington, D.C., on Sunday, January 13, 2002 from 1:30 to 5:00 p.m. at the Hilton Washington Hotel, International East. For more information, visit TRB’s web page: <http://www4.trb.org/trb/annual.nsf>.



**SIB UPDATE**

**SIB Activity Remains Steady**

State Infrastructure Banks (SIBs) continue to leverage the ability of states to address project needs throughout the country. As shown in the table to the right, as of September 30, 2001, 32 states had entered into 245 SIB loan agreements with a dollar value of nearly \$2.9 billion. The table on the following page summarizes obligations and outlays of Federal funds for the SIB Program as of September 30, 2001.

One of the more active SIBs is the Texas SIB, highlighted below. With 32 loan agreements to date, the Texas SIB has helped advance more than \$1.1 billion in needed transportation projects throughout the state. Also highlighted is the Delaware SIB, which with one loan agreement in place, is charting a course to support future projects.



Contact:  
*Phyllis Jones, FHWA,*  
202/366-2854.

**SIB HIGHLIGHTS**

**Texas SIB: A Progress Report**

In the three years of administering its SIB program, the Texas Department of Transportation (TxDOT) has helped fund and expedite more than \$1.1 billion in needed transportation projects. City and county officials across the state are taking advantage of this innovative financing option that has truly been a success. Recognizing that transportation is vital to continued economic growth in Texas, the SIB has allowed many projects to begin development sooner rather than later by making needed funds available to local entities at or slightly below market-rates.

Following selection as one of the first 10 states approved by the U.S. DOT to pilot the program, TxDOT was then authorized at the state level to administer the SIB program under legislation enacted in 1997. SIB financial assistance can be provided to any public or private entity authorized to construct, maintain, or finance an eligible transportation project. The program provides financial assistance through more than just loans. Lines and letters of credit, bond insurance, and capital reserves are also available through the SIB program. TxDOT has tailored its SIB to enhance the ability of borrowers to access capital funds at or lower-than-market interest rates.

TxDOT has developed its own computer software to track every SIB loan application. The tracking system is built on a spreadsheet system capable of modifying and calculating loan amounts, rates, payments, and interest, and it offers a cash flow analysis for approved loans. In conjunction with the tracking system, TxDOT has created a revolving loan register that maintains a chronological database of loans processed through the program. The register provides basic information for all loans submitted to the bank.

**State Infrastructure Bank Loan Agreements by State**

As of September 30, 2001

State	Number of Agreements	Loan Agreement Amount (\$000)	Disbursements to Date (\$000)
Alaska	1	\$2,737	\$2,737
Arizona	23	373,192	156,850
Arkansas	1	31	31
Colorado	2	400	400
Delaware	1	6,000	6,000
Florida	32	465,000	94,000
Indiana	1	3,000	0
Iowa	1	739	739
Maine	23	1,780	759
Michigan	23	17,034	13,033
Minnesota	7	66,124	29,581
Missouri	10	69,251	66,754
Nebraska	1	1,500	0
New Mexico	1	541	541
New York	2	12,000	12,000
North Carolina	1	1,575	1,575
North Dakota	2	3,565	1,565
Ohio	35	146,624	102,550
Oregon	9	11,483	11,181
Pennsylvania	15	14,600	14,600
Puerto Rico	1	15,000	15,000
Rhode Island	1	1,311	1,311
South Carolina	5	1,502,289	510,428
South Dakota	1	11,740	11,740
Tennessee	1	1,875	1,875
Texas	32	88,900	70,016
Utah	1	2,888	2,888
Vermont	3	1,030	0
Virginia	1	18,000	18,000
Washington	1	700	0
Wisconsin	2	1,188	1,188
Wyoming	5	49,090	32,614
	<b>245</b>	<b>\$2,891,187</b>	<b>\$1,179,956</b>

Note: Includes both Federal and state SIB programs.

**SIB-Funded Projects in Texas**

Since 1997, the Texas Transportation Commission, TxDOT's governing body, has approved 32 SIB loans totaling \$88.9 million, helping to fund \$1.1 billion in highway and bridge construction projects. This represents a Federal leveraging factor of over 14:1. The SIB-assisted projects in Texas are highlighted below:

❖ **State Highway 121** – The State Highway 121 corridor consists of a heavily traveled two-lane roadway connecting several of Dallas' northern suburbs and the Dallas-Fort Worth International Airport. The project plan is to expand approximately 25 miles of highway to a six-lane freeway in order to improve the flow of north-south traffic through Denton County in one of the state's fastest growing corridors.

The SIB loan helped jump start this critical project that would otherwise have been unfunded for 10 to 15 years. Denton County partnered with five area cities to contribute an additional \$48 million to the cost of expanding State

*continued on page 7*

## SIB Pilot Program Obligations and Outlays (as of September 30, 2001)

State	Highway Obligations				Highway Outlays				Transit	
	Federal-Aid Highway Funds	Special Appropriations	TEA-21 Funds	Total	Federal-Aid Highway Funds	Special Appropriations	TEA-21 Funds	Total	Obligation: Special Appropriations	Outlays: Special Appropriations
Alaska	\$ -	2,490,000	-	2,490,000	-	2,490,000	-	2,490,000	\$ -	\$ -
Arizona	39,485,974	6,700,000	-	46,185,974	39,485,974	6,700,000	-	46,185,974	-	-
Arkansas	-	1,500,000	-	1,500,000	-	1,380,000	-	1,380,000	-	-
California	-	3,000,000	-	3,000,000	-	-	-	0	-	-
Colorado	3,200,000	1,500,000	-	4,700,000	-	400,000	-	400,000	-	-
Delaware	3,300,000	1,500,000	-	4,800,000	3,300,000	1,500,000	-	4,800,000	-	-
Florida	38,815,438	8,650,000	28,320,000	75,785,438	38,815,437	8,650,000	28,320,000	75,785,437	-	-
Georgia	-	-	-	0	-	-	-	0	-	-
Illinois	-	-	-	0	-	-	-	0	-	-
Indiana	-	3,390,000	-	3,390,000	-	3,118,800	-	3,118,800	-	-
Iowa	-	1,500,000	-	1,500,000	-	591,600	-	591,600	-	-
Louisiana	-	-	-	0	-	-	-	0	-	-
Maine	-	2,540,000	-	2,540,000	-	2,336,800	-	2,336,800	-	-
Massachusetts	-	-	-	0	-	-	-	0	-	-
Michigan	-	8,666,389	-	8,666,389	-	7,782,389	-	7,782,389	2,383,610	2,383,610
Minnesota	31,109,200	-	-	31,109,200	31,109,200	-	-	31,109,200	3,960,000	3,524,400
Missouri	25,000,000	-	16,000,000	41,000,000	25,000,000	-	16,000,000	41,000,000	7,410,000	7,410,000
Nebraska	-	2,830,000	-	2,830,000	-	2,603,600	-	2,603,600	-	-
New Jersey	-	-	-	0	-	-	-	0	-	-
New Mexico	4,827,348	8,140,000	-	12,967,348	4,827,348	7,244,600	-	12,071,948	-	-
New York	-	12,000,000	-	12,000,000	-	8,920,000	-	8,920,000	-	-
North Carolina	-	120,000	-	120,000	-	-	-	0	1,380,000	1,260,000
North Dakota	-	2,540,000	-	2,540,000	-	2,133,600	-	2,133,600	-	-
Ohio	75,000,000	5,100,000	-	80,100,000	75,000,000	4,140,000	-	79,140,000	6,900,000	6,900,000
Oklahoma	-	-	-	0	-	-	-	0	-	-
Oregon	8,973,000	2,589,700	-	11,562,700	8,973,000	1,708,100	-	10,681,100	2,920,300	2,920,300
Pennsylvania	14,000,000	2,090,000	-	16,090,000	14,000,000	1,922,800	-	15,922,800	1,300,000	1,196,000
Rhode Island	-	1,500,000	-	1,500,000	-	1,020,000	-	1,020,000	-	-
South Carolina	1,848,045	3,000,000	-	4,848,045	-	2,670,000	-	2,670,000	-	-
South Dakota	8,322,719	2,830,000	-	11,152,719	8,322,719	2,603,600	-	10,926,319	-	-
Tennessee	-	1,500,000	-	1,500,000	-	1,380,000	-	1,380,000	-	-
Texas	159,288,804	12,000,000	-	171,288,804	159,288,804	11,040,000	-	170,328,804	-	-
Utah	-	2,310,000	-	2,310,000	-	2,310,000	-	2,310,000	-	-
Vermont	560,000	1,500,000	-	2,060,000	560,000	1,020,000	-	1,580,000	-	-
Virginia	18,000,000	3,000,000	-	21,000,000	18,000,000	-	-	18,000,000	-	-
Washington	-	1,500,000	-	1,500,000	-	1,500,000	-	1,500,000	-	-
Wisconsin	-	1,500,000	-	1,500,000	-	1,380,000	-	1,380,000	-	-
Wyoming	21,031,942	2,510,000	-	23,541,942	21,031,942	2,510,000	-	23,541,942	-	-
Puerto Rico	10,748,588	1,500,000	-	12,248,588	10,748,588	1,260,000	-	12,008,588	-	-
<b>TOTAL</b>	<b>463,511,058</b>	<b>111,496,089</b>	<b>44,320,000</b>	<b>619,327,147</b>	<b>458,463,012</b>	<b>92,315,889</b>	<b>44,320,000</b>	<b>595,098,901</b>	<b>26,253,910</b>	<b>25,594,310</b>

Texas SIB, continued from page 6

Highway 121, which includes a \$10 million SIB loan that will help leverage the \$145.8 million project. The funding package blended a local bond issue with the SIB loan to leverage both state and Federal highway funds.

- ❖ **State Highway 45** – Transportation toll projects can also utilize the Texas SIB loan program. A SIB loan is facilitating financing of the new State Highway 45, one of the four project elements of the planned 122-mile Central Texas Turnpike Project that is being developed by the Texas Turnpike Authority, a division of TxDOT.

The City of Round Rock and its Transportation System Development Corporation (4B Corporation) received a \$16 million SIB loan as part of its contribution to the \$553.7 million project. The 15-mile long highway will provide a direct east-west connection through the rapidly growing commercial and residential area located in north Austin and neighboring suburb, Cedar Park. Ultimately, the facility design will be a six-lane roadway with frontage roads and overpasses at major thoroughfares, and direct connection ramps to Interstate 35.

- ❖ **World Trade Bridge** – Nearly 45 percent of approved SIB loans in Texas are for transportation improvements in the Texas-

Mexico border region. More than \$39.3 million in approved loans have gone to border area projects as a way to address the needs related to increased trade due to the North American Free Trade Agreement (NAFTA). Texas ports of entry are used by 79 percent of all United States-Mexico border truck traffic.

The largest of these border area SIB loans is a \$29.3 million loan to the City of Laredo for construction of the Laredo Northwest International Bridge IV (World Trade Bridge). The bridge is the fourth international bridge connecting Laredo, located in Webb County, Texas and Nuevo Laredo, in Tamaulipas, Mexico. The eight-lane bridge structure carries commercial vehicle and pedestrian traffic only, and will help alleviate congestion on other area toll bridges and roadways as well as support increased trade and traffic.

- ❖ **El Paso International Bridges** – Rehabilitation of the El Paso International Bridges system is another United States-Mexico border NAFTA project given financial assistance through the SIB program. The City of El Paso is using an \$8.9 million SIB loan to fund total costs of improvements to city-owned international toll bridges, which include purchase of an automated toll collection system, construction of a toll collections support building, and structural rehabilitation of two

*continued on page 8*

Texas SIB, continued from page 7

downtown international bridges. The project will help provide a new automated toll collection system for the Zaragoza, Stanton, and Santa Fe International bridges to include commercial, private vehicle, and pedestrian lanes.

❖ **Joe Fulton International Trade Corridor** – The Joe Fulton International Trade Corridor is a \$40 million project that has been designated by Congress as a National High Priority Corridor. The corridor runs through the inner harbor of the Port of Corpus Christi, the fifth largest port in the nation. The port authority is developing a nine-mile highway along the port that will link Interstate 37 to U.S. Highway 181 and provide a principal arterial roadway, and link existing area rail lines that will serve current and future waterborne transportation facilities.

The need for the project was established by the area's increase in NAFTA-related traffic. Trucks carrying shipments to and from Mexico can cut 200 miles from their trip if their cargoes are moved through Corpus Christi's port. The project will eliminate dependency on area bridges and improve port access. The \$16.3 million SIB loan request submitted by the Port of Corpus Christi has won preliminary approval and is still awaiting environmental clearance before final approval.

❖ **John F. Kennedy Causeway** – The John F. Kennedy Causeway project, also in Corpus Christi, is another project that has received assistance from the SIB program. Elevation of the JFK Causeway, also known as State Park Road 22, was seen as an essential safety measure for this area, located in Texas' Coastal Bend area. Its susceptibility to being washed over, if not flooded, by hurricane-driven Laguna Madre waters, thereby potentially isolating hundreds of residents and anyone else on North Padre Island, has been demonstrated repeatedly.

### Highlighted Texas SIB Projects: Key Statistics

Project	Total Project \$	SIB \$	Interest Rate	Length of Loan (years)
State Highway 121	\$145,800,000	\$10,000,000	4.5%	7
State Highway 45	\$553,680,000	\$16,000,000	4.6%	15
World Trade Bridge	\$92,497,000	\$29,300,000	4.1%	28
El Paso International Bridges	\$8,922,000	\$8,922,000	4.3%	15
Joe Fulton Trade Corridor*	\$40,000,000	\$16,300,000	TBD	TBD
JFK Causeway	\$45,000,000	\$4,000,000	4.5%	8

\*Final SIB approval anticipated upon completion of environmental clearance.

The project involves raising the roadway to provide a safer, more efficient evacuation route from area islands during high tides, tropical storms, and hurricanes. The SIB program provided a \$4 million loan to the City of Corpus Christi to fund its portion of the \$45 million cost to elevate and expand the roadway, which is currently built just above the sea-level of the Gulf of Mexico.

These SIB-assisted projects are important examples of the state's efforts to help alleviate congestion and enhance mobility in response to increased traffic and trade resulting from the implementation of NAFTA. "Traditional methods for financing the development of infrastructure are no longer enough to serve the need of communities," said TxDOT's Dorn Smith, manager of the TxDOT SIB. "The SIB program is a perfect example of 'outside of the box' thinking necessary to help provide the assistance communities need in order to accomplish these tasks."

Additional SIB information is posted on TxDOT's web site at <http://www.dot.state.tx.us/revexp/sib/sibtoc.htm>.

*Contacts:*

*Dorn Smith, Texas Department of Transportation,  
512/463-8721 or*

*Mark Cross, Texas Department of Transportation,  
512/475-0942.*



### Delaware SIB Demonstrates Leveraging Benefits

The Delaware Department of Transportation's (DelDOT) SIB was authorized in November 1997 with the signing of a Cooperative Agreement between FHWA and the Delaware Transportation Authority.

Delaware's SIB account is maintained at Wilmington Trust Company (WTC), a banking corporation organized and existing under the laws of the State of Delaware. WTC serves as the trustee for the Delaware Transportation Authority. Delaware's SIB is managed through DelDOT's Trust Fund Administration.

In 1998, the SIB was capitalized with \$4.8 million of Federal funds and \$1.2 million of state funds. The SIB advanced a \$6 million loan in November 1999 to DelDOT for the Biddle's Road Toll Plaza. The loan will be repaid at an interest rate of 5.02 percent over six years in semi-annual payments. The

project included construction of a 9,491 square-foot toll plaza with 10 manual lanes and four high-speed express lanes. All lanes are equipped with electronic toll collection equipment. The total cost of the project was \$54 million. This translates into a leveraging factor of 9:1, demonstrating the value of the SIB concept in facilitating project financing.

As monies are repaid from the first loan, Delaware will rebuild the bank balance. As of September 30, 2001, the SIB balance was \$2.6 million. Delaware anticipates launching a second round of loans in FY 2003.

*Contact:*

*John Nauman,  
Delaware Department of Transportation,  
302/760-2692.*





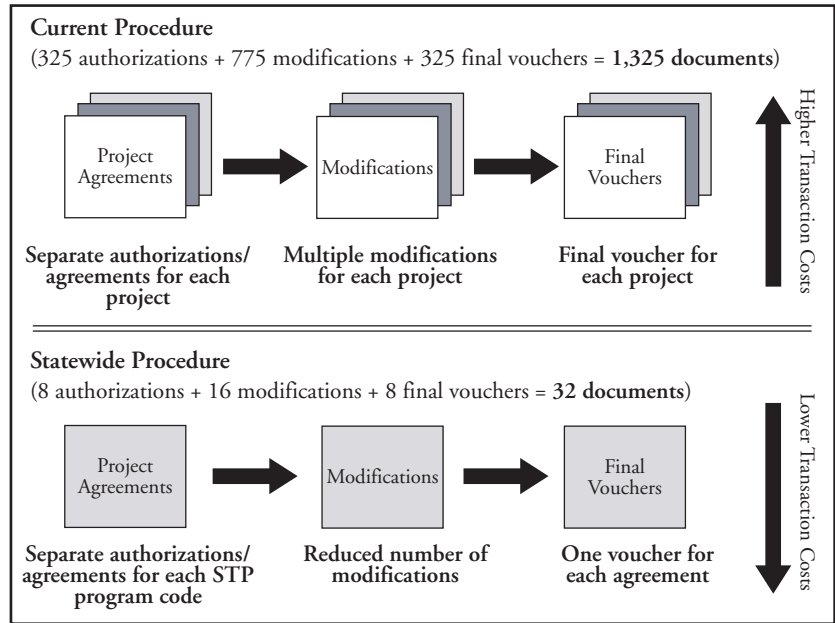
**TECHNICAL CORNER**

**STP Program-Wide Approval: Simplifying Procedures and Saving Dollars**

Today's increasing administrative costs, shrinking state administrative budgets, and the need to improve state cash flow are all factors creating increased pressure on many state DOTs. Taking advantage of 23 U.S.C. 133 Surface Transportation Program (STP) program approval procedures is one way to reduce transaction costs, while providing a state with increased flexibility in the management of its STP funds. This technique was first tested by the Washington DOT as a TE-045 financing innovation and then was implemented as a standard feature of the Federal-aid program under TEA-21 authorization.

STP program approval allows the state to establish one annual Federal-aid STP project for each STP program (appropriation) code. This program efficiency is designed to provide the state and FHWA Division Offices with the option of processing only one annual Federal-aid authorization request per STP program.

**STP Lifecycle: Hypothetical Case Study**



*continued on page 10*

**FHWA's Test and Evaluation Program: What's New**

In 1994, FHWA spearheaded a program initiative, known as TE-045, to introduce new flexibility into the financial characteristics of the Federal-Aid Highway Program. Under the TE-045 program, FHWA sought proposals from states for alternatives to traditional financing approaches. To date, 102 projects have been approved in 42 states, generating substantial benefits in terms of building more projects with existing resources and accelerating project construction.

TE-045 is still available for states to test innovative financing ideas. States that may wish to consider alternatives to traditional grant funding are encouraged to submit proposals through their FHWA Division Office. Highlighted are proposals submitted by Oregon and South Carolina that were recently accepted as TE-045 projects.

- ❖ The Oregon Department of Transportation (ODOT) submitted a TE-045 proposal for a flexible match to be applied as the non-Federal match against current and future Federal-aid projects along Highway 99W, a major safety corridor in Oregon. In their proposal, ODOT requested approval to 1) use part of a state-funded project as the match for the Federal-aid project, and 2) use the remaining non-Federal funds as match for the adjacent future Federal-aid projects that were identified, and included in the State Transportation Plan. This innovative matching technique will leverage state dollars, enabling ODOT to accelerate the Highway 99W safety corridor project.
- ❖ The South Carolina Department of Transportation (SCDOT) submitted a proposal for a flexible match to be applied to Federal-aid highway projects. In their proposal, SCDOT requested approval to apply soft match credit for eligible administrative costs. This technique will allow SCDOT to take credit for the eligible administrative costs in the form of soft match against future Federal-aid projects, and release much needed additional funds for highway maintenance. The acceptance of this proposal provides flexibility to test alternative cost payment methods which are allowed in the Office of Management and Budget's Circular A-87, *Cost Principles for State, Local, and Indian Tribal Governments*.

**Scorecard on Innovative Matching Tools in Practice**

Tool	Number of States
STP Program Match	4
Tapered Match	9
Donations	19
Partial Conversion of Advance Construction	31
Toll Credits	20



Contact:  
Dale Gray, FHWA, 202/366-0978.

Also using this technique, Federal funds can be matched across the full program, not on a project-by-project basis. The biggest administrative savings is realized in the elimination of hundreds of individual project modifications, while the primary challenge to implementing this technique involves the transfer of project data to FHWA.

The figure on page 9 illustrates hypothetically how a state with 325 STP new project authorizations and three modifications per project per year can vastly reduce the number of required transactions through STP program approval.

The STP statewide program not only cuts transaction costs for both the state and FHWA, but it also gives the state the flexibility to modify individual state project costs without waiting for FHWA approval. This means the state, as long as it stays within the amount authorized for the Federal master project, can process individual state project cost under runs and over runs. The self-approved state adjustment procedure improves the state cash flow by allowing a state to immediately bill FHWA for its full STP program costs, rather than waiting for the FHWA Division office to process the detailed project modifications.

By bundling together individual STP-funded projects and treating them as a single project for purposes of approval and administration, the state can realize both cash flow benefits and reduced processing costs.



**Contacts:**

Joe Stertz, FHWA, Wisconsin Division, 608/829-7525 or  
Max Inman, FHWA, 202/366-2853.

**Contributors to Vol. 7, No. 3  
of IFQ include:**

Roger Berg, Cambridge Systematics, Inc.

Duane Callender, TIFIA JPO

Mark Cross, Texas Department of Transportation

Dale Gray, FHWA

Cheryl E. Jones, TIFIA JPO

Phyllis Jones, FHWA

Stephanie Kaufman, FHWA, TIFIA JPO

Jennifer Mayer, FHWA Western Resource Center

John Nauman, Delaware Department of Transportation

Suzanne H. Sale, FHWA, TIFIA JPO

Joe Stertz, FHWA, Wisconsin Division

Mark Sullivan, TIFIA JPO



SUZANNE H. SALE, FHWA  
CO-MANAGING EDITOR  
602/379-4014  
FAX: 602/379-3608  
SUZANNE.SALE@FHWA.DOT.GOV

MAX INMAN, FHWA  
CO-MANAGING EDITOR  
202/366-0673  
FAX: 202/366-7493

LAURIE L. HUSSEY, CS MANAGING EDITOR  
CAMBRIDGE SYSTEMATICS, INC.  
617/354-0167  
FAX: 617/354-1542  
LLH@CAMSYS.COM

*Reproduction (in whole or in part) and  
broad distribution of IFQ is strongly  
encouraged. Permission from FHWA,  
the editor, or any other party  
is not necessary.*

**A REMINDER TO READERS**

FHWA DOES NOT MAINTAIN A MAILING LIST AND DOES NOT DISTRIBUTE **IFQ** DIRECTLY. **IFQ** IS AVAILABLE AS AN INSERT TO THE **AASHTO JOURNAL**, AND IS AVAILABLE ELECTRONICALLY THROUGH FHWA'S WWW HOME PAGE:  
[http://www.fhwa.dot.gov/innovative\\_finance/](http://www.fhwa.dot.gov/innovative_finance/)

**IFQ** IS ALSO PROVIDED TO THE FOLLOWING ORGANIZATIONS FOR REDISTRIBUTION AND/OR AS INFORMATION FOR THEIR MEMBERSHIP:

- American Public Works Association (APWA)
- Surface Transportation Policy Project (STPP)
- National Governor's Association (NGA)
- National Association of State Treasurers (NAST)
- National Association of State Auditors, Controllers, and Treasurers (NASACT)
- National Association of Regional Council's (NARC's) Association of MPOs (AMPO)